



**FINAL COURSE OUTLINE: WINTER 2016**

**GEOGRAPHY 639  
H(3-3)**

**Advanced Spatial Analysis and Modelling**

Section	Days	Times	Location
LECO1	We	14:00 – 16:45	ES 342
LAB01	Th	14:00 – 16:50	ES 415

Instructor:	Torsten Geldsetzer	Office:	ES 446
Telephone:	Please email	Email:	<a href="mailto:geldsetz@ucalgary.ca">geldsetz@ucalgary.ca</a>

**Please note: The appropriate emergency evacuation assembly point for all classes taught in Earth Sciences is the ICT Food Court.**

**Official Course Description:**

The course will provide students with analytical tools to help them understand spatial phenomena and to stimulate their critical thinking about space and spatial processes. The course will focus on the properties of spatial data and their effects on quantitative analysis. Students will learn an array of spatial analytical models, understanding their hypothesis, power and limitations; they will learn to choose the most appropriate techniques for different research questions and spatial data. Concepts and theories of spatial analysis will be discussed, with reference to landmark and current literature.

**Prerequisite:** Consent of the Department

**Supplementary Fees:** (*field trips etc.*) N/A

**Text(s)/Readings:**

Recommended: **one** of the following textbooks:

Rogerson, P.A., 2001. *Statistical Methods for Geography*. Sage Publications Ltd., London.

Fotheringham, A. S., Brunson, C., Charlton, M., 2000. *Quantitative Geography. Perspectives on Spatial Data Analysis*. London: SAGE.

Fortin, M.-J., Dale, M. R. T., 2005. *Spatial Analysis. A Guide for Ecologists*. Cambridge: Cambridge University Press.

Lloyd, C.D., 2006. *Local Models for Spatial Analysis*. CRC Press.

Additional material will be suggested in class and made available in the collections room (ES 457).

**Grading (Weighting):**

Labs and short papers	36%
Tests	29%
Final project	35%

Class Participation is not formally graded, but students are strongly encouraged to share their ideas, contributions, and questions in class.

Lab exercises are due at the beginning of the lab session the week after the assignment (unless otherwise specified).

The final project is an opportunity to perform an insightful spatial statistical analysis on a research topic chosen by each individual student. Detailed guidelines for the project completion will be provided in class. The final project (literature review, written project, and presentation) must be consistent with the project proposal. If the final project is not consistent with the proposal, the proposal will receive a 0 grade.

**Late Policy:**

Lab assignments, short papers, project proposal, and final project are due on the date specified in the calendar provided in class. They are due at the beginning of the lab session or class on that date. There are no exceptions and any piece of work handed in late will be subject to an immediate 10% penalty followed by a 10% reduction in grade for each day thereafter (weekends and holidays included). Medical related circumstances will require a note from a physician.

**There is no final examination for this course.**

**Grading System:**

96-100	A+	77-80	B	59-61	C-
90-95	A	71-76	B-	55-58	D+
86-89	A-	65-70	C+	50-54	D
81-85	B+	62-64	C	0-49	F

**For additional detailed course information posted by the Instructor Desire2Learn at <https://d2l.ucalgary.ca/d2l/home>**

**USRI**

At the University of Calgary, feedback provided by students through the Universal Student Ratings of Instruction (USRI) survey provides valuable information to help with evaluating instruction, enhancing learning and teaching, and selecting courses ([www.ucalgary.ca/usri](http://www.ucalgary.ca/usri)). Your responses make a difference - please participate in USRI Surveys.

**Writing across the Curriculum**

Writing skills are not exclusive to English courses and, in fact, should cross all disciplines. The University supports the belief that throughout their University careers, students should be taught how to write well so that when they graduate their writing abilities will be far above the minimal standards required at entrance. Consistent with this belief, students are expected to do a substantial amount of writing in their University courses and, where appropriate, members of faculty can and should use writing and the

grading thereof as a factor in the evaluation of student work. The services provided by the Writing Support Services can be utilized by all undergraduate and graduate students who feel they require further assistance.

### **Principles of Conduct**

The University of Calgary 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 the University's property. This statement applies in all situations where the members of the University community are acting in their University capacities. All Members of the University Community have a responsibility to familiarize themselves with this statement which is available at: <http://www.ucalgary.ca/pubs/calendar/current/j-2.html>

### **Plagiarism**

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. Quite 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 proper referencing and 3) using work completed for another course. This activity will not be tolerated in this course and students conducting themselves in this manner will be dealt with according to the procedures outlined in the calendar. <http://www.ucalgary.ca/honesty/plagiarism>

### **Academic Accommodations:**

It is the student's responsibility to request academic accommodations according to the university policies and procedures listed below. The student accommodation policy can be found at: [www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf](http://www.ucalgary.ca/policies/files/policies/student-accommodation-policy.pdf)

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. The procedure can be found at: [www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities\\_0.pdf](http://www.ucalgary.ca/policies/files/policies/procedure-for-accommodations-for-students-with-disabilities_0.pdf)

Students needing an accommodation based on a Protected Ground other than Disability, should communicate this need, in writing, to the Instructor.

### **Freedom of Information and Protection of Privacy**

*FOIP:* The Freedom of Information and Protection of Privacy (FOIP) legislation disallows the practice of having students retrieve assignments from a public place, e.g., outside 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 provide the instructor with a stamped, self-addressed envelope to be used for the return of the assignment.

### **Re: Posting of Grades and Picking-up of Assignments**

- All assignments will be handled through D2L or personally.
- Their own grades will be available to each student on D2L by password access. Grades will not be available at Geography's main office.

### **Contact Information for Student and Faculty Representation**

- SU VP Academic Phone: 220-3911 and e-mail: [suvpaca@ucalgary.ca](mailto:suvpaca@ucalgary.ca)

- SU Faculty Rep. Phone: 220-3913 and e-mail: [arts1@ucalgary.ca](mailto:arts1@ucalgary.ca)

The students ombudsman office information can be found at:

<http://www.su.ucalgary.ca/page/affordability-accessibility/su-structure/contact-info>

### **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, 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.