



**Department of Economics**  
**ECON 5020 F**  
**Microeconomic Theory**  
Fall 2022

Instructor: Zhiqi Chen  
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Lectures: Mondays 8:35am – 11:25am, Room 309 Southam Hall  
Office Hours: TBA

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### **Course Description**

An introduction to graduate-level microeconomic theory, including topics such as utility maximization and individual choice, decision-making under uncertainty, producer theory (technology, costs, and profit maximization), alternative market structures (competition, monopoly, and oligopoly), general equilibrium, and the economics of information.

Precludes additional credit for ECON 5000 (no longer offered) and ECON 5001 (no longer offered).

### **Required Text**

Jehle, Geoffrey, A, and Philip J. Reny, *Advanced Microeconomic Theory*, 3<sup>rd</sup> edition, London: Financial Times Prentice Hall, 2011

### **Other References**

Varian, H. R., *Microeconomics Analysis*, 3rd ed. New York: W.W. Norton and Company, 1992

Mas-Colell, A., M.D. Whinston, and J.R. Green, *Microeconomic Theory*, New York: Oxford University Press, 1995

### **Readings of Interest**

Cartwright, E., *Behavioral Economics*, London: Routledge, 2011

Knight, F., *Risk, Uncertainty and Profit*, Boston: Houghton Mifflin 1921 (Available online at <http://www.econlib.org/library/Knight/knRUP.html>)

Schwartz, B. *Paradox of Choice: Why More is Less*, New York: HarperCollins, 2004

### **Topics**

#### **I. Consumer Theory**

- Preferences
- Utility maximization and indirect utility function
- Expenditure minimization and expenditure function
- Marshallian and Hicksian demand functions

- Slutsky equation and Slutsky matrix
- Aggregate demand
- Revealed preferences
- Risk and uncertainty

Jehle and Reny, chapters 1 and 2

Gilboa, I. and D. Schmeidler (1989) “Maxmin Expected Utility with Non-Unique Prior,” *Journal of Mathematical Economics*, 18: 141 – 153

Klibanoff, P., M. Marinacci, and S. Mukerji (2005) “A Smooth Model of Decision Making under Ambiguity,” *Econometrica*, 73: 1849–1892

## **II. Producer Theory**

- Production set
- Profit maximization and profit function
- Cost minimization and cost function
- Input demand and output supply functions
- Aggregation

Jehle and Reny, chapter 3

## **III. Equilibriums**

- Perfect competition
- Equilibrium in competitive market systems
- Imperfect competition

Jehle and Reny, chapters 4 and 5

## **IV. Information Economics**

- Adverse selection
- Moral hazard
- Competition in selection markets

Jehle and Reny, chapter 8

Neale Mahoney, André Veiga & E. Glen Weyl (2014) “Competition Policy in Selection Markets”  
<http://ssrn.com/abstract=2484738>

## **Evaluation**

Each student’s grade in the course will be determined based on the following three components:

- Questionnaire: 5% (Due on September 19)  
 Midterm Examination: 45% (To be held in class on October 31)  
 Final Examination: 50% (To be scheduled by Scheduling and Examination Services)

Any student who fails to write the midterm exam without a valid medical or equivalent excuse will receive a zero for the exam. With a valid excuse, a substitute exam will be scheduled.

Failure to write the final examination when the student has achieved satisfactory performance during the term will result in a grade of F until an appeal to write the deferred final exam is granted. Application to write a deferred final examination must be made at the Registrar's Office.

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.

### **Use of Brightspace**

Students are advised to check the course website in Brightspace regularly for course materials and updates. Lecture slides and problem sets will be posted at the Brightspace course website.

### **Tutorials**

Tutorials will be conducted to demonstrate the applications of concepts and theories presented in classes. They will commence after a sufficient amount of materials are covered in lectures. Therefore, there will be no tutorial during the first week of classes. A schedule of the tutorials will be posted at the Brightspace course website at the beginning of the term.

### **Teaching Assistant**

TA's contact information will be posted at the Brightspace course website when it becomes available.

### **Course Materials**

Student or professor materials created for this course (including presentations and posted notes, assignments and exams) remain the intellectual property of the authors. They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author.

### **Plagiarism**

Please ensure that you are familiar with and comply with the [Carleton University Academic Integrity Policy](#). And, more specifically, with regard to written work required for this course, please be sure to avoid any form of plagiarism. Plagiarism is a serious offence that cannot be resolved directly by the course's instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course. For more information, please see [Academic Integrity and Offenses of Conduct](#).

### **Requests for Academic Accommodation**

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 write to me 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 accommodation regarding a formally-scheduled final exam, you must complete the Pregnancy Accommodation Form at <https://carleton.ca/equity/contact/form-pregnancy-accommodation/>

## Religious Obligation

Please write to me 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 <https://carleton.ca/equity/focus/discrimination-harassment/religious-spiritual-observances/>

## Academic Accommodations for Students with Disabilities

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and 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 me to ensure accommodation arrangements are made. Please consult the PMC website ([carleton.ca/pmc](http://carleton.ca/pmc)) for the deadline to request accommodations for the formally-scheduled exam (if applicable).

## 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:

<https://carleton.ca/equity/sexual-assault-support-services>

## 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. Write to me 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, see the policy:

<https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

## Pandemic Measures

It is important to remember that COVID is still present in Ottawa. The situation can change at any time and the risks of new variants and outbreaks are very real. There are a number of actions you can take to lower your risk and the risk you pose to those around you including being vaccinated, wearing a mask, staying home when you're sick, washing your hands and maintaining proper respiratory and cough etiquette. For more information, visit <https://carleton.ca/covid19/health-and-safety/reducing-your-risks/>

All members of the Carleton community are required to follow requirements and guidelines regarding health and safety which may change from time to time. For the most recent information about Carleton's COVID-19 response and health and safety requirements please see the [University's COVID-19 website](#) and review the [Frequently Asked Questions \(FAQs\)](#). Should you have additional questions after reviewing, please contact [covidinfo@carleton.ca](mailto:covidinfo@carleton.ca).

## Student Mental Health

As a University student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. Here is a list that may be helpful:

### Emergency Resources (on and off campus):

<https://carleton.ca/health/emergencies-and-crisis/emergency-numbers/>

### Carleton Resources:

- Mental Health and Wellbeing: <https://carleton.ca/wellness/>

- Health & Counselling Services: <https://carleton.ca/health/>
- Paul Menton Centre: <https://carleton.ca/pmc/>
- Academic Advising Centre (AAC): <https://carleton.ca/academicadvising/>
- Centre for Student Academic Support (CSAS): <https://carleton.ca/csas/>
- Equity & Inclusivity Communities: <https://carleton.ca/equity/>

**Off Campus Resources:**

- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550, <https://www.dcottawa.on.ca/>
- Mental Health Crisis Service: (613) 722-6914, 1-866-996-0991, <http://www.crisisline.ca/>
- Empower Me: 1-844-741-6389, <https://students.carleton.ca/services/empower-me-counselling-services/>
- Good2Talk: 1-866-925-5454, <https://good2talk.ca/>
- The Walk-In Counselling Clinic: <https://walkincounselling.com>