Western University Department of Geography Geography 3421A: Location Theory and Analysis

Lectures Labs
Location: UCC-53 SSC-1316A
Days: Monday Monday
Hours: 12:30-2:30p.m. 2:30-4:30p.m.

The course Website http://publish.uwo.ca/~jmalczew/3421.htm

Prerequisite: Geography 2420A/B or permission of the instructor.

"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 Information

Name: Jacek Malczewski Contact information:

Office: SSC 2422

E-mail: jmalczew@uwo.ca

Phone: 611-2111 ext. 85030

Office hours: Monday 11:30 - 12:30pm

Tuesday 3:30 - 4:30pm

Tuesday 3:30 - 4:30pm and by appointment

Course Syllabus

"An examination of public and private facility location theory. Industrial location, retailing and public facility location approaches are discussed. GIS-based techniques for location analysis are applied in practical sessions" There are three objectives of the course:

- (i) to overview location theories,
- (ii) to introduce basic techniques for location analysis, and
- (iii) to apply GIS-based techniques for location analysis.

Attendance at lecture class is optional, but highly *recommended*. The course material is cumulative. Missing a single lecture may, therefore, be critical. It is the student's responsibility to cover any material missed.

LECTURE SCHEDULE

Date	Topics	Readings
Sep. 14	Introduction	
Sep. 21 - Oct. 26	Theories of economic location	Healey & Ilbery, pp.14-30;
	 Neoclassical approaches 	Healey & Ilbery, pp. 183-190
	 Behavioral approaches 	Chapman & Walker, pp. 18-57
	Structural approaches	Church & Murray, pp. 1-17
Oct. 26 - Nov. 30	Location analysis	Church & Murray, pp. 107-134
	Site suitability analysis	Church & Murray, pp. 259-272
	 Network analysis 	Ghosh & McLafferty, pp. 87-177
	 Location-allocation models 	Malczewski, Lecture notes
	Spatial interaction models	
Dec. 7, 2015	Synthesis	
Sep. 28, 2015 No class (Field trips)		
Oct. 12, 2015	Thanksgiving Holiday	
Nov. 2, 2015	MID-TERM TEST	

Course Materials

Readings:

(The textbooks are placed on reserve in the D.B. Weldon Library) Chapman K. and Walker D. F., 1991, Industrial Location, 2nd Edition,

Cambridge: Basil Blackwell. **DBW HD58.C37 1991**

Church R. L. and A. T. Murray, 2009, *Business site selection, location analysis, and GIS*, Hoboken, N.J.: John Wiley, **BUS HD58.C48 2009**

Ghosh A. and McLafferty S. L., 1987, *Location Strategies for Retail and Service Firms*, Lexington: Lexington Books. **BUS HF5429.275.G47 1987**

Healey M. J. and Ilbery B. W., 1990, Location and Change: Perspectives on Economic Geography, Oxford University Press. **DBW HF1025.H4 1990** Malczewski J., 2015, Location-allocation analysis, Lecture Notes

Methods of Evaluation of Assignments

LAB SCHEDULE

Lab #	Date	Topic	Due date	Readings		
1	Nov. 9	Site selection/suitability analysis	Nov. 16	Using ArcGIS: Spatial Analyst		
2	Nov. 16	Location-allocation models: Network analysis 1	Nov. 23	ArcGIS Network Analyst Tutorial		
3	Nov. 23	Location-allocation models: Network analysis 2	Nov. 30	ArcGIS Network Analyst Tutorial		
4	Nov. 30	Location-allocation models	Dec. 7	ArcGIS Network Analyst Tutorial		
5	Dec. 7	Spatial interaction models	Dec. 11	ArcGIS Network Analyst Tutorial		

- i. Laboratory exercises are the means by which you can gain practical experience in lecture material. They provide the opportunity to explore and learn.
- ii. The lab component of this course consists of five assignments worth 5% each (25% your final grade).
- iii. The labs are quantitative. Although mathematical detail is not emphasized, competence in simple mathematical notions and arithmetic manipulations are fundamental. Computations will be performed with computers using ArcGIS and Excel.
- iv. The bulk of the work for the assignments will be done on your own outside of the classroom. If you have problems with any aspect of the assignments, please come and talk to me during my office hours.
- v. Assignments will be available on the course Website http://publish.uwo.ca/~jmalczew/3421.htm.
- vi. Attendance at labs is **mandatory** and absence will be **penalised by deduction of 2% of the total course mark** for each lab missed. Assignments handed in after the due date will not be accepted.
- vii. Each exercise will have a due date and should be handed in 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, student number. Labs must be typed or hand-written legibly.

Grads will be based on composite performances for the following:

Mid-term Test (100 min. Nov. 2, 2015)	35%
Final Exam (2h., TBA)	40%
Exercises	25%

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. The final exam is cumulative. For UWO Policy on Accommodation for Medical Illness and a downloadable SMC see:

http://www.uwo.ca/univsec/pdf/academic_policies/appeals/accommodation_medical.pdf

Students seeking academic accommodation on medical grounds for any missed tests, exams, participation components and/or assignments worth 10% or more of their final grade must apply to the Academic Counselling office of their home Faculty and provide documentation. Academic accommodation cannot be granted by the instructor or department.

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/