

## MICROECONOMIC THEORY

### **Instructor:**

Professor Nicolas Gendron-Carrier

E-mail: [nicolas.gendron-carrier@mcgill.ca](mailto:nicolas.gendron-carrier@mcgill.ca)

Office Hours: Thursday 16:00-17:30 via Zoom

### **Teaching Assistants:**

Mahmut Ablay

E-mail: [mahmut.ablay@mail.mcgill.ca](mailto:mahmut.ablay@mail.mcgill.ca)

Nathan Maves-Moore

E-mail: [nathan.maves-moore@mail.mcgill.ca](mailto:nathan.maves-moore@mail.mcgill.ca)

Tutorials: Tuesday 16:00-17:30 and Thursday 9:00-10:30 via Zoom.

### **Course Overview:**

The introductory course for Economics Major students in microeconomic theory. In depth and critical presentation of the theory of consumer behaviour, theory of production and cost curves, and theory of the firm, theory of distribution, welfare economics and the theory of general equilibrium.

### **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. As such, the class will be heavy on math. 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* (9th Edition) will serve as the textbook for the course. This book is available at the bookstore and online. Any earlier edition of this book is perfectly good to use (and probably cheaper). I also highly recommend doing the exercises in Theodore C. Bergstrom and Hal R. Varian's *Workouts in Intermediate Microeconomics* (9th Edition) as we go along. The book is available at the bookstore and a PDF copy of *Workouts* is freely available on Bergstrom's [website](#). Lecture slides, video recordings, and all required readings except the textbook will be posted on *myCourses*.

**Electronic Communications:**

All class announcements will be posted on *myCourses*.

Given that students may be in different time zones due to the COVID-19 pandemic, I have decided to pre-record my lectures. As such, you will not be able to ask questions in class. I encourage you to ask questions related to the class material during the tutorials and virtual office hours. If you want to ask questions electronically, please use our class *Piazza* page: <https://piazza.com/mcgill.ca/fall2020/econ230d1>. The goal of *Piazza* is to encourage peer-to-peer Q&A. The TAs and I will periodically check *Piazza* to ensure proper usage, flag some postings, and answer questions.

**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 only 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:**

Lecture slides and video recordings will be posted on *myCourses* every week. You can engage with the material on your own time and use our class *Piazza* page to ask questions to the class. The TAs will hold tutorials on Zoom every week, starting in the second week of class. In these sessions, they will answer questions about the class material and solve problem set questions and other exercises in *Workouts*. I will also be available on Zoom during office hours every week to answer questions about class material.

Please consult McGill's [Remote Learning Resources](#) to learn more about Zoom. 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 (20%): The best way to learn microeconomic theory is to work through exercises. Problem sets are therefore an integral part of the learning process. There will be 8 problem sets in total. To introduce flexibility, you are required to complete 6 out of the 8 problem sets. If you submit more than 6 problem sets, only the best 6 will count. Due dates will be announced on *myCourses*. Late submissions will not be accepted.

Video Project (10%): Students will create a short video (3 minutes or less) that teaches an economic concept to a general audience. Due date and instructions will be posted on *myCourses*.

Midterm Exam I (10%): The first midterm exam will be held on Thursday, September 17.

Midterm Exam II (25%): The second midterm exam will be held on Thursday, October 15.

Final Exam (35%): The final exam will be held in December during the final exam period.

**How to Succeed:**

Most students find this course challenging. The workload is substantial. 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 8-10 hours a week on this course. Every week, you should watch the lecture videos, read the corresponding chapters in the textbook, work through some *Workouts* exercises, and do the problem set. Many of the problem set questions will be almost the same as quiz questions in the back of *Workouts*. If you have studied the material and can do the quizzes for the corresponding chapters, you should have no trouble getting the problem set questions right. The exercises are chosen to develop your skills, deepen your understanding of the material, and prepare you for exams. I strongly discourage last minute cramming.

Get help early. Make use of *Piazza* and attend weekly tutorials and office hours to ask questions. Form a virtual study group.

Take ownership of your learning. This is a time commitment on your part. I am here to help you understand how to think like an economist, but you won't learn if I give you all the answers. 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 230D. Your physical and mental health is important, so you need to maintain a balance.

**Make-up Exams:**

You may only miss an exam for a documented family or medical emergency. If you miss an exam, you must hand me an original physician's note within 7 days of the date of the exam which explains the medical reason for your absence. No make-up exams are possible for midterm exams. If you miss a midterm exam, that exam's weight will be reallocated to the final exam.

**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. Policies on final exam re-reads are determined by the Faculty of Arts.

**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 are transfers from ECON 250D as described below.

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

There are two time-windows when transfers from ECON 250D to ECON 230D are permitted. Window 1 is up to the end of the week after the second midterm in ECON 230D1. For students using this window, the course grade depends solely on their subsequent performance in ECON 230D. Your grade in ECON 230D1 will be calculated as follows. The remaining problem sets will be worth 10%, the video project 20%, and the final exam 70%. Window 2 is up to the January add/drop period in the Winter semester. For students using this window, the overall grade for ECON 230D will be composed of 25% of your ECON 250D1 Fall semester grade and 75% of your ECON 230D2 Winter semester grade.

## COURSE OUTLINE

Below is a tentative course outline. 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. 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)
- The Neoclassical Labour Supply Model (Varian, Chapter 9)
- Market Demand (Varian, Chapter 15)
- Measurement (Varian, Chapter 17)

### 3. Supply

- Technology (Varian, Chapter 19)
- Profit Maximization (Varian, Chapter 20)
- Cost Minimization (Varian, Chapter 21)
- Cost Curves (Varian, Chapter 22)
- Firm Supply (Varian, Chapter 23)
- Industry Supply (Varian, Chapter 24)

### 4. Equilibrium

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

## 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

- 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.
- 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.
- © Instructor-generated course materials (e.g., video recordings, lecture 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.
- 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.
- **In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.**