Western University
Department of Geography
Geography 3210A: Quantitative Analysis in Geography

	Lectures	**Labs**
Locations:	SSC 3006	SSC 1425
Day:	Tuesday	Tuesday
Hours:	4:30-6:30 PM	7:00-9:00 PM

http://publish.uwo.ca/~jmalczew/3210.htm

Prerequisite: Geography 2210A/B
Antirequisite: All other senior level statistics courses numbered 2000 or above
"Unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you may be removed from this course and it will be deleted from your record. This decision may not be appealed. You will receive no adjustment to your fees in the event that you are dropped from a course for failing to have the necessary prerequisites."

Instructor
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Office hours:	Tue. 3:30 - 4:30pm
	Wed. 9:30 - 10:30am
	and by appointment

Teaching Assistant
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	and by appointment

Curse Syllabus

Course description: "Simple parametric and nonparametric statistical methods through multiple regression are introduced. Exploratory data analysis techniques are examined as a supplement to more traditional statistical methods. Geography specific techniques are also presented".
Goal: To extend the knowledge gained in Geog 2210a/b regarding the nature of geographical data and the application of statistical techniques and computing systems to spatial analysis.

Attendance at lecture class is highly recommended. The course material is cumulative. You should review lectures and readings weekly (do not expect success if you only study and practice before exams!). Missing a single lecture may, therefore, be critical. It is the student's responsibility to cover any material missed by failure to attend lectures.

Although mathematical detail is not emphasized, competence in simple mathematical notion and arithmetic manipulation are fundamental. Attendance at lecture class is optional, but highly recommended. Computations will be performed with computers or manually. SPSS will be the main computer program used in the course.

SCHEDULE OF CLASSES

Date	Lecture topic	Required readings
12/09/17	Introduction: course outline	Rogerson: Chapter 1, pp. 1-25
19/09/17	Exploratory data analysis	Rogerson: Chapter 2, pp. 26-38
26/09/17	No class (field camps)	
03/10/17	Parametric and non-parametric tests	Rogerson: Chapter 3-4, 60-118
10/10/17	Fall Reading Week	
17/10/17	Parametric and non-parametric tests (con.)	Rogerson: Chapter 5-6, 119-204
24/10/17	Multiple regression	Rogerson: Chapter 7-8, 205-251
31/10/17	**Mid-term test**	
07/11/17	Multiple regression (con.)	Rogerson: Chapter 9, 252-288
14/11/17	Descriptive spatial statistics	Rogerson: Chapter 2, pp. 38-59
21/11/17	Spatial pattern analysis	Rogerson: Chapter 10, 289-302
28/11/16	Spatial pattern analysis (con.)	
05/12/16	Synthesis	
TBA	**Final exam**	

Course Materials
Required textbook: Rogerson, P. A. (2015) *Statistical Methods for Geography*: *A Student's Guide*. SAGE Publications. Fourth Edition. pp 396. Paperback ISBN: 978-1446295731 (The textbook is available in the BookStore) sample
The book's companion Website: study.sagepub.com/rogerson4e

Methods of Evaluation
LAB SCHEDULE

Lab #	Section	Date	Topic	Due date
	A	Sep. 19	Exploratory data analysis	Oct. 17

	B	Oct. 3	Exploratory data analysis	Oct. 24
	A	Oct. 17	Parametric and nonparametric tests	Oct. 31
	B	Oct. 24	Parametric and nonparametric tests	Nov. 7
	A	Oct. 31	Multiple regression	Nov. 21
	B	Nov. 7	Multiple regression	Nov. 28
	A	Nov. 21	Spatial statistics	Dec. 5
	B	Nov. 28	Spatial statistics	Dec. 5

Attendance at labs is **mandatory** and absence will be **penalised by deduction of 2% of the total course mark** for each lab missed.
Each exercise will have a due date and should be handed in to your TA during the respective lab session. **An assignment loses 10% of its total possible value for each day late**. Assignments more than 5 days late will not be accepted. Medical and compassionate grounds, accomplished by suitable documentation, may be accepted as justification for late assignment submission. Labs must be stapled securely, and clearly labelled with your name and student number. Labs must be typed or hand-written legibly. Computations will be performed using SPSS Statistics and ArcGIS.

Your final grads will be based on composite performances for the following:

Mid-term Test (open-book, 60 min., Oct. 31, 2017)	35%
Final Exam (open-book, cumulative, TBA)	45%
Assignments (4 assignments at 5% each)	20%

The test and exam are designed to assess individual competence in course material. The focus is on material covered in lectures and labs.
The mid-term test consists of a 60 min in-class evaluation using multiple-choice, short-answer questions, statistical calculations and interpretation of SPSS outputs.
A restricted open-book format applies; only a calculator, textbook and lecture notes can be used in the test and exam. The level and intensity of questions posed will reflect this facility. Checking formulae and tables is practical, but it will not be possible to look up answers to all questions in the available time. A calculatoris essentialfor the mid-term test and final exam.
In accordance with university policy, missed tests and exams cannot be made up except on written medical grounds and notification prior to test/exam date (see http://counselling.ssc.uwo.ca/procedures/examinations.asp).

Additional Statements

Statement on Use of Electronic Devices
No electronic devices will be allowed during tests and examinations.

Statement on Academic Offences
"Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a Scholastic

Offence, at the following Web site:
http://www.uwo.ca/univsec/pdf/academic_policies/appeals/scholastic_discipline_undergrad.pdf "

 "All required papers may be subject to submission for textual similarity review to the commercial plagiarism detection software under license to the University for the detection of plagiarism. All papers submitted for such checking will be included as source documents in the reference database for the purpose of detecting plagiarism of papers subsequently submitted to the system. Use of the service is subject to the licensing agreement, currently between The University of Western Ontario and Turnitin.com (http://www.turnitin.com)."

 "Computer-marked multiple-choice tests and/or exams may be subject to submission for similarity review by software that will check for unusual coincidences in answer patterns that may indicate cheating."

Western's commitment to accessibility
The University of Western Ontario is committed to achieving barrier free accessibility for persons studying, visiting and working at Western.
Please contact the course instructor if you require material in an alternate format or if you require any other arrangements to make this course more accessible to you. You may also wish to contact Services for Students with Disabilities (SSD) at 661-2111 x 82147 for any specific question regarding an accommodation.

Mental Health
If you or someone you know is experiencing distress, there are several resources here at Western to assist you. Please visit the site below for more information on mental health resources:
http://www.uwo.ca/uwocom/mentalhealth/.

Support Services

Registrarial Services: http://www.registrar.uwo.ca/
Student Development Services: http://www.sdc.uwo.ca/
Social Science Academic Counselling: http://counselling.ssc.uwo.ca/