

GEOG 588 Urban GIS

Winter 2024
GFC HOURS (3-2)

Section	Days	Time	Location
LEC 01	Tues & Thurs	9:30AM - 10:45 AM	ES 319
Lab 01	Wed	13:00-14:50 PM	ES 407

Instructor: Victoria Fast	Office: ES-452
Email: Victoria.fast@ucalgary.ca ***Email communication must be through your UCalgary email address.*** ***Be sure to include course code in the subject line of email communication.***	
Office hours: Wednesday 11 AM to 12 PM and as needed; please reach out during class or via email to schedule.	

The **Department of Geography** condemns the longstanding and continued injustices against those marginalized by racism, sexism, homophobia, transphobia, classism, xenophobia, able-bodied normativity, mental health profiling, and other forms of prejudice. We are pained by the fact that injustices are unevenly borne. <https://arts.ucalgary.ca/news/anti-racism-statement>

Territorial Acknowledgement

The Department of Geography would also like to acknowledge the traditional territories of the people of the Treaty 7 region in southern Alberta. The City of Calgary is also home to Métis Nation of Alberta, Region III. <https://www.ucalgary.ca/indigenous/cultural-protocol>

Personal commitment

I am committed to creating a teaching and learning environment and community that decolonizes the curriculum, and does better at building systems of justice, inclusion, and empowerment.

Official Course Description

Surveys GIS applications for urban studies, and the data structures, sources, and analysis techniques used in them. Explores urban spatial analysis, decision-making in a GIS environment, and representational challenges, including project planning, spatial data acquisition, data preparation and coding, analysis and visualization of project findings, and communication and implementation of project results.

Course Objectives

This course builds on your previous introductory- and advance-level coursework in GIS, through a more in-depth examination of GIS applications in urban studies, and the data structures, source, and analysis techniques used in them. Through collaborative partnerships with urban professionals from the City of Calgary, University of Calgary, and Sustainable Calgary, students will work on real-world project (modules) that require GIS solutions. These projects are designed to mirror professional urban GIS challenges, providing hands-on experience and practical application of GIS skills in addressing current urban issues.

Through the projects, we will explore urban spatial analysis, decision-making in a GIS environment, and representational challenges, including project planning, spatial data acquisition, data preparation, analysis and visualization of project findings, and communication and implementation of project results. Students will gain experience in locating and obtaining geospatial data from local, provincial, and national government sources; developing primary data for urban spatial analysis; and analyzing and representing these data using desktop GIS software. We examine a range of urban applications of GIS, including accessible voting for the City of Calgary, sustainability, and transportation and routing application.

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	PLO(s)*	Level(s)**
Apply diverse spatial analytic approaches toward urban planning, decision-making, and administration	1,2,4,6	2,3
Evaluate and use appropriate data sources and analytical technique for diverse spatial problems	6	3
Compose cartographically sound maps and reports to communicate geographic information in a variety of media	7,8	2
Deconstruct the ways representations and data come to shape the ways we think of places and the people in them	1,2,4,5,7,8	2,3
Devise policy recommendations based on spatial analyses	1,2,7	2,3

*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

3 units from GEOG 480, 482, 484, or 485.

Intermediate to advanced GIS-skills required and an interest in urban issues.

Course Format

Regular, in person attendance during scheduled lectures and labs is mandatory. Unless government- and university-imposed public health measures are reintroduced, ALL classes and tutorials will be offered synchronously.

Learning Resources

All required readings will be posted or linked on the course D2L. Please check course website regularly for updates.

Grading (Weighting)

Course Component	Weight	Due Date
Module 1	20%	
- Preliminary research (individual)	- 5%	- 1/17/2024
- Lab (individual)	- 5%	- 1/24/2024
- Final submission (group/individual)	- 5%	- 1/29/2024
- Presentation (group)	- 5%	- 1/30/2024
Module 2	20%	
- Preliminary research (individual)	- 5%	- 2/7/2024
- Lab (individual)	- 5%	- 2/14/2024
- Final submission (group/individual)	- 5%	- 2/15/2024
- Presentation (group)	- 5%	- 2/15/2024
Module 3	20%	
- Preliminary research (individual)	- 5%	- 2/28/2024
- Lab (individual)	- 5%	- 3/7/2024
- Final submission (group/individual)	- 5%	- 3/11/2024
- Presentation (group)	- 5%	- 3/12/2024
Module 4	20%	
- Preliminary research (individual)	- 5%	- 3/20/2024
- Lab (individual)	- 5%	- 3/27/2024

- Final submission (group/individual)	- 5%	- 3/27/2024
- Presentation (group)	- 5%	- 3/28/2024
Project Management	20%	
- Preliminary Interest Survey	- 5%	- 1/10/2024
- Final report	- 10%	- 4/8/2024
- Peer evaluation	- 5%	- 4/8/2024

Notes:

- It is not necessary to pass each course component in order to pass the course.
- There is no final examination for this course.
- Late assignments will be assessed a 20% penalty per day.
 - All course assignments will be submitted through the D2L Dropbox and will be automatically timestamped. These components will be considered late if the timestamp is later than the due date and time. Deliverables received within 1 minute to 24 hours of the due date will be assessed a 20% penalty. This means if your assignment receives a grade of 88% it will be entered as 68% ($88 - 20 = 68$) on the grade sheet. If it is received between 24 and 48 hours, it will be assessed a 40% penalty. If the assignment is received greater than 48 hours from the due date it will be assessed a penalty of 60%, and so forth.

Grading System

A+	4.00	>96	Outstanding performance
A	4.00	90-95	Excellent performance
A-	3.70	86-89	Approaching excellent performance
B+	3.30	81-85	Exceeding good performance
B	3.00	76-80	Good performance
B-	2.70	71-75	Approaching good performance
C+	2.30	67-70	Exceeding satisfactory performance
C	2.00	63-66	Satisfactory performance
C-	1.70	60-62	Approaching satisfactory performance
D+	1.30	55-59	Marginal pass. Insufficient preparation for subsequent courses
D	1.00	50-54	Minimal Pass. Insufficient preparation for subsequent courses
F	0.00	<50	Failure. Did not meet course requirements

Flexible Grade Option (CG Grade)

<https://www.ucalgary.ca/pubs/calendar/current/f-1-3.html>

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.

Submitting Assignments & Posting of Grades

- All assignments will be handled through D2L – both individual and group assignments.
- Grades will be available to each student on D2L by password access. Grades and assignments will not be available at the Department of Geography's main office.
- ***You are responsible for submitting assignments to the correct Dropbox. Submissions to the wrong Dropbox folder will be treated as not submitted.***

Additional Course Information

*For additional detailed course information posted by the instructor, visit the course Desire2Learn page online at

<https://d2l.ucalgary.ca/d2l/home>.

Academic Accommodations

*In the event that a student misses course work due to illness or extenuating circumstances, I am willing to make reasonable accommodations and grant extensions provided the student arranges accommodations with the instructor **ahead of the due date**. The same for deferred assignments.*

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:

<https://www.ucalgary.ca/pubs/calendar/current/b-6-1.html>

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:

<https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure>

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: freeman@ucalgary.ca).

Supporting documentation, such as a medical note or a statutory declaration may be requested

<https://www.ucalgary.ca/pubs/calendar/current/m-1.html>

Please refer to <https://www.ucalgary.ca/registrar/registrar/appeals/student-faq> for frequently asked questions concerning the provision of a medical note/statutory declaration.

Exams & Deferrals <https://www.ucalgary.ca/registrar/exams>

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

Referencing Standard

In written work presented in this class, the accepted method for referencing the work of others will be APA Manual of Style:

<https://apastyle.apa.org/style-grammar-guidelines/references/examples>

Important Dates

The last day to drop this course and receive a tuition fee refund is **Thursday, January 18 2024**. The last day to withdraw from this course is **Tuesday, April 9 2024**. No classes February 18–24, 2024.

SUPPLEMENTAL INFORMATION**Writing support**

Please note writing support resources provided by the Student Success Centre <https://ucalgary.ca/ssc/resources/writing-support> and the library <https://library.ucalgary.ca/guides/writinghelp>

University of Calgary Academic Integrity Policy

Academic integrity is the foundation of the development and acquisition of knowledge and is based on values of honesty, trust, responsibility, and respect. We expect members of our community to act with integrity. 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: <https://www.ucalgary.ca/legal-services/university-policies-procedures/student-academic-misconduct-procedure>

For students wishing to know more about what constitutes plagiarism and how to properly cite the work of others, the Department of Geography recommends that they attend Academic Integrity workshops offered through the Student Success Centre: <https://www.ucalgary.ca/student-services/student-success/learning/academic-integrity>

Instructor Intellectual Property

Information on Instructor Intellectual Property can be found at <https://www.ucalgary.ca/legal-services/university-policies-procedures/intellectual-property-policy>

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.

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: <https://www.ucalgary.ca/pubs/calendar/current/b-6-1.html>
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: <https://www.ucalgary.ca/legal-services/university-policies-procedures/accommodation-students-disabilities-procedure>

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: freeman@ucalgary.ca).

Use of internet and electronic devices in class

You are welcome to use laptops and devices during lecture and lab when needed. Please silence all devices.

Media Recording

Please refer to the following statement on media recording of students: https://elearn.ucalgary.ca/wp-content/uploads/2020/05/Media-Recording-in-Learning-Environments-OSP_FINAL.pdf

Course evaluations and student feedback

Student feedback will be sought at the end of the course through the standard University Student Ratings of Instruction (USRI) and Faculty course evaluation forms. Students are also welcomed and encouraged to share their feedback throughout the term.

Accessibility

I will make every effort to ensure the learning environment is accessible to all students. Please let me know if any accessibility accommodations are required at the start of the term.

Copyright Legislation

All students are required to read the University of Calgary policy on Acceptable Use of Material Protected by Copyright <https://www.ucalgary.ca/legal-services/university-policies-procedures/acceptable-use-material-protected-copyright-policy> 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 disciplined 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/>).

Students requiring assistance are encouraged to email the **Student at Risk line** if they or others appear to need wellness assistance: sar@ucalgary.ca For more immediate response, please call: 403-210-9355 and select option #2.

Sexual Violence Policy

The University recognizes that all members of the University Community should be able to learn, work, teach and live in an environment where they are free from harassment, discrimination, and violence. Please see the policy available at <https://www.ucalgary.ca/policies/files/policies/sexual-violence-policy.pdf>

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/

Emergency Evacuation/Assembly Points

Assembly points for emergencies have been identified across campus. Assembly points are designed to establish a location for information updates from the emergency responders to the evacuees; from the evacuated population to the emergency responders. For more information, see the University of Calgary's Emergency Management website: <https://www.ucalgary.ca/risk/emergency-management>. The muster point for both labs and lecture is the ICT footcourt.

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.