



FINAL COURSE OUTLINE: WINTER 2015

GEOGRAPHY 639 H(3-3)

Advanced Spatial Analysis and Modelling

| Section | Days | Times | Location |
|---------|------|--------------|----------|
| LEC01 | We | 2pm - 4:45pm | ES 342 |
| LAB01 | Th | 2pm – 4:50pm | ES 415 |

| | | | |
|-------------|--------------------|---------|--|
| Instructor: | Stefania Bertazzon | Office: | ES 336 |
| Telephone: | 220 7355 | Email: | bertazzs@ucalgary.ca |

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

Official Course Description:

The scope of the course is to provide students with the analytical tools that will 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 consequences 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.

Fotheringham A. S., Rogerson, P. A., *The SAGE Handbook of Spatial Analysis*. London: SAGE

Ward, M. D., Gleditsch, K., S., 2008, *Spatial Regression Models*. London: SAGE

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

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

Grading (Weighting):

| | |
|-----------------------|-----|
| Labs and short papers | 35% |
| Review tests | 40% |
| Project | 25% |

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

In order to obtain the minimum graduate level passing grade (B-), *students must obtain no less than 70% in each of the following course components:*

- Total sum of all the labs and short papers;
- Total sum of Test 1 and Test 2;
- Total sum of the project component (proposal, implementation, lit. review, and presentation).

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

The final project should be viewed as an opportunity to perform an insightful spatial statistical analysis on a research topic chosen by each student. Detailed guidelines for the project completion will be provided in class. The final project (implementation and literature review) 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). 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>

Student Accessibility Services Accommodations

If you are a student with a documented disability who may require academic accommodation and have not registered with Student Accessibility Services, please contact their office at 220-8237. Students who have not registered with Student Accessibility Services are not eligible for formal academic accommodation. You are also required to discuss your needs with your instructor no later than fourteen (14) days after the start of this course.

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
- SU Faculty Rep. Phone: 220-3913 and e-mail: 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.

Faculty of Arts Program Advising and Student Information Resources

- Have a question, but not sure where to start? The new Faculty of Arts Students Centre is your information resource for everything in Arts! Drop in at SS 102, call us at 403-220-3580 or email us at ascarts@ucalgary.ca you can also visit the Faculty of Arts website at <http://arts.ucalgary.ca/undergraduate> which has detailed information on common academic concerns.
- For registration (add/drop/swap), paying fees and assistance with your Student Centre, contact Enrolment Services at (403) 210 7625 or visit them at the MacKimmie Library Block.

Contact for Students Union Representatives for the Faculty of Arts:

arts1@su.ucalgary.ca,

arts2@su.ucalgary.ca,

arts3@su.ucalgary.ca,

arts4@su.ucalgary.ca