



GEOGRAPHY FINAL COURSE OUTLINE: WINTER 2017
GEOGRAPHY 439
H(3-2)

Analytical Methods in Geography II

Section	Days	Time	Location
LEC 01	TuTh	09:30 – 10:45	EEEL 151
LAB 01	Fr	08:00 – 09:50	ES 407

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

Please note the appropriate emergency evacuation assembly point for classes taught in EEEL building and Earth Sciences is ICT Food Court.

Official Course Description:

Methods for the analysis of temporal, spatial and multivariate data sets. Emphasis is placed on data sets relating to geographic phenomena, resource utilization and environmental problems, with examples from the geographic literature. Examples will involve the use of computer packages.

Official Content:

The course provides students with the essential toolbox for the analysis of spatial and temporal multivariate datasets. These tools are among the most commonly used in honors and graduate projects, as well as in professional and applied geography.

Techniques covered in this class include regression analysis (multivariate, linear, and logistic); time series analysis, principal component and factor analysis, cluster analysis, and spatial interpolation methods. A wealth of geographic examples and applications will be illustrated, including physical, environmental, human, and health geography analyses.

For each technique, students will understand conceptual development and underlying hypotheses, as well as their benefits, applicability, and limitations. Aided by hands-on labs and statistical software, students will learn to apply each technique to geographic data.

By the end of the class students will have acquired the ability of independently applying each technique to address their own research questions on data of their choice.

Prerequisite: Geography 339

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

Text(s)/Readings:

Recommended:

B. Tabachnick & L. Fidell, 2013, Using Multivariate Statistics, 6th Edition. Boston: Allyn and Bacon.

Rogerson, P.A. (2015) Statistical Methods for Geography Sage Publications Ltd., London.

J. Burt, G. Barber, D. Rigby, 2009, Elementary Statistics for Geographers. Third Edition. New York: Guilford Press.

Additional material will be suggested in class and made available in the collections room (ES 457) or on D2L.

Grading (Weighting):

Lab assignments: 45 % of course grade.
Review tests: 40% of course grade.
Term project: 15% of course grade.

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

Lab exercises are due the week after the assignment (unless otherwise specified).

The final project should be viewed as an opportunity to perform an insightful statistical analysis on a research topic chosen by each student.

A detailed guideline for the project completion will be provided in class.

Late Policy:

Lab assignments are due at the beginning of the lab session the week following the assignment and shall be submitted to the Teaching Assistant. Project proposal and final project are due on the date specified in the calendar provided in class. Your work is 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 (weekend and holidays included). Medical related circumstances will require a note from a physician. Appropriate documentation shall be provided in support of other circumstances.

There is no final examination.

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

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>

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

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

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
- 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