

## MICROECONOMIC THEORY

### **Instructor:**

Professor Nicolas Gendron-Carrier

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Office Hours: Thursday, 10:00-11:30, LEA 543

### **Teaching Assistants:**

Jérôme Larivière ([jerome.lariviere@mail.mcgill.ca](mailto:jerome.lariviere@mail.mcgill.ca))

Office Hours: Tuesday, 18:00-19:00, Zoom

Tutorial: Monday, 17:30-18:30, Zoom

Guannan Li ([guannan.li@mail.mcgill.ca](mailto:guannan.li@mail.mcgill.ca))

Office Hours: Wednesday, 16:00-17:00, LEA 111E

Tutorial: Monday, 17:30-18:30, Zoom

### **Course Overview:**

The introductory course for Economics Major students in microeconomic theory.

### **Requirement:**

Students must register for both ECON 230D1 and ECON 230D2.

### **Learning Outcomes:**

Students will develop problem solving skills and learn to reason about economic questions in a careful, systematic way. Students will learn how to manipulate models and how to move between mathematical, diagrammatic, and verbal representations of these models. A major teaching goal is to provide students with technical tools that allow them to manipulate mathematical models. By the end of the course, students will have a solid foundation in the methods of microeconomics and will be able to apply these methods to the study of consumers, firms, and

markets. The skills and methods learned in this course will prepare students to take more advanced, specialized economics courses.

**Course Materials:**

Hal R. Varian's *Intermediate Microeconomics: A Modern Approach* (10th Edition, with Marc Melitz) will serve as the textbook for the course. This book is available at the bookstore and online. I highly recommend doing the exercises on Smartwork5 as we go along. Lecture slides and all required readings except the textbook will be posted on *myCourses*.

**Electronic Communications:**

All class announcements will be posted on *myCourses*. I encourage you to ask questions related to the class material in class or during office hours.

For all administrative issues, please first contact the TAs. They are your first point of contact and will communicate important matters to me. Questions that are personal in nature can be sent to me by e-mail. E-mails should be sent from your official McGill e-mail address and include [ECON 230D1] in the subject line. I will normally reply to e-mails within 48 hours, except on weekends. I will not respond to e-mails related to the class material or administrative issues covered in the syllabus and on *myCourses*.

**Format:**

All lectures will take place in-person unless instructed otherwise. The teaching staff will also hold tutorials every week, starting in the second week of class. In these sessions, we will answer questions about the class material and solve problem set questions and other exercises. We will also be available during office hours every week to answer questions about class material.

Please consult McGill's [Remote Learning Resources](#) to learn more about Zoom in case a class or a tutorial must take place online. You will be notified through a pop-

up box in Zoom if a portion of a session is being recorded. By remaining in sessions that are recorded, you agree to the recording, and you understand that your image, voice, and name may be disclosed to classmates. You also understand that recordings will be made available in *myCourses* to students registered in the course.

**Evaluation:**

Problem Sets (23%): The best way to learn microeconomic theory is to work through exercises. Problem sets are therefore an integral part of the learning process. Exercises are chosen to develop your skills, deepen your understanding of the material, and prepare you for exams. This is a formative assessment designed to support your learning by providing regular, low-stakes assessment opportunities.

There will be 9 problem sets in total. To introduce flexibility, you are required to complete 7 out of the 9 problem sets. If you submit more than 7 problem sets, only the best 7 will count. Due dates will be announced on *myCourses*. Late submissions will not be accepted.

Each problem set will receive one of the following grades:

- 5/5: A good problem set overall. The student answered all questions with only minor gaps in understanding. You can receive a 5/5 on a problem set even if your answers are not perfect.
- 4/5: The student answered all questions but revealed significant gaps in understanding the material. As a rule of thumb, a student will receive this grade if the overall problem set would typically receive a grade of 80% or less.
- 3/5: The student left a question blank, but the rest of the problem set is good.
- 0-2/5: Low effort / nonsensical answers.
- 0/5: No submission.

The TAs will discuss solutions to all problem sets after the due date.

Participation on Mercury (2%): Your feedback is very important to me, and I encourage all students to complete the final course evaluation on Mercury. If more than 75% of the class completes the final course evaluation, all students will automatically receive these points. This is a group effort.

Midterm Exam (30%): To be held in-person on Thursday, October 10, 2024.

Final Assessment (45%): A cumulative final exam. To be held in-person during the final exam period (December 6-20, 2024).

Please note that work submitted for evaluation as part of this course may be checked with text matching software within *myCourses*.

**Policy on the use of AI:**

Students are encouraged to make use of technology, including generative artificial intelligence (GenAI) tools such as ChatGPT, to contribute to their understanding of course materials, for example for studying and learning. Students may not use artificial intelligence tools for completing graded assignments, for example when completing problem sets and exams. Students may, however, use GenAI to understand problem set solutions after the assignment has been graded and returned.

**How to Succeed:**

Many students find this course challenging. The course starts out at a brisk pace and builds on what you learn. Do not slack off at the beginning and try to catch up later. To succeed in this course, you should:

Put in the time, consistently. Plan to spend 7-9 hours a week on this course. Every

week, you should attend the lectures, read the corresponding chapters in the textbook, work through some exercises, and do the problem set.

Get help early. Attend weekly tutorials and office hours to ask questions. Form a study group.

Take ownership of your learning. This is a time commitment on your part. Listening to me present the material and reading the textbook is the equivalent to watching a YouTube demonstration video or reading an instruction manual: helpful, but not enough. To learn a new skill, you need to experiment, make mistakes, and, most importantly, practice. Economics is difficult and it can be frustrating. Keep an eye on the long-term goals.

Take this class seriously, but not too seriously! There are more important things in life than doing well in ECON 230.

**Make-up Exams:**

You may only miss an exam for a family or medical emergency. If you miss an exam, you must send me (the instructor, not the TA) a written justification within 7 days of the date of the exam to explain the reason for your absence. No make-up exam is possible for the midterm exam. If you miss the midterm exam, the midterm exam's weight will be reallocated to the final exam. For those eligible, the deferred exam for the final will take place in March 2025.

**Re-read Policy:**

We do our very best to ensure fair grading and to minimize errors. Nevertheless, if you disagree with the grade you have received in your exam, you may opt to have your exam re-read. Before you do, please make sure you first carefully compare your answers to the solutions we provide.

To request a re-read, you must submit to me (the instructor, not the TA) your exam with a written justification for the re-read, specifying the question which you felt was incorrectly graded. This written request for re-read must be submitted within 7 days of receiving the exam. I will then re-read and reassess the answer. Please note that I may review the entire exam. As a result, your grade may go up, down, or stay the same.

**Final Grade:**

Students must register for both ECON 230D1 and ECON 230D2. No credit will be given for ECON 230D unless both ECON 230D1 and ECON 230D2 are successfully completed in consecutive terms. Each semester contributes 50% to your final grade in ECON 230D. The only exception to this rule is transfers from ECON 250D as described below.

Please note that you are not allowed to change sections for ECON 230D2 during the semester. You will not be able to write the final exam for ECON 230D1-001 if you change sections for ECON 230D2 during the semester.

Supplemental exams for those eligible will cover material from both ECON 230D1 and ECON 230D2 and will be held during the summer after ECON 230D2. Supplemental exams are not given for individual semesters only. Students taking the supplemental exam should be aware that it counts for 100% of the student's overall grade in ECON 230D.

Transfers from ECON250 D1/D2 are permitted during the January add/drop period. For students transferring from ECON 250 to ECON 230, the grade for 230D1/D2 will be composed of 25% for the 250D1 Fall semester and 75% for the 230D2 Winter semester.

## COURSE OUTLINE AND SCHEDULE

Below is a tentative course outline and schedule. The relevant chapters from the textbook are in brackets. You are encouraged to read the chapters, but for exam purposes you will only be responsible for material covered in the lectures and the tutorials. I maintain discretion regarding changes to this outline and schedule. Any changes will be announced on *myCourses*.

### 1. Preliminaries

- Introduction (Varian, Chapter 1)
- Math Camp (Varian, Appendix)

### 2. Demand

- The Budget Constraint (Varian, Chapter 2)
- Preferences (Varian, Chapter 3)
- Utility (Varian, Chapter 4)
- Choice (Varian, Chapter 5)
- Demand (Varian, Chapter 6)
- Income and Substitution Effects (Varian, Chapter 8)
- Buying and Selling (Varian, Chapter 9)
- Market Demand (Varian, Chapter 15)

### 3. Supply

- Technology (Varian, Chapter 19)
- Profit Maximization (Varian, Chapter 20)
- Cost Minimization (Varian, Chapter 21)

### 4. Equilibrium

- Equilibrium (Varian, Chapter 16)
- Exchange (Varian, Chapter 32)

	<b>Tuesday</b>	<b>Thursday</b>	<b>Lecture Slides</b>	<b>Required Reading</b>	<b>Deliverable</b>
<b>Week 1</b>		2024-08-29	Lecture 1	Becker	
<b>Week 2</b>	2023-09-03	2024-09-05	Lecture 2 and 3	Ch.1 and Math App.	
<b>Week 3</b>	2023-09-10	2024-09-12	Lecture 4 and 5	Math App. and Ch. 2	Problem Set 1
<b>Week 4</b>	2023-09-17	2024-09-19	Lecture 6 and 7	Ch. 3 and 4	Problem Set 2
<b>Week 5</b>	2023-09-24	2024-09-26	Lecture 8 and 9	Ch. 5 and 6	Problem Set 3
<b>Week 6</b>	2023-10-01	2024-10-03	Lecture 10	Ch. 8	Problem Set 4
<b>Week 7</b>	2023-10-08	2024-10-10	Review		Midterm Exam 1 on Thursday, October 10
<b>Week 8</b>	2023-10-15	2024-10-17	Break		
<b>Week 9</b>	2023-10-22	2024-10-24	Lecture 11	Ch. 9	Problem Set 5
<b>Week 10</b>	2023-10-29	2024-10-31	Lecture 12 and 13	Ch. 15 and 19	Problem Set 6
<b>Week 11</b>	2023-11-05	2024-11-07	Lecture 14 and 15	Ch. 20 and 21	Problem Set 7
<b>Week 12</b>	2023-11-12	2024-11-14	Lecture 16	Ch. 16	Problem Set 8
<b>Week 13</b>	2023-11-19	2024-11-21	Lecture 17	Ch. 32	
<b>Week 14</b>	2023-11-26	2024-11-28	Catch Up and Review		Problem Set 9
<b>Week 15</b>	2023-12-03	2024-12-05	Review		



## MCGILL POLICY STATEMENTS

### **Language of Submission:**

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded. This does not apply to courses in which acquiring proficiency in a language is one of the objectives.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tout travail écrit devant être noté (sauf dans le cas des cours dont l'un des objets est la maîtrise d'une langue).

### **Academic Integrity:**

McGill University values academic integrity. Therefore, all students must understand the meaning and consequences of cheating, plagiarism and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see [www.mcgill.ca/students/srr/honest/](http://www.mcgill.ca/students/srr/honest/) for more information).

L'université McGill attache une haute importance à l'honnêteté académique. Il incombe par conséquent à tous les étudiants de comprendre ce que l'on entend par tricherie, plagiat et autres infractions académiques, ainsi que les conséquences que peuvent avoir de telles actions, selon le Code de conduite de l'étudiant et des procédures disciplinaires (pour de plus amples renseignements, veuillez consulter le guide pour l'honnêteté académique de McGill).

### ADDITIONAL STATEMENTS

1. McGill University is on land which has long served as a site of meeting and exchange amongst Indigenous peoples, including the Haudenosaunee and Anishinabeg nations. We acknowledge and thank the diverse Indigenous peoples whose presence marks this territory on which peoples of the world now gather.
2. As the instructor of this course, I endeavor to provide an inclusive learning environment. If you experience barriers to learning in this course, do not hesitate to discuss them with me and the Office for Students with Disabilities, 514-398-6009.
3. The University Student Assessment Policy exists to ensure fair and equitable academic assessment for all students and to protect students from excessive workloads. All students and instructors are encouraged to review this Policy, which addresses multiple aspects and methods of student assessment, e.g., the timing of evaluation due dates and weighting of final examinations.
4. © Instructor-generated course materials (e.g., lecture recordings, slides, exams, etc.) are protected by law and may not be copied or distributed in any form or in any medium without explicit permission of the instructor. Note that infringements of copyright can be subject to follow up by the University under the Code of Student Conduct and Disciplinary Procedures.
5. **In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.**