GEOG 588: Urban GIS
Winter 2020 - H(3-2)

<table>
<thead>
<tr>
<th>Section</th>
<th>Days</th>
<th>Time</th>
<th>Location*</th>
</tr>
</thead>
<tbody>
<tr>
<td>LEC 01</td>
<td>TuTh</td>
<td>12:30 – 13:45</td>
<td>ES 342</td>
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<tr>
<td>LAB 01</td>
<td>Th</td>
<td>15:30 – 17:20</td>
<td>ES 407</td>
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Instructor: Victoria Fast
Office: ES 452
Telephone: 403 220 8353
Email: Victoria.fast@ucalgary.ca

Teaching Assistant: Shifa Hayat
Email: Shifa.hayat1@ucalgary.ca

* The emergency evacuation assembly point for all classes taught in Earth Sciences is ICT Food Court.

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, representational challenges, including project planning, spatial data acquisition, and 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. 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. You 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 crime analysis, transportation and routing application, and spatial accessibility.

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.

<table>
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<tr>
<th>Course Learning Outcomes</th>
<th>PLO(s)</th>
<th>Level(s)</th>
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<tbody>
<tr>
<td>Apply diverse spatial analytic approaches toward urban and environmental planning, decision-making, and administration</td>
<td>1,2,4,6</td>
<td>2,3</td>
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<tr>
<td>Evaluate appropriate data sources for diverse spatial problems</td>
<td>6</td>
<td>3</td>
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<tr>
<td>Compose cartographically sound maps and reports to communicate geographic information in a variety of media</td>
<td>7,8</td>
<td>2</td>
</tr>
<tr>
<td>Deconstruct the ways representations and data come to shape the ways we think of places and the people in them</td>
<td>1,2,4,5,7,8</td>
<td>2,3</td>
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<tr>
<td>Devise policy recommendations based on spatial analyses</td>
<td>1,2,7</td>
<td>2,3</td>
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**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 GEOGRAPHY 357, 482.

**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.

**COURSE EVALUATION COMPONENTS AND WEIGHTING**

- Laboratory Assignments (5 * 6% each) 30%
- Weekly In-Class Engagement (11 * 2% each) 20% (2% bonus if all completed)
- Spatial News 5%
- Term Test 15%
- Major Course Project 30%
  - Proposal: 5%
  - Presentation: 10%
  - Final Written Report: 15%

**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.
- Only pens, pencils and erasers are allowed in the term test. No other materials or devices are allowed.

**GRADING SYSTEM**

- **A+** 4.00 >95 Outstanding performance
- **A** 4.00 86-94 Excellent performance
- **A-** 3.70 80-85 Approaching excellent performance
- **B+** 3.30 77-79 Exceeding good performance
- **B** 3.00 74-76 Good performance
- **B-** 2.70 70-73 Approaching good performance
- **C+** 2.30 67-69 Exceeding satisfactory performance
- **C** 2.00 64-66 Satisfactory performance
- **C-** 1.70 60-63 Approaching satisfactory performance
- **D+** 1.30 56-59 Marginal pass. Insufficient preparation for subsequent courses
- **D** 1.00 50-55 Minimal Pass. Insufficient preparation for subsequent courses
- **F** 0.00 <50 Failure. Did not meet course requirements

In the event that a student misses a midterm or any course work due to illness, supporting documentation, such as a medical note or a statutory declaration will be required see: [https://www.ucalgary.ca/pubs/calendar/current/m-1.html](https://www.ucalgary.ca/pubs/calendar/current/m-1.html)

Please refer to [https://www.ucalgary.ca/registrar/registration/appeals/student-faq](https://www.ucalgary.ca/registrar/registration/appeals/student-faq) for frequently asked questions concerning the provision of a medical note/statutory declaration.
SUBMITTING ASSIGNMENTS & POSTING OF GRADES
- All assignments will be handled through D2L.
- 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.

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.

DEFERRED EXAMS OR ASSIGNMENTS
As listed in the Deferral of final Examinations section of the University of Calgary Calendar are illness, domestic affliction or religious conviction. If you miss an assignment or examination and you provide me with the appropriate documentation, you will have one opportunity to make arrangements for the missed work. Without appropriate documentation, you will receive a zero for that portion of your grade.

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 no 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.

**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).

**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.