Economics 4020B: Advanced Microeconomic Theory

Carleton University, Economics Winter 2025 Instructor: Eric Stephens eric.stephens@carleton.ca Loeb Building D898

Meeting Times:

Lecture: In person, Fridays, 11:35a.m-2:25p.m, for location see Carleton Central or Brightspace. Tutorial: In person, Thursdays, 10:05a.m-11:25a.m, for location see Carleton Central or Brightspace. Office hours: In person, Loeb D-898, Thursdays, 5:30-7pm. Website: Accessible at https://brightspace.carleton.ca

Course Objectives:

This course provides a more advanced and detailed analysis of the microeconomic concepts studied in previous classes. It is intended to familiarize students with the economic approach to the study of human behaviour.

Prerequisites:

ECON 2020 (or ECON 2009) and ECON 2030 each with a grade of C+ or higher; ECON 3001 (or MATH 2000 or MATH 2004) with a grade of C+ or higher; and ECON 2220 (or equivalent, or STAT 2605 or STAT 3502), which may be taken concurrently with ECON 4020. This is an advanced class and students are assumed to be comfortable with the use of calculus (e.g., the differentiation of multivariable functions, constrained and unconstrained optimization, comparative statics). If you are unsure of your background please see me to discuss whether the course is appropriate for you.

Topics:

The following outlines the list of major topics to be discussed throughout the semester. The amount of time devoted to each will vary.

- 1. Introduction
- 2. Consumer Theory
- 3. Theory of the firm
- 4. Partial Equilibrium
- 5. General Equilibrium
- 6. Information and Contracts
- 7. Welfare economics and social choice (time permitting)
- 8. Public Goods and Externalities (time permitting)

Readings and Textbooks:

The course will follow Advanced Microeconomic Theory, by G. Jehle and P. Reny, Pearson, 3^{rd} edition, 2011. A new copy currently has a regular price on Amazon of \$165, but is on sale (as of December 10/24) for \$75. A second hand copy is fine, but note that with older editions some topics and recommended questions may have different labels or not be available. Other than text questions, practice assignments and supplementary materials will be posted on the course web-page. Alternative expositions of similar ideas can be found in the following:

- 1. Microeconomics Analysis, by H. Varian, Norton, 1992.
- 2. Microeconomics, by H. Gravelle and R. Rees, 2004.
- 3. Microeconomics with Calculus, by B.R. Binger and E. Hoffman, Addison Wesley, 1998.

Grading:

Marks are based on a participation grade, two midterm exams, and one final exam (all exams are cumulative). Midterm exams are written in class, while the final examination will be scheduled by the University. All exams are in-person, weights are as follows:

Table 1: *

Grading Scheme 1

Participation / assignments	10~%
Midterm I - February 14^{th}	20~%
Midterm II - March 21^{st}	30~%
Final	40~%

Table 2: *

Grading Scheme 2

Participation / assignments	10~%
Midterm II - March 21^{st}	40~%
Final	50~%

Grades for the first midterm exam will be counted only if they increase the student's grade. In other words, I will calculate each students final grade using both schemes and take the highest of the two.

Assignments will be posted on the course website and will be graded pass or fail. Students making a reasonable attempt at all questions will receive a pass. Students are also encouraged to work through as many textbook problems as possible, especially those suggested by the instructor, since working through problems is the best way to learn the course material.

There will be no make-up midterm exams. Students who can document a compelling reason for missing a midterm examination will be excused. Students must inform the instructor of such an absence in advance if possible. The weight of an examination missed for valid reasons will be evenly distributed between the remaining examinations. Should the final exam be missed for any reason, a grade of 0 will be assigned and the student must arrange for the possibility of a deferred examination through the Registrar's Office within 3 working days of the exam. If granted by the Registrar's Office, this exam will take place during the time designated in the Calendar. Special final exams will not be given.

See Academic Regulation 3.2 for the official meanings of final grades, and note that regulations stipulate that no course grades are final until approved by the Faculty Dean. Further, course grades may be scaled upwards or downwards in a rank-preserving manner to better fit the relevant departmental distributional norm.

Plagiarism:

Please be aware that plagiarism is serious offence at Carleton and should be recognized and avoided. For further information, please see

https://carleton.ca/economics/plagiarism-resources-and-accommodations/.

Online Etiquette:

See the following statement regarding etiquette at Carleton: carleton.ca/online/online-learning-resources/netiquette/

Course Copyright:

Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copyright protected and remain the intellectual property of their respective author(s). All course materials, including PowerPoint presentations, outlines, and other materials, are also protected by copyright and remain the intellectual property of their respective author(s). Students registered in the course may take notes and make copies of course materials for their own educational use only. Students are not permitted to reproduce or distribute lecture notes and course materials publicly for commercial or non-commercial purposes without express written consent from the copyright holder(s).

Accomodation Statements:

You may need special arrangements to meet your academic obligations during the term. For an accommodation request the processes are as follows:

Pregnancy obligation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website.

Religious obligation: Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website. Academic Accommodations for Students with Disabilities: If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC no later than two weeks before the first in-class scheduled test or exam requiring accommodation (if applicable). After requesting accommodation from PMC, meet with your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the Paul Menton Centre website.

Survivors of Sexual Violence: As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and where survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support.

Accommodation for Student Activities: Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.