## ECO333: URBAN ECONOMICS UNIVERSITY OF TORONTO, SUMMER 2023

# 1. BASIC INFORMATION

Section L0101

- Synchronous class: Thursday 3:10–4:00 рм
- Tutorials:
  - Tuesday 4:10–5:00 рм
  - Thursday 4:10–5:00 рм

# Section L5101

- Synchronous class: Thursday 7:10–8:00 рм
- Tutorials:
  - Tuesday 8:10–9:00 рм
  - Thursday 8:10–9:00 рм

Instructor: Jonathan Hall Email: jonathan.hall@utoronto.ca

Teaching assistants: Zhongdao Wang and Derek Theile

Office hours:

- Monday
  - 7:00-8:00 рм (Zhongdao)
  - 8:00–9:00 рм (Professor Hall)
- Tuesday
  - noon–1:00 рм (Derek)
  - 3:30–4:00 рм (Professor Hall)
- Wednesday
  - 7:30–8:30 рм (Derek)
  - 8:30–9:00 рм (Professor Hall)
- Thursday, 1:00–2:00 рм (Zhongdao)
- Friday, 8:00–9:00 AM (Professor Hall)

Course website: http://q.utoronto.ca

Zoom link: https://utoronto.zoom.us/j/82339469819 (passcode 989016)

Date: April 25, 2023.

### 2. Course Description and objectives

In this course we will apply the tools you learned in your first and second year courses to understanding urban and transportation policy. By the end of this course, you will be able to

- Explain the fundamental economic forces causing cities to exist
- Explain the fundamental economic trade-offs driving urban spatial structure, and use this understanding to explain differences within and across cities
- Understand the key issues in urban transportation, be able to explain the trade-offs between different transportation systems, and analyze how different government policies affect mobility within cities
- Analyze how different government policies affect the housing market

See the end of the syllabus for a detailed list of specific questions we will address in this course.

In addition, you will

- Improve your ability to use models to answer questions. This requires mastering the ability to translate back and forth between English and mathematics.
- Improve your ability to interpret tables and graphs.

## 3. Approach

This class is primarily online asynchronous. Most course content will be provided by prerecorded video. Every Thursday we will meet using Zoom for a 50-minute class discussion. To facilitate discussion, these will not be recorded.

The bi-weekly tutorials are an opportunity for you to ask the teaching assistants any questions you have about the material. After an exam or homework assignment the teaching assistants will go over the answers in the tutorial.

## 4. Policies

**First rule of holes.** Stop digging and get help! Come see me, your college registrar's office, or any of the other resources listed in Section 6.

**Communication: Email and Quercus.** I check my University of Toronto email accounts once each business day and expect you to do the same. I will respond to all emails within two business days. Emails should be sent from your official University of Toronto email address. When emailing, please prefix the subject line with [ECO333] so that I can prioritize your message.

In order to help me get to know you better, I prefer that you ask questions in class or during office hours; rather than by email. My experience is that any other beyond administrative questions works better in a face-to-face discussion. I hold additional office hours in part to make this feasible.

I use the University's learning management system, Quercus, to post course information, announcements, and assignments. I expect you to either check Quercus, or set Quercus to email you notifications and check your email, at least once each business day.

We also have a course Piazza page, accessible via Quercus. Piazza is an ideal place to post questions, and it allows fellow classmates, the TAs, and me to collaborate on answering them.

**Generative Artificial Intelligence.** The use of generative artificial intelligence tools or apps for assignments in this course, including tools like ChatGPT and other AI writing or coding assistants, is prohibited.

Accommodation. I am willing to provide reasonable accommodations for a variety of reasons, including disability, health problems, religious observance, participation in an extra-curricular activity, death in the family, illness, or injury. I require a written request for an accommodation. If you need an accommodation for a disability you should register with Accessibility Services (http://accessibility.utoronto.ca).

*Missing an exam.* The most common accommodation request is to miss an exam. Requests due to non-medical reasons must be received by 19 May 2023.

If you need to miss the midterm due to illness, you must email me, from your official University of Toronto email account, *before* 9AM the day of the exam. Your email must concisely explain why you missed the test, contain the statement "I understand that it is a punishable academic offense to present false or misleading information with my request for a make-up test" and close with your name and student number. I do not require a medical note. There will be a makeup exam on 9 June 2023 from 3:00–5:00 PM.

For medical issues that last longer than a few days, you should consult with your college registrar.

If you miss the final exam, you must follow Arts & Science's procedures for requesting a deferred exam.

*Homework.* As an automatic accommodation for sickness, technical problems, etc. that impact your ability to complete the homework or quizzes done on Quercus on time, your worst 10% of homework or quizzes on Quercus will be dropped. There are no other accommodations made regarding the homework.

**Late homework.** Late homework will be assessed a 20 percentage point penalty per day.

**Appealing grades.** If you believe an assignment, quiz, or exam has been incorrectly graded, you may for it to be re-evaluated. A form will be posted on Quercus where you can submit this request. You need to make this request as soon as possible after receiving the work back, and the request must be received within two weeks of the coursework being handed back. The entire work will be regraded and your grade may increase or decrease. I have this policy not to punish you for asking for a re-evaluation, but because notwithstanding all our efforts to achieve precision in grading, grading inevitably involves a degree of randomness and in regrading we wish to reduce the randomness (both in your favor and against) on all parts of the work in order to come to a more precise measure of your true performance on the assignment. If after completing this process you still have a problem with any aspect of your grade, the overall grade appeal process under the university's policies remain available to you (see http://www.governingcouncil.utoronto.ca/Assets/Governing+Council+Digital+Assets/Policies/PDF/grading.pdf).

**No audio or video recordings.** You may not create audio or video recordings of classes, with the exception of those students requiring an accommodation for a disability, who must speak to me prior to beginning to record lectures.

Academic Integrity. All students, faculty and staff are expected to follow the University's guidelines and policies on academic integrity. For students, this means following the standards of academic honesty when writing assignments, collaborating with fellow students, and writing tests and exams. Ensure that the work you submit for grading represents your own honest efforts. Plagiarism—representing someone else's work as your own or submitting work that you have previously submitted for marks in another class or program—is a serious offense that can result in sanctions. Speak to me or your TA for advice on anything that you find unclear. To learn more about how to cite and use source material appropriately and for other writing support, see the U of T writing support website at http://www.writing.utoronto.ca. Consult the Code of Behaviour on Academic Matters for a complete outline of the University's policy and expectations. For more information, please see https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity and http://academicintegrity.utoronto.ca.

**Copyright.** Course materials prepared by the instructor are considered by the University to be an instructor's intellectual property covered by the Copyright Act, RSC 1985, c C-42. These materials are made available to you for your own study purposes, and cannot be shared outside of the class or "published" in any way. Lectures, whether in person or online, cannot be recorded without the instructor's

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permission. Posting course materials or any recordings you may make to other websites without the express permission of the instructor will constitute copyright infringement.

### 5. Important dates

- First tutorial: 9 May 2023
- First class discussion: 11 May 2023
- Midterm exam: 1 June 2023, 3:00-5:00 РМ in EX 320 for L0101 and 6:00-8:00 РМ in EX 310 for L5101. This replaces the live discussion and tutorial for this date.
- Make-up midterm exam: 9 June 2023, 3:00-5:00 рм in EX 310 for all sections
- Last class discussion: 15 May 2023
- Last tutorial: 19 June 2023
- Final exam: 21–26 June 2023, as scheduled by the Office of the Faculty Registrar

### 6. Resources

Academic Success Centre. http://www.studentlife.utoronto.ca/asc

Accessibility Services. http://www.studentlife.utoronto.ca/as

Health & Wellness Centre. http://www.studentlife.utoronto.ca/hwc

**College Registrars' offices.** https://www.artsci.utoronto.ca/current/academic-advising-and-support/college-registrars-offices

English Language Learning. http://www.artsci.utoronto.ca/current/advising/ell

Office of Student Academic Integrity. http://www.artsci.utoronto.ca/osai

Writing help. http://www.writing.utoronto.ca/

Advice for thriving at university.

- http://www.vox.com/2015/1/7/7500705/college-advice
- http://www.vox.com/2014/6/24/5824192/study-smarter-learn-better-8tips-from-memory-researchers

### 7. Grades

Grades will be based on

- Midterm exam (30%)
- Comprehensive final exam (45%)
- Homework and quizzes (25%)

Final grades will automatically be curved up to ensure the median grade is at least a B-. Final grades will never be curved down.

**Exams.** 30% of your final grade will come the midterm exam. This will cover Modules 1–6.

**Final exam.** 45% of your final grade will come from the final exam. The final exam will be given as scheduled by the Office of the Faculty Registrar. The final exam will be comprehensive, but will be heavily weighted towards the last half of the course. Roughly 75% of the points will be from the last half of the course with 25% from the first half.

**Homework and quizzes.** 25% of your final grade will come from your homework and quizzes.

Via Quercus there will be a large number of short quizzes and response questions. For most of these you will be able to use any resources you have available, including working with classmates. There will be some quizzes that you will not be able to work with classmates, but they will still be open notes.

For the purposes of academic integrity, the homework and quizzes within a given third of the course are considered as one. This means the typical penalty for cheating on a problem set is receiving a zero for all problem sets in that third of the course.

## 8. Course outline

Below is a list of topics and questions we will address in this course. This is subject to change. Readings will be posted on Quercus.

- (1) Introductions, definition of cities, and why cities exist
  - (a) What is a city?
  - (b) How do we split urban areas into cities?
  - (c) Why do cities exist?
- (2) Agglomeration economies
  - (a) Why are some cities so big?

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- (b) Why do industries cluster in a given city, or within the same area of a given city? To be more specific, why is Bay Street a thing?
- (3) Systems of cities
  - (a) Why don't we all live in one big city?
  - (b) Are cities too big, too small, or just right?
  - (c) Why are cities different sizes?
- (d) What explains how wages and housing cost differs across cities?
- (4) Basic trade-offs governing urban spatial structure
  - (a) What determines land use within a city?
  - (b) Why is housing more expensive downtown than in the suburbs?
  - (c) Why are buildings taller downtown than in the suburbs?
  - (d) Why are homes smaller downtown than in the suburbs?
- (5) Using model of urban spatial structure to understand differences across cities and how policies will change cities
  - (a) Why is Toronto's tallest building 50% taller than Montreal's tallest building?
  - (b) Why is Phoenix cheaper and less dense than Toronto?
  - (c) What happens to a city as its population grows?
  - (d) What happens to a city if we add a highway?
- (6) Urban sprawl
  - (a) Is urban sprawl a problem?
  - (b) What are the causes of urban sprawl?
  - (c) What should we do about urban sprawl?
- (7) Cities and the environment
  - (a) Are cities good or bad for the environment?
  - (b) How can cities adapt to climate change?
- (8) Housing
  - (a) How can we make housing more affordable?
  - (b) What are the effects of rent control?
  - (c) Who does rent control help?
  - (d) What causes gentrification and who gains and loses?
- (9) Addressing traffic congestion
  - (a) Why are our roads so congested and what can we do about it?
  - (b) If economists are such big fans of congestion pricing, why don't we see it more often in the real world?
  - (c) How could we implement congestion pricing so that it would make all road users better off?
- (10) Addressing traffic congestion (part 2) and parking policy
  - (a) Is there too much or too little parking?
  - (b) Is parking priced correctly?
- (11) Autonomous vehicles
  - (a) How have previous changes in transportation technology affected cities?
  - (b) What are possible benefits and costs from AVs?

(c) How can public policy address the downsides from AVs?

- (12) Public transportation
  - (a) Why do so few people use public transportation?
  - (b) What could we do to encourage additional transit ridership?
  - (c) Should we subsidize transit fares?
  - (d) Should we build subways, light rail, or buses?