

GEOG 3225B – Transportation Geography & GIS Course Outline: Section 001 Winter 2025

1. Course Information

*Details about design and delivery of the course are listed below in Section 5



Classes Start	Spring Reading Week	Classes End	Study day(s)	Exam Period
January 6	February 17-23	April 4	April 5 & 6	April 7-30

January 14, 2025: Last day to add a second-term half course

February 17, 2025: Family Day

March 31, 2025: Last day to drop a second term half course without penalty



Course Instructor	Contact Information	Office Hours
Professor Jinhyung Lee	jinhyung.lee@uwo.ca	By appointment

Teaching Assistant(s)	Contact Information	Office Hours
Naser Ahmed (PhD student)	nahme42@uwo.ca	TBD

2. Calendar Description

Provides a comprehensive introduction to concepts, theories, and models in the field of transportation geography. GIS and spatial analysis methods for solving transport issues and problems will be presented. Topics covered include accessibility, planning, public transit, active transport, smart mobility, impacts on land use, health, energy, environment, and social equity.



2 lecture hours, 2 lab hours, 0.5 course

Antirequisite(s): None.

Prerequisite(s): Third or fourth year-status, GEOG 2220A/B or equivalent, or

permission from the instructor.

Prerequisite checking is the student's responsibility

Senate Regulations state, "unless you have either the requisites for this course or written special permission from your Dean to enroll in it, you will 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."

3. Textbook

A required textbook (it's freely available via the book website (see below)) of this course is:



- Jean-Paul Rodrigue, *The Geography of Transport Systems* (2020), Fifth edition, ISBN 0367364638, Routledge.
 - Book website: https://transportgeography.org

Selected readings such as news articles and journal papers related to the course topics could be posted to the OWL course website. Stay tuned!

4. Course Objectives and Format

Course objectives:

- I. Understand the fundamental concepts, theories, and models of transport geography/planning and GIS for transportation (GIS-T).
- II. Have necessary quantitative and GIS skills for analyzing transport issues and problems within cities.
- III. Solve transport problems using spatial analysis techniques and GIS software (e.g., ArcMap, ArcGIS Pro).



Mode	Dates	Time	Frequency
Lecture – in-person	Thursdays	1:30 – 2:30 PM	Weekly
Lab – in-person	Thursdays	2:45 – 5:30 PM	Weekly

All course material will be posted to OWL: http://owl.uwo.ca. Any changes will be indicated on the OWL site and discussed with the class.

Current versions of all popular browsers (e.g., Safari, Chrome, Edge, Firefox) are supported with OWL Brightspace; what is most important is that you update your browser frequently to ensure it is current. All JavaScript and cookies should be enabled.

If students need assistance, they can seek support on the OWL Brightspace Help page. Alternatively, they can contact the Western Technology Services Helpdesk. They can be contacted by phone at 519-661-3800 or ext. 83800.

5. Course Content and Schedule

General

Week	Dates (Thursday)	Topic	Lab
Part 1: C	Part 1: Overview, contexts, and foundational concepts		
1	Jan 9	Course overview and introduction	Lab 1
2	Jan 16	What is transportation geography?	Lab 2
3	Jan 23	Spatial accessibility – Part 1	Lab 3
4	Jan 30	Spatial accessibility – Part 2	Lab 3 help
		Term Project Introduction	
5	Feb 6	Transport, land use, and urban structure	Lab 4
		+ Problems Part 1 (Safety issues)	
6	Feb 13	Mid-term exam	N/A
Part 2: P	roblems		
7	Feb 20	Reading Week (No Class)	N/A
8	Feb 27	Problems Part 2:	Lab 4 help
		environmental impacts of transportation	
9	Mar 6	Problems Part 3 (social impacts) +	Lab 6
		Travel behaviour and Transport demand	
		management	
Part 3: S	olutions		
10	Mar 13	Towards More Equitable Transport Planning	Lab 6 help
11	Mar 20	Towards More Sustainable and Healthier	Lab 7
		Transport Planning	
12	Mar 27	Special topic: Transport geography & GIS	Lab 7 Help
		in the Global South	
13	April 3	Term Project Help	Term Project
			Help



<u>Lab</u>

	Topic	Lab session date	Due
			date
Lab 1	Constructing a network dataset in ArcPro	Jan 9	Varies
Lab 2	Delineating accessible areas	Jan 16	(Due in
Lab 3	Spatial accessibility analysis – Part 1	Jan 23	two
Lab 4	Spatial accessibility analysis – Part 2	Feb 6	weeks)
Lab 6	Measuring accessibility by public transit	Mar 6	
Lab 7	Walkability analysis	Mar 20	

Note: There is no Lab 5.

Exam

	Scope	Time	Format
Mid-term	Week 1-5	In class time, Thursday, Feb	Short essay questions
Exam		13 th , 2025	
Final	Week 8-	During the Final Exam period	Short essay questions
Exam	12		

Term Project

	Time (Due date)
Term Project Proposal (written)	March 5, 2025
Term Project Final Report (written)	April 16, 2025

6. Generative Al Policy

Overall, this course does not impose strict constraints on your use of generative AI tools (e.g., ChatGPT, Gemini). You are encouraged to use these emerging AI tools creatively, responsibly, and ethically. However, there is one exception: you cannot use these tools to write your drafts (e.g., Assignments, Term Project Final Reports). While it is acceptable to use generative AI tools for editing your writing (e.g., correcting grammar errors), you should not depend on them to create the original draft.

Using generative AI tools for technical assistance (e.g., R/Python code, ArcGIS Pro, geospatial analysis tools), statistical or mathematical help, or information retrieval (e.g., search queries) is allowed. However, please remain mindful of the potential biases and inaccuracies in the responses generated by these tools.

7. Communication

- Students should check the OWL site every 24 − 48 hours
- A weekly update will be provided on the OWL announcements



- For any other communication, the centrally administered **e-mail account** provided to students will be considered the individual's official university e-mail address. It is the responsibility of the account holder to ensure that e-mail received from the University at his/her official university address is attended to in a timely manner. You can read about the privacy and security of the UWO email accounts here.
- Emails will be monitored daily; students will receive a response in 24 48 hours, excluding weekends

8. Evaluation

Below is the evaluation breakdown for the course. Any deviations will be communicated.

Assessment	Weighting
Labs	30%
Mid-term Exam	17.5%
Term Project Proposal	5%
Term Project Final Report	30%
Final Exam	17.5%

Students are responsible for material covered in the lectures as well as the assigned chapters/sections in the text.

- All assignments are due at 11:55 pm EST unless otherwise specified
- Assignments will be accepted up to **48 hrs** after their scheduled due date, excluding weekends (e.g., if your lab is due on a Tuesday, you have until Thursday to hand it in).
- After an assessment is returned, students should wait 24 hours to digest feedback before contacting their evaluator; to ensure a timely response, reach out within 7 days



Click <u>here</u> for a detailed and comprehensive set of policies and regulations concerning examinations and grading. The table below outlines the University-wide grade descriptors.

A+	90-100	One could scarcely expect better from a student at this level
Α	80-89	Superior work which is clearly above average
В	70-79	Good work, meeting all requirements, and eminently satisfactory
С	60-69	Competent work, meeting requirements
D	50-59	Fair work, minimally acceptable
F	below 50	Fail

Information about late or missed evaluations:

- Assignments (Labs, Term Project Proposal, Term Project Final Report) will **NOT be** accepted for grading more than 48 hours (excluding weekends) after the scheduled due date & time (e.g., if your lab is due on a Tuesday, you have until Thursday to hand it in).
- Late assessments <u>without</u> an academic consideration request will be subject to a late penalty 10 %/day.
- Late assessments <u>with</u> an academic consideration request please discuss new submission deadline with Dr. Lee.

Grades will not be adjusted on the basis of need. It is important to monitor your performance in the course. Remember: You are responsible for your grades in this course.

9. Accommodation Policies

Students with disabilities work with Accessible Education (formerly SSD) which provides recommendations for accommodation based on medical documentation or psychological and cognitive testing. The accommodation policy can be found here: Academic Accommodation for Students with Disabilities.

General Information about missed work:

University policy on academic considerations are described <u>here</u>. This policy requires that all requests for academic considerations must be accompanied by a self-attestation. Further information about academic considerations, and information about submitting this self-attestation with your academic consideration request may be found here.

Please note that any academic considerations granted in this course will be determined by the instructor, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline.

Absence from Course Commitments

Students must familiarize themselves with the <u>Policy on Academic Consideration – Undergraduate Students in First Entry Programs</u>

Students missing course work for medical, compassionate or extenuating circumstances can request academic consideration by completing a request at the central academic consideration portal. Students are permitted one academic consideration request per course per term without supporting documentation. Note that supporting documentation is <u>always</u> required for academic consideration requests for examinations scheduled by the office of the registrar (e.g. December and April exams) and for practical laboratory and performance tests typically schedule during the last week of the term. Students should also note that the instructor may designate one assessment per course per term that requires supporting documentation. This designated assessment is described elsewhere in this document. Please note that any academic considerations granted in this course will be determined by the instructor of this course, in consultation with the academic advisors in your Faculty of Registration, in accordance with information presented in this course outline. Supporting documentation for academic considerations for absences due to illness should use the <u>Student Medical Certificate</u> or, where that is not possible, equivalent documentation by a health care practitioner.

Course Assessments that Require Supporting Documentation

For this course the following assessment has been designated as requiring supporting documentation:

Mid-term Exam (Thursday, Feb 13th, 2025)

Accommodation for Religious Holidays

Students should review the policy for <u>Accommodation for Religious Holidays</u>. Where a student will be unable to write examinations and term tests due to a conflicting religious holiday, they should inform their instructors as soon as possible but not later than two weeks prior to

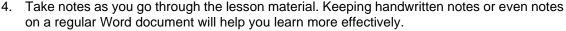
writing the examination/term test. In the case of conflict with a midterm test, students should inform their instructor as soon as possible but not later than one week prior to the midterm.

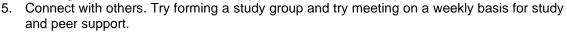
10. How to Be Successful in this Class:

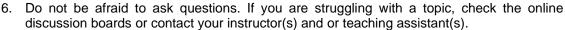
Students enrolled in this class should understand the level of autonomy and self-discipline required to be successful.

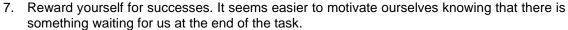


- 1. Invest in a planner or application to keep track of your courses. Populate all your deadlines at the start of the term and schedule time at the start of each week to get organized and manage your time.
- 2. Make it a daily habit to log onto OWL to ensure you have seen everything posted to help you succeed in this class.
- 3. Follow weekly checklists created on OWL or create your own to help you stay on track.











Scholastic offences are taken seriously and students are directed to read the appropriate policy, specifically, the definition of what constitutes a <u>Scholastic Offence</u>.

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.

12. Western's Commitment to Accessibility

The Department of Geography and Environment strives at all times to provide accessibility to all faculty, staff, students and visitors in a way that respects the dignity and independence of people with disabilities.



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 519-661-2147 for any specific question regarding an accommodation. <u>Information regarding accommodation of exams</u> is available on the Registrar's website.

More information about "Accessibility at Western" is available.

13. Mental Health

If you or someone you know is experiencing distress, there are several resources here at Western to assist you. Please visit Western's <u>Health and Wellness website</u> for more information on mental health resources.

14. Support Services

Western's Support Services
Student Development Centre

15. Important Dates

Monday January 6: Classes resume

Tuesday January 14: Last day to add a second term half course Monday February 17: Family Day – Department Office Closed

February 17-23: Spring Reading Week (No classes; Department Office open)

Friday March 7: Last day to drop a second term half course

Friday April 4: Classes end April 5 and 6: Study days April 7-30: Examination Period