# Faculty of Environmental and Urban Change York University

# ENVS6128 Transportation Policy and Planning

Term: Fall 2024

**Time and Location:** Wednesday 10:00am, HNE142

# **Calendar Description**

This course provides a broad understanding of key concepts and issues in transportation planning and policy. It also reviews transportation systems, including new mobility options. Topics covered in this course include transportation disadvantage, externalities of transportation, and travel behavior.

There are no prerequisites for this course.

#### **Course Director**

Dr. Mahtot (Mah-tote) Gebresselassie Office Hours: Friday 11:00am, Zoom link in eClass

#### Communication

Please use eClass only to communicate with me regarding anything about this course, unless I advise you otherwise. For other reasons, please email me. I respond to student communication within 24 hours on weekdays. If you contact me on the weekend, expect a response by the following Monday. Always begin your emails with the following salutation: Hello Professor Mahtot or Professor Gebresselassie.

#### **Course Description**

This course provides an introductory overview of key concepts, issues, and trends related to transportation planning and policy. While it is intended for students with little or no background in transportation, students familiar with aspects of it seeking to enhance their understanding are also welcome. The first module introduces students to key concepts to assist with deeper exploration of policies and trends covered in latter sections. The module on public and private transportation gives students an understanding of various user groups and knowledge of policies that encourage or discourage use of different modes. It also gives an overview of travel trends. The next section reviews travel behavior and determinants, including land use and its relationship with transportation systems and travel behavior. In Transportation Disadvantages, the module examines theoretical framework in understanding transportation equity, the impact of transportation disadvantage on underserved communities, and how transportation equity is understood. The two underserved communities discussed in this module are low-income earners and people with disabilities. The last module covers new technology-enabled modes of transportation such as Uber and Lyft. It also covers topics on autonomous vehicles and electrification of private and public transportation

systems. While majority of the content focuses on Canada and the US, other contexts are also reviewed to help students appreciate similarities and differences.

#### **Course Evaluation**

In this course, you will be assessed on a Pass or Unsatisfactory grading scheme with a short qualitative assessment. If you would like to receive a letter grade in addition to the official Pass/Unsatisfactory, please let me know by week two. Graduate grading will be based on higher level of insight, understanding and complexity of the material as well as mastery of concepts.

The course evaluation is based on the following items weighted as indicated:

Journaling About Transportation in the GTA	5%
Observations about GTA transportation	
News brief	5%
News item discussion/assignment	
Class Participation	20%
This includes participation during class discussion, guest-speaker	
presentations, and engagement during in-class group/pair	
activities, online discussions	
Topical Brief, Group Presentation	20%
Select from suggested topics or choose another issue	
Accessibility Audit (Location TBD), Group Assignment	25%
Accessibility audit	
Final Paper	25%
A focused paper on a topic relevant to thesis or general interest	

# **Assignments Submission**

Due dates will be posted in eClass; you will submit all assignments via e-class; and graded papers will be returned to you via e-class. Proper academic performance depends on you doing your work not only well, but on time. My expectation for you is that you submit your work on the due date specified for the assignment. If you need extension, let me know ahead of time. I will not consider any request for extension on the due date or past it as it will not be fair to your classmates who work hard to submit on time.

#### **ADDITIONAL INFORMATION**

# **Religious Observance Days**

York University is committed to respecting the religious beliefs and practices of all members of the community and making accommodations for observances of special significance to adherents. Should any of the dates specified in this syllabus for in-class test or examination pose such a conflict for you, contact me within the first three weeks of class. Similarly, should an assignment to be completed in a lab, practicum placement, workshop, etc., scheduled later in the term pose such a conflict, contact me immediately.

# **Academic Honesty**

The use of generative AI such as ChatGPT is **strictly prohibited** in this course. Any use of AI technology would be considered a **breach of academic honesty** and will be handled accordingly.

As a student at York University, you have a responsibility to not only understand, but also play an important part in upholding the integrity of the academic experience. The Faculty of Environmental and Urban Change supports the International Center for Academic Integrity's **definition of academic integrity**. That is, you will be committed to acting in all academic matters, even in the face of adversity, with honesty, trust, fairness, courage, respect and responsibility.

How can you demonstrate academic integrity in the completion of your course?

- Respect the ideas of others: Your course work should represent your own knowledge
  and ideas. You should not falsely claim credit for ideas that are not your own, by
  presenting another's work as yours. If you are quoting, paraphrasing, or summarizing
  another person's work in order to support your own ideas, identify the work and the
  author through proper citation practices. For more information about how to cite
  properly, use the <u>Student Papers and Academic Research Kit</u> (SPARK). You can
  improve your writing, research, and personal learning abilities through the <u>Learning</u>
  Commons.
- Respect your peers: Know when you are allowed to collaborate. Ask your instructor
  about what group work entails when it comes to the sharing of work. In test
  situations and assignments, do not steal or give answers to your peers. Cheating and
  aiding are a breach of academic honesty and are both against York University's
  academic honesty policy.
- Respect your course instructor: Understand what the instructors are asking of you in class, in assignments, and in exams. If you are unsure, ask your professor, we are committed to making you feel supported and want to assess you fairly and with integrity. Please do not submit the same piece of work for more than one course without your instructor's permission.
- Respect yourself: When you act with integrity, you know that your work is yours and yours alone. You do not allow others to impersonate you, or you do not yourself impersonate another person during a test or exam. You do not buy or otherwise obtain term papers or assignments. You do the work. As a result, you know that you earned the grades that you receive, so you can be proud of your York degree. By acting with integrity in your course work, you are also practising a valuable professional skill that is important in all workplaces.
- Take responsibility: If you have acted in an academically dishonest way, you can
  demonstrate courage and take responsibility for your mistake. You can admit your
  mistake to your course instructor as soon as possible.

Students who engage in academic dishonesty can be subject to disciplinary action under the **Senate Policy on Academic Honesty**. Your lack of familiarity with the Senate Policy and Guidelines on Academic Honesty does not constitute a defense against their application. Some academic offences can also constitute offences under the Criminal Code of Canada, which means that you may also be subject to criminal charges.

#### Intellectual property notice

All materials prepared for this course are the intellectual property of the Course Director or otherwise stated. Course materials should only be used by students enrolled in this course. This can include but is not limited to the following material: lecture notes, handouts, and recordings; assignment handouts and instructions; spoken and written presentations; audio and video recordings; PowerPoint slides; and questions and/or solution sets for assignments, quizzes, tests, and final exams. You are also not allowed to record (audio and video) presentations, lectures, in-class discussion, and any and all activities that take place in the classroom without the instructor's permission.

As a student in this course, you may not publish, post on an Internet site, sell, or otherwise distribute any of this work without the instructor's express permission. Unauthorized or commercial use of these materials is strictly prohibited. Third party copyrighted materials (such as book chapters, journal articles, music, videos, etc.) have either been licensed for use in this course or fall under an exception or limitation in Canadian copyright law. Copying this material for distribution (e.g. uploading material to a commercial third-party website, or online sharing of course material with people outside of the course) may lead to a charge of misconduct under York's **Code of Student Rights and Responsibilities** and the **Senate Policy on Academic Honesty**. In addition, you may face legal consequences for any violation of copyright law.

**Ethical Review of Research Involving Human Participants in Undergraduate Courses** York students are subject to the York University Policy for the **ethics review process** for research involving Human Participants. All research activity with human participants must undergo ethical review.

# **Student Conduct**

Students, course instructors and staff have a joint responsibility to create and maintain a welcoming and inclusive learning environment. All students are expected to conduct themselves in accordance with the <u>Code of Student Rights and Responsibilities</u>. Whether online or in-person, students and course instructors are expected to cultivate and sustain a professional relationship characterized by mutual respect and courtesy. In all classrooms, any <u>disruptive and/or harassing behavior</u> will not be tolerated. To ensure that you adhere to the rules of the virtual classroom, please review what counts as proper 'netiquette' (the basic rules for communicating with others in online spaces) by consulting the <u>student guide to e-learning</u>.

Please respect the privacy of your peers and instructors. Never share private information about your peers and instructors without their permission. Remember, no aspect of your courses should be recorded or distributed without everyone's consent.

### **Accessibility**

While all students are expected to satisfy the requirements of their program of study and to aspire to achieve excellence, the university recognizes that persons with disabilities may require reasonable accommodation to enable them to perform at their best. For more information about this policy, please refer **Academic Accommodation for Students with Disabilities** guidelines and procedures.

The university encourages students with disabilities to register with <u>Student Accessibility Services (SAS)</u> to discuss their accommodation needs as early as possible in the term. An Accessibility Counsellor will help you establish recommended academic accommodations, which will then need to be communicated to your course instructor(s) as necessary. Please let me know as early as possible in the term if you anticipate requiring academic accommodation, so that your accommodation needs can be discussed and considered within the context of this course.

## Support

**Student Counselling & Development (SCD)** aims to help York students realize, develop and fulfill their personal potential in order to maximally benefit from their university experience and manage the challenges of university life. You can get support for a wide range of concerns including, but not limited to depression, anxiety, abuse, stress, self-esteem, relationship issues, eating and body image as well as issues related to sexuality.

# Schedule of Topics and Readings

Required readings are available in the York Libraries. Permalink will be provided in e-Class under the appropriate section. eClass announcements. Together, we may decide to change due dates of assignments to give you more flexibility in the Fair Dealing Guidelines. Please note that I may change the readings if I come across more relevant materials. I may also Scanned copies of non-electronic book chapters will be provided as an attachment in compliance with the university's add to the weekly readings to have enough material for in-class activities. I will notify you of these changes through course work.

Week & Date	Topic	Instructor/Guest	Required Reading/Learning Resources	Assignment
Sept. 4 - class cancelled	ancelled			
1. Sept. 11	1. Sept. 11 Introduction, syllabus review, co-creation of community guidelines, discussion about plagiarism	Instructor	Course syllabus	
Module One: In	Module One: Introduction to Key Concepts	cepts		
2. Sept. 18	Sept. 18 Key concepts and issues - accessibility, mobility	Instructor	Hanson, S. (2017). The Context of Urban Travel: Concepts and Recent Trends. In S. Hanson & G. Giuliano (Eds.), The Geography of Urban Transportation (4 ed., pp. 3-29). New York: Guilford Press. Levine, J., Grengs, J., & Merlin, L. A. (2019). What is transportation for? In From Mobility to Accessibility (pp. 18-34). Ithaca, NY: Cornell University Press.	
3. Sept. 25	Key concepts & issues – Externalities –	Instructor	Stopher P. & J. Stanley. 2014. Tackling the Externalities: Fuels and Technology. In: Introduction to Transport Policy: A Public Policy View, pp. 195-204.	

Le Vine, S. & Lee-Gosselin, M. (2017). Transportation and Environmental Impacts and Policy. In S. Hanson & G. Giuliano (Eds.), The Geography of Urban Transportation (4 ed., pp. 273-301). New York: Guilford Press.	Le Vine, S. & Lee-Gosselin, M. (2017). Green. In S. Hanson & G. Giuliano (Eds.), The Geography of Urban Transportation (4 ed., pp. 273-301). Transportation and energy, in, pp. 302-331.		structor & Diab, E., Kasraian, D., Miller, E. J., & Shalaby, A. (2020).  Uest speaker The rise and fall of transit ridership across Canada: Understanding the determinants. Transport Policy, 96, 101-112.	Taylor, B. D., & Morris, E. A. (2015). Public transportation objectives and rider demographics: Are transit's priorities poor public policy? Transportation, 42(2), 347–367.	Schweitzer, S. (2017). Mass Transit. In S. Hanson & G. Giuliano (Eds.), The Geography of Urban Transportation (4 ed., pp. 187 -217). New York: Guilford Press.	Kennedy, C. A. (2002). A comparison of the sustainability of public and private transportation systems: Study of the Greater Toronto Area. Transportation, 29(4), 459-493.	
	Le Vine, S Hanson & Transport		Instructor & Guest speaker		Schweitz Giuliano Transport Press.	Kennedy sustainak systems: 'Systems: 'Area. Tra	
congestion, the environment		Module Two: Private and Public Modes of Transportation	4. Oct. 2 Modes of transportation. User groups, alternatives,	policies, transit			

University of Toronto Press.	King, D. A., Smart, M. J., & Manville, M. (2019). The Poverty of the Carless: Toward Universal Auto Access. Journal of Planning Education and Research, 0739456X18823252. https://doi.org/10.1177/0739456X18823252	Brown, J. R., Morris, E. A., & Taylor, B. D. (2009). Planning for Cars in Cities. Journal of the American Planning Association, 75(2), 161-177.	Meyer, M. D. (1999). Demand management as an element of transportation policy: using carrots and sticks to influence travel behavior. Transportation Research Part A, 33, 575-599.	"Improving Travel Options with Transportation Demand Management", Federation of Canadian Municipalities, 2008.	The High Cost of Free Parking, by Donald Shoup <a href="http://www.youtube.com/watch?v=K8vkbfz8PU8">http://www.youtube.com/watch?v=K8vkbfz8PU8</a>	Thoughts on the fringe: O'Toole, R. (2006). Are Highways Subsidized? Retrieved from <u>TheFreeman 8-11 (fee.org)</u>
	Instructor & Guest speaker					
	Cars, carelessness, & transport demand management					
	5. Oct. 9					

6. Oct. 16 R	Oct. 16 Reading Week			
Module Three: Travel Behavior	ravel Behavior			
7. Oct. 23	Travel behavior determinants - transportation and	Instructor	Ewing, R., & Cervero, R. (2010). Travel and the built environment: A meta-analysis. Journal of the American planning association, 76(3), 265-294.	
			Van Wee, B., & Handy, S. (2016). Key research themes on urban space, scale, and sustainable urban mobility. International Journal of Sustainable Transportation, 10(1), 18-24.	
			Transit-Oriented Communities: A Literature Review on the Relationship Between the Built Environment and Transit Ridership, Translink, September 2010.	
8. Oct. 30	Travel behavior in other contexts	Instructor & Guest speaker	Guerra, Caudillo, C., Monkkonen, P., & Montejano, J. (2018). Urban form, transit supply, and travel behavior in Latin America: Evidence from Mexico's 100 largest urban areas. Transport Policy, 69, 98–105. https://doi.org/10.1016/j.tranpol.2018.06.001	
			Wang, & Zhou, M. (2017). The built environment and travel behavior in urban China: A literature review. Transportation Research. Part D, Transport and Environment, 52, 574–585. https://doi.org/10.1016/j.trd.2016.10.031Marketing, 35(7), 909–921.https://doi.org/10.1080/10548408.2018.1445575	
Module Four: Tro	Module Four: Transportation Disadvantage	rage		
9. Nov. 6	Writing workshop	Ray Bennett & instructor	Graff, G., Birkenstein, C., & Maxwell, C. (2014). They say, I say: The moves that matter in academic writing (p. 245). Gildan Audio.	

Litman, T. (2023). Evaluating Transportation Equity. <u>Evaluating Transportation Equity (vtpi.org)</u>	Jones, P., & Lucas, K. (2012). The social consequences of transport decision-making: clarifying concepts, synthesising knowledge and assessing implications. Journal of Transport Geography, 21, 4-16.	Attoh, K. A. (2013). Rights in Transit: Public Transportation and the" Right to the City" in California's East Bay. P. 1 - 20	Martens, Karel. "Fairness in Traditional Transportation Planning." Transport Justice. Routledge, 2017. 33–50. Web.	O'Neill, Y., & O'Mahony, M. (2005). Travel Behavior and Transportation Needs of People with Disabilities: Case Study of Some Categories of Disability in Dublin, Ireland. Transportation Research Record, 1924(1), 1–8. https://doi.org/10.1177/0361198105192400101	Brumbaugh, S. (2018). Travel patterns of American adults with disabilities. Bur. Transp. Stat, 1-10.	Paez, A., Scott, D., Potoglou, D., Kanaroglou, P., & Newbold, K. B. (2007). Elderly Mobility: Demographic and Spatial Analysis of Trip Making in the Hamilton CMA, Canada. Urban Studies, 44(1), 123-146.	Stafford 1 & Baldwip C (2018) Planning Walkable
Instructor				nstructor			
Concepts of Ir				Disability, and accessibility, and transportation			
10. Nov. 13				11. Nov. 20			

			Abilities and Ages? Journal of Planning Literature, 33(1), 17-30.
Module Five: Te	Module Five: Technology and mobility and strategies for n	y and strategies for now ar	ow and the future
12. Nov. 27	App-hailed transportation	Instructor	Young, M., & Farber, S. (2019). The who, why, and when of Uber and other ride-hailing trips: An examination of a large sample household travel survey. Transportation Research Part A: Policy and Practice, 119, 383-392.
			Shi, H. Y. (Eva), & Sweet, M. N. (2021). Who uses ridehailing? Policy implications and evidence from the Greater Toronto and Hamilton Area. The Canadian Geographer / Le Géographe Canadien, 65(2), 197–214. https://doi.org/10.1111/cag.12638
			Clewlow, R. R., & Mishra, G. S. (2017). Disruptive transportation: The adoption, utilization, and impacts of ride-hailing in the United States.
			Rayle, L., Dai, D., Chan, N., Cervero, R., & Shaheen, S. (2016). Just a better taxi? A surveybased comparison of taxis, transit, and ridesourcing services in San Francisco. Transport Policy, 45, 168-178.
			Gebresselassie, M. (2023). Wheelchair Users' Perspective on Transportation Service Hailed Through Uber and Lyft Apps. <i>Transportation Research Record.</i>
			Alemi, Circella, G., Handy, S., & Mokhtarian, P. (2018). What influences travelers to use Uber? Exploring the factors affecting the adoption of on-demand ride

services in California. Travel, Behaviour & Society, 13, 88–104. https://doi.org/10.1016/j.tbs.2018.06.002	Jin, S. T., Kon, H., Wu, R., & Sui, D. Z. (2018). Ridesourcing, the sharing economy, and the future of cities. Cities, 76, 96-104.	Cohen, T., & Cavoli, C. (2019). Automated vehicles: exploring possible consequences of government	(non)intervention for congestion and accessibility. Transport Reviews, 39(1), 129-151.	Sweet, M. (2021). User interest in on-demand, shared, and driverless mobility: Evidence from stated preference choice experiments in Southern Ontario. Travel Behaviour and Society, 1-17.
		Instructor &	Guest speaker	
		AVs and EVs		
		13. Dec. 4		