## ECO206Y1Y: Microeconomic Theory, Fall 2023 - Winter 2024 Prof. Freitas, Department of Economics, University of Toronto

Course Website :https://q.utoronto.ca/courses/318189

Course Email: eco206@utoronto.ca See Section 1.4

This is an in-person course. We use Quercus as a primary means of communication. Adjust your notification settings to keep up with important information.

## 1 Course Overview

Microeconomics studies how individuals make choices and the patterns that result when they interact in a market. This course builds on ECO 101 concepts to develop a deeper, more nuanced understanding. You will learn when and how to use the basic optimization tools of the field to answer questions. Math will help us get precise and discipline our logic. Writing will help us understand and communicate the reasoning and intuition behind the math. Our goal is to equip you with the methods and concepts that will help you be successful in upper-level courses and beyond.

Microeconomics is best learned (and is a lot more fun) when you use it regularly to ask and answer questions, and solve problems. We hope you will actively participate and engage with the material. Help us create a course where we *all* feel comfortable contributing so we can learn together.

## 1.1 Learning Objectives

If you successfully complete this course, you will be able to:

- Explain the basic concepts of Microeconomics using math, graphs and clear English.
- Use constrained optimization techniques proficiently.
- Problem-solve using course concepts-i.e. When given a question you have not seen before, you should be able to identify important details, choose and use the appropriate solution strategy correctly to find the answer, and explain and interpret your results.
- Critically evaluate economic arguments-i.e. Identify the logic behind them, identify explicit and implicit assumptions, evaluate strength and correctness of economic reasoning, and communicate this.
- Apply course concepts to a real-world or hypothetical situation or policy.
  - Identify essential features, choose an appropriate framework, check if required assumptions hold.
  - Generate different arguments and choose one based on a set of defendable criteria, preferably using supporting evidence.
  - Conduct well-structured, logically consistent economic analysis; and communicate this precisely in clear English.

## **1.2** Course Information

• Meeting times and location: Workshops on Thursdays. Tutorials and in-person tests on Wednesdays. We expect you to be available during scheduled class times.

Section	Workshop	Tutorial	
L101	Thursdays 11-1pm, FE114	Wednesdays 9-11am, RW117 (see section 2)	
L201	Thursdays 6-8pm, RW117	wednesdays 5-11am, 100117 (see section 2	

• Office Hours are posted on Quercus: https://q.utoronto.ca/courses/318189/pages/office-hours. You're welcome to stop by even if you don't have questions.

## 1.3 Prerequisites

A department administrator will drop you from the course if you do not have the required prerequisites. We cannot waive them. We expect you to be comfortable with the calculus in the prerequisite courses. https://fas.calendar.utoronto.ca/course/eco206y1 http://www.economics.utoronto.ca/index.php/index/undergraduate/load/prerequisites

## 1.4 Communication

This is a large course and while we would like to correspond with each of you individually, that can get out of hand quickly. To help us make this process efficient, please follow the guidelines below. This will allow us to answer all your questions and also have time to work on making the course better.

- **Piazza**: This is an online discussion board meant to facilitate student-to-student interaction so everyone can benefit from the answers. It is not an online helpdesk to reach course staff. We are happy to answer your questions in-person during office hours.
- Course email: eco206@utoronto.ca. Use this email for all course-related questions. For example: questions regarding individual issues about Accessibility accommodations, Quercus quizzes, assessments, etc. We will redirect emails about course content to the more appropriate discussion boards and office hours.
- **Prof. Freitas**: k.freitas@utoronto.ca. Use this email for course problems that require immediate attention (e.g broken links etc.) or for personal problems.

Please email us only from your UofT email or via Quercus. We will ignore any other email addresses (e.g. gmail etc.). Include ECO206 in the subject line and your student number at the end of every email. It helps us find correspondence with you efficiently. If we can answer your email briefly, we will try to respond to within 3 business days. If you do not get a reply please check Quercus, the syllabus or drop by office hours.

## 1.5 Important Dates

Term Work	Weight	Date
Homeworks	10%	Weekly, due date on HW
Class participation	5%	Weekly, during Thursday workshops
Midterm 1	15%*	Wednesday Oct 18, 9am
Midterm 2	15%*	Wednesday Dec 06, 9am
In-person Writing Assessment 1	10%**	During the Dec final exam period. TBD by A&S
Midterm 3	15%*	Wednesday Feb 14, 9am
Midterm 4	15%*	Wednesday Mar 20, 9am
In-person Writing Assessment $2^{**}$	$5\%^{**}$	Wednesday Apr 03, 9am
Final Exam	25%	During the April Final Exam period. Date and time TBD by A&S

Consider all graded work as individual work unless explicitly specified otherwise.

\*Only the three highest Midterm scores will count. Total midterm weight is 45%

\*\*The highest Writing Assessment score will be worth 10% and the other 5% for a total Writing Assessment weight of 15%

## **1.6** Required Materials

- **Textbook:** *Microeconomics: Theory and Applications with Calculus, 5th Ed.* by Jeffrey M. Perloff. The latest edition is available only in e-text format bought directly from the publisher. Details on purchasing and registering your e-text are on Quercus. We will not be using MyEconLab.
- Supplementary Videos: For each topic, I will post short videos. The videos are meant to be a supplement to the textbook; an additional learning resource.
- We will post additional readings during the semester. Please check Quercus for the latest information.
- Optional: Piazza. Free and accessed through Quercus.

## 2 Course Structure and Evaluation

- Workshops: Microeconomics is best learned by doing and working with your classmates helps you learn more effectively. As a group, we will work on problem-solving skills and your ability to use course concepts in new contexts. It will involve trying hard tasks and using mistakes to identify gaps in understanding that we fix together. We need you to help us create a safe and welcoming atmosphere. Make your classmates feel comfortable enough to ask any question without embarrassment and listen to their points of view. We have much to learn from each other. Be kind. You will have to continue this process outside our meetings with independent work, so we strongly encourage you to form study groups.
- **Tutorials**: This year we will not have parallel tutorials held in different rooms. We are trying a new structure based on student feedback from earlier years. Our tutorial room for both sections is RW117. We will use the first hour as a dedicated study space for group work on posted tutorial questions with the TA available to answer questions. During the second hour, the TA will go over the solutions. We encourage students to choose whatever fits their needs best for the week's content and their schedule. We may adjust this during the semester based on how things evolve.
- Homeworks: There is typically one every week except for test weeks. The purpose is to incentivize regular practice. It will be graded coarsely. Due dates are on the Homeworks.
- Ungraded problem sets: These are important learning resources that complement the class material and textbook. They have detailed explanations that allow you to work through them at your own pace with support. Just skimming through the answers is a bad idea. Learning happens when you try the questions without looking at the solutions.

We may require you to submit your term work to the university's plagiarism detection tool.

"Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq)."

We will use Crowdmark for term work.

"This course will use Crowdmark, a collaborative online grading tool for marking and providing feedback on graded term assessments. Crowdmark provides efficiencies with grading, data recording, returning term assessments and handling regrade requests. Copies of student work marked in Crowdmark, including grading and feedback, will be available online to students for at least one year. Digital (i.e., online) copies will serve as the authoritative record for course administrative purposes, and paper copies of assessments scanned and uploaded to Crowdmark will be destroyed after the term has ended and final grades are approved. If you have questions about how your information is stored on Crowdmark, please contact your course instructor. "

#### 2.1 Tests: Midterms and Final

- Midterm tests are held during scheduled class time, so you are expected to be available. Details on the tests, including format and coverage will be posted on Quercus.
- The final exam is cumulative and will be based on material covered over the entire course.

- Attending workshops and tutorials, completing the material, doing the homeworks, problem sets and past tests, and attending office hours is the best ways to prepare for tests.
- **Regrades**: Regrade requests are to be made via an MS form available on Quercus. It will open one week after the assessment is handed back and closes a week after that. We only accept requests during that period, not before or after and they will be batch processed after the deadline. We re-read your entire assessment so your mark could go up, down or remain unchanged.

## 2.2 In-person Writing Assignments

The ability to apply your skills and communicate your economic analysis is a valuable workplace skill. The writing assessments will develop and assess this ability. They will be held in-person this year. Further details will be posted on Quercus.

#### 2.3 Missed work

For ongoing any injury, illness, or personal/family problems that last longer than 5 days you must contact your College Registrar immediately <a href="https://future.utoronto.ca/current-students/registrars/">https://future.utoronto.ca/current-students/registrars/</a>. You may want to consider dropping the course if you have an issue lasting longer than a few days.

#### 2.3.1 Missed Workshop Participation

To accommodate any variation across weeks during the semester, for reasons like illness, personal problems, religious or extracurricular conflicts, or other reasons, we will drop your lowest four workshop participation scores. No other accommodations will be provided.

#### 2.3.2 Missed Homeworks

To accommodate any variation across weeks during the semester, for reasons like illness, technology/internet or personal problems, internet issues, religious or extracurricular conflicts, or other reasons, we will drop your lowest four weekly HW scores. No other accommodations will be provided. As this is regular work throughout the semester, deadline extensions will only create additional work in the following week which is counterproductive when you are already struggling to keep up. We do not accept *any* late submissions or provide deadline extensions for weekly work for *any* reason.

#### 2.3.3 Missed Tests

Tests are important not just because they are an assessment of your knowledge, but because they serve as feedback for you on your grasp of course knowledge. We have multiple tests so that one test doesn't count for too much of your grade. You have time to adjust your study strategies and fix conceptual errors along the way if needed. Any missed test gets a grade of zero.

**Midterm**: If you miss a midterm, you need do not need to submit anything. We drop your lowest midterm score when calculating your grade. This is the only accommodation. **There is no make-up for a missed midterm**. We do not need a doctor's note or other documentation. If you miss a second midterm, please contact your registrar and you should think about dropping the course. Your zero for the second missed midterm will affect your grade.

**In-person Writing Assessment**: A missed assessment gets a grade of zero. If you miss an in-person writing assessment, you need to submit a request to take a make-up via the MS forms on Quercus and provide documentation.

There are two options for documentation. The university policy on student absences is here: https://www.artsci.utoronto.ca/current/academics/student-absences

Complete an Absence Declaration on ACORN. Put the course email when asked for instructor email: eco206@utoronto.ca
Upload a copy/screenshot of your declaration that includes your name on the MS form.
See: https://help.acorn.utoronto.ca/blog/ufaqs/how-do-i-declare-an-absence/.

(2) If you have used your Absence Declaration for the semester, you must have a medical doctor complete a UofT Verification of Illness Form. Form FAQ here: http://www.illnessverification.utoronto.ca/Frequently-Asked-Questions.php Upload a copy on the MS form at submission time. Within a week of the test, you will need to submit the original version to the economics reception in GE (Max Gluskin).

There is a **cumulative** make-up writing assessment towards the end of the winter semester. It will be held at 7:00am to avoid conflicts with other courses. As per university policy, there is no make-up for the make-up test. You will get zero if you miss the make-up. The final decision to accept any request lies with me or the undergraduate chair. You will get your grades for the make-up after the drop deadline. The format may be differ from the class test and could include an oral test component. **The score on the make-up will only substitute for one missed writing assessment.** If you miss a second one, please contact your registrar and consider dropping the course.

Final : A&S deals with missed final exams. See http://calendar.artsci.utoronto.ca/Rules\_&\_Regulations.html

## 2.4 How to succeed in this course

**Put in the time, consistently**: Plan to spend 8-10 hours a week on this course<sup>1</sup>. Last minute cramming leads to superficial understanding which gets exposed in the tests. Regular practice over a longer time period leads to deeper learning that lasts beyond the final exam. Study groups are a great commitment device to ensure consistent effort, so are the homeworks.

**Use the time effectively**: Again, use a study group. As you solve problems, focus on the concepts not the procedure. Ask why do we get this? What if some elements were different? What are the similarities/differences with what you've seen before? Write out your reasoning, etc. Get help early if you're stuck. You can come to office hours or go to the Economics Study Center.

Know what we are looking for on the exams: Problem solving is an important learning outcome and an essential job skill. It is what you do when you use your conceptual knowledge to answer a question you haven't seen before. The emphasis is on how you approach the question and the quality of your reasoning. Machines can do memorization and matching patterns better than you can and will not help you in this course.

**Take ownership of your learning**: You are taking this course to make you a better economist. Make your effort count. Watch the videos before class and come ready to actively participate and problem solve.

Anticipate challenges: Please do your best in every piece of graded term work. Do not count on later tests to raise your grades. We've learned over the past few years, dramatic changes in circumstances are possible.

Think about this way, ECO206 gives you a box of blocks. You need to use them to build something to answer a question or solve a problem. Listening to me talk/reading the text or someone else's lecture notes is the equivalent of watching a demo/reading the instruction manual-helpful but not enough. You need to experiment to know what blocks you have and all the ways they can fit together. Try different combinations, make mistakes and most important - practice, practice, practice! Sometimes it may be a little tedious, but, when you actively engage with the material, you will become a better economist and have fun along the way. We look forward to learning with you this year!

## 2.5 Privacy

We are all expected to respect university privacy and copyright restrictions in this course.

Some elements of this course, including your participation, may be recorded on video and will be available to students in the course for viewing remotely. For questions about recording and use of videos in which you appear, please contact me.

Students may not create their own recordings of any course events (e.g. workshops, tutorials and office hours). If you require an accommodation for a disability, please speak to me first. Students creating unauthorized audio recording of in-person time violate an instructor's intellectual property rights and the Canadian Copyright Act. Students violating this agreement will be subject to disciplinary actions under the Code of Student Conduct.

Course materials, including content videos, belong to your instructor, the University, and/or other sources depending on the specific facts of each situation, and are protected by copyright. Do not download, copy, or share any course or student materials without the explicit permission of the instructor.

 $<sup>^{1}</sup>$ A full time student should spend 40-50 hours a week on course work. With 5 courses this works out to 8-10 hours a course including lectures and tutorials.

## 2.6 Academic Integrity

Academic Integrity is central to an UofT education. We will do our best to maintain the integrity of the learning experience. Sometimes you may feel like taking shortcuts because you are don't understand the material, are stressed or overworked, don't have time, not doing well, etc. Please don't do it. We report all suspected cases of academic dishonesty to the Department of Economics and SAI. The consequences can be very severe. It is not worth it.

- Do your own work. We design course work to develop and assess skills useful in upper-level courses and the job market. You lose a valuable opportunity to develop these skills and lower the value of the UofT brand when you cheat.
- Properly acknowledge other people's ideas. You'd want the same for your ideas.
- Ask if you're unsure. Unless explicitly told otherwise, assume that all work is individual work. Unless explicitly allowed, you cannot discuss any graded work with anyone–this includes classmates, friends, family, tutors (paid or unpaid), neighbours, literally anyone. Checking websites for answers, posting your work for others to use, collaborating, solicit-ing/receiving answers, stating false or misleading information related to assessments, etc., are examples of actions violate Academic Integrity. Unintentional mistakes or confusion is not a defence.
- **Report** any suspected violations by other students to the professor immediately. Students who cheat, hurt others who work hard and honestly. Maintaining the Academic Integrity of the course is a shared responsibility; do your part.
- Read the University of Toronto's Code of Behavior on Academic Matters. This is especially important if you're new to the UofT. See: http://www.artsci.utoronto.ca/osai.
- 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**, **unless explicitly stated otherwise** by the instructor in this course. The knowing use of an unauthorized generative artificial intelligence tools, including ChatGPT and other AI writing and coding assistants, for the completion of, or to support the completion of, an examination, term test, assignment, or any other form of academic assessment, will be considered an academic offense in this course.

Why did I adopt this policy?

- I understand these tools make our work easier, but we are working on skills that require the deep understanding that only comes when you struggle with the concepts yourself. For example, you need to have a deep understanding of basic arithmetic operations like addition, multiplication, etc. developed in school to do the more difficult math. Once you're doing more conceptual, higher-level math, the grunt work like basic calculations can be done by a calculator. But you cannot do higher-level math with a shaky foundation in basic arithmetic. The same applies for economics. If you take shortcuts now when building your foundational knowledge, you cannot do high quality analysis later.
- Generative AI is a word predictor based on data it is trained on. It makes mistakes, sometimes catastrophic ones. This is not a calculator that follows rules. You can only catch these mistakes when, later on, you outsource some tasks to it, if you have a deep understanding of the fundamentals we are building in this course. If you take shortcuts now, you won't be able to effectively use generative AI as a complement, later on.
- Finally, do not become a substitute to generative AI. If what you do can be outsourced to AI, why should an employer hire you? AI generates material based on everything already out there. Using your experience and knowledge makes you a better, more creative economist who is able to bring something new to the workplace. That is where your comparative advantage lies. Don't waste any opportunity to work on those skills.

## 2.7 Need Help?

While it may feel like you're the only one struggling, it is not true. Trust me. Instead of trying to figure out things yourself, reach out right away. Help is available. Don't wait till things get to a crisis point.

#### 2.7.1 Office hours

If you're struggling with the material, we can help. As you work through the course material, you should have questions (if not, you're not working through the material carefully enough). Write them all down. You can post them on Piazza or if you want an in-person answer, bring them to office hours. You're welcome to stop by even if you don't have questions. You can learn

from the questions asked, make connections with your classmates, or just say hello. The best part of teaching is getting to know you better and with large classes, office hours is a good way of making individual connections. Please check Quercus for the latest schedule.

Additional Resource: The Economics Study Center. It is staffed by undergraduate students like you. They are not course TAs but have taken and done well in Econ courses.

#### 2.7.2 Your Registrar

For issues that last more than a few days or affect your performance across many courses, your registrar can help. They can also advise you on course selections, university regulations and connect you with university resources in case you are having trouble. They are important partners in ECO206 and we rely on their expertise a lot. We strongly recommend you get to know your registrar.

#### 2.7.3 Other help

- Mental Health Resources at the UofT. Please don't wait until you are in a crisis. University is difficult and sometimes we all need a little help. Please reach out and talk to someone. The TELUS Health Student Support app (formerly MySSP) is linked in Quercus (left-hand tab).
- A common thing I hear from student is that they are spending a lot of time on the material, but it is not translating into higher grades. In most cases, it is because they are using ineffective study habits or bad time management. I've also posted some resources to help with learning on Quercus. I also encourage you to reach out to learning strategists in the Academic Success Center or in the Rotman Commerce office.

## 2.8 Accessibility Accommodations

If you require accommodations, please register with Accessibility Services (AS). If you need testing accommodations (e.g. extra time on a timed quiz) please register with ATS (formerly TES) and they will send us the testing accommodations directly. Contact your accessibility advisor if you have any questions about how to do this. Every student is different and we are not experts. We rely on AS and ATS to determine what is appropriate for you and then we work hard to ensure your needs are met.

# 3 List of Topics

SEMESTER 1			
Week	CH.	TOPIC	
1	1 & 3.3, calculus appendix	Budget Constraints	
2	3.1-3.2	Preferences & Utility	
3	3.4	Choice: Constrained Optimization	
4	4.1-4.2	Demand & Income Effects	
5	4.3-4.4	Income & Substitution Effects	
6	5.4, 2.5	Labor Supply, Elasticities	
7	5.1 - 5.3	Consumer Surplus	
8	5.1 - 5.3	Consumer Surplus	
9	16	Uncertainty	
10	16	Uncertainty	
11	6,7	Production; Cost Minimization	
12	8, 15.1	Profit Maximization	
December Break			

The course schedule is listed on the course Quercus homepage.

SEMESTER 2				
Week	CH.	TOPIC		
13	2.1-2.4, 9.1-9.2	Perfect Competition		
14	2.6-2.8, 9.3-9.5	Welfare and Distortions		
15	10	General Equilibrium		
16	11	Monopoly		
17	12	Price Discrimination		
18	13.1	Game Theory		
19	14.1-14.3	Oligopoly		
21	14.4-14.5	Oligopoly		
21	17	Externalities; Public Goods		
22	18	Adverse Selection		
23	19	Moral Hazard		
24		TBD		