

**Department of Economics
Carleton University**

ECON 4020A – Advanced Microeconomic Theory

Course Information

<u>Professor:</u>	Radovan Vadovic D-896 Loeb, 613-520-2600 x 1509, radovan.vadovic@carleton.ca
<u>Lectures:</u>	Wednesdays and Fridays at 11:35-12:55 (Log into Carleton Central to view the location on your class schedule.)
<u>Tutorial:</u>	Wednesdays at 13:05-14:55 (Log into Carleton Central to view the location on your class schedule.)
<u>Office hours:</u>	Thursdays 10:00 – 11:00

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.

Course Description

The course will expand on the material covered in ECON 2020 and ECON 2030. We will cover more advanced topics and some key results across various topics in microeconomic theory. This includes the theory of individual choice, market competition, and strategic interactions. Along the way, I will emphasize examples and applications.

Required Textbook

Osborne, Martin J., and Ariel Rubinstein: *Models in Microeconomic Theory*, 2nd Edition. Open Book Publishers, 2020.

This book can be downloaded free of charge from:

<https://www.openbookpublishers.com/books/10.11647/obp.0362>

Notes that you take in class or that I will distribute will be an important complement to the assigned readings.

All readings will be assigned on weekly basis and posted on Brightspace.

Alternative references:

Jehle Geoffrey, and Philip Reny: *Advanced Microeconomic Theory*. 2010. Pearson, 3rd edition. (This is a more advanced textbook.)

Varian, Hal R.: *Microeconomic Analysis*. 1992. Norton, 3rd Edition (This is a classic textbook.)

Examinations and Grading Policy

Class Participation:	10%	
Midterm examination:	25%	on Friday the 20 th of October
Group project:	25%	due on the last class of the semester, Friday the 8 th of December
Final examination:	40%	scheduled by the University

Each exam or a graded class assignment will be graded on a 100-point scale. The final scores will be combined using the weights above and then translated into an alphabetical final grade in accordance with the percentage equivalents described in the Undergraduate Calendar. If you have any questions about your midterm exam or assignments, please contact the instructor no later than 2 weeks of grades being posted on Brightspace.

Examinations: There will be two exams for the course: an in-person mid-term exam (75 min in length) and an in-person final exam (120 minutes in length).

Students who can document a compelling reason for missing the midterm examination will be excused and their final grade will be based on their performance in the rest of the course. Students must inform the instructor of such an absence in advance. There will be no make-up mid-term exam.

The final examination is cumulative but will put more emphasis on the material covered in the second half of the course. The date will be scheduled by the University during the exam period. Students are not to make travel plans during the exam period as that is not a valid reason for missing a final exam.

Students who do not write the final examination because of illness or other circumstances beyond their control may apply for to write a deferred final examination by contacting the Registrar's Office no later than three working days after the original final examination was scheduled. In the event that a student writes a deferred examination, the deferred examination will carry the same weight as the final examination in determining the course grade.

Group project: Group project: Depending on the number of students I will divide the class into several groups. Each group will be assigned a chapter from our textbook by Osbourne and Rubinstein (2020) and will be in charge of teaching the rest of us about the content of the assigned chapter. The deliverables are:

1. Written teaching notes: 7-10 pages (including figures and tables; excluding references). Notes will be structured as follows:
 - a. Motivation: why is this problem relevant and interesting to learn about? Include examples from ordinary life. Support these examples by newspaper articles that refer to them.
 - b. Leading example: carefully present the leading example (or theorem) from the chapter. Is the textbook presentation clear? In which parts did you have difficulty with understanding? Can the example be improved, simplified, or clarified? Come up with your ideal presentation?
 - c. Discuss one academic paper which directly relates to the theory in your assigned chapter:
 - i. it could be an empirical paper which tests the theory from your assigned chapter with some form of data (preferably experimental); or
 - ii. it could be a theoretical paper extending the result or applying the result from your assigned chapter.

Please check with me before you select an article.

2. Powerpoint (or equivalent) slides used for in-class presentation.
3. One worked out exercise of your own making (your exercise has to be different from those in the book, but it can be similar).
4. The last 1 or 2 classes of the semester will be reserved for interactive presentations, each one approximately 30 minutes in length. These parameters may be subject to change depending on our class numbers. We will fix all details early on in the semester.

Participation: Each in-class assignment that you turn in to the instructor (could be in electronic form) will earn you a point. If it is a graded assignment, then this point will be multiplied by your score and divided by 100. Your participation score will be calculated as the number points earned during the semester divided by the number of total points possible.

Homework: A homework will be assigned on weekly bases. Answers and partial solutions to the homework assignments will be posted one week before the examination. It is essential that you attempt to do the homework assignments yourself. You will find that solving homework problems is a good preparation for the examination.

Satisfactory performance criteria: Students must fulfil all preceding course requirements in order to achieve a passing grade (D- or higher). Failing performance on participation and midterm examination class component (without a documented compelling reason) will result in a grade of FND (“Failure with No Deferred final examination allowed”). Failure to write the final examination when the student has achieved satisfactory performance during the term will result in a grade of ABS (“ABSent from a required final examination”). Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean. Application to write a deferred final examination must be made at the Registrar’s Office.

Plagiarism policy

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found: www.carleton.ca/economics/plagiarism-resources-and-accommodations.

Other policies

Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copy 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).

Other University Policies

For policies on academic accommodations regarding pregnancy obligation, religious obligation, academic accommodations for students with disabilities, survivors of sexual violence, please consult <https://students.carleton.ca/course-outline>.

Also consult equity services at www.carleton.ca/equity/accommodation and the Paul Menton Centre at www.carleton.ca/pmc/students/accommodations.

Readings and Academic Calendar

Tentative Outline of Topics:

Week 1: Individual preferences and choice (Ch. 1 - 2)
Week 2: Individual preferences and choice (Ch. 1 - 2)
Week 3: Consumers (Ch. 4 and 5)
Week 4: Consumers (Ch. 4 and 5)
Week 5: Producers and Monopoly (Ch. 6 and 7)
Week 6: Risk (Ch. 3)
Week 7: Midterm exam and catch-up
Week 8: Winter break
Week 9: Equilibrium (Ch. 9 and 10)
Week 10: Equilibrium (Ch. 11 and 12)
Week 11: Equilibrium (Ch. 13 and 14)
Week 13: Game theory (Ch. 15 and 16)
Week 13: Game theory (Ch. 15 and 16)
Week 14: Presentations and wrap -up