

THE UNIVERSITY OF WESTERN ONTARIO

ECONOMICS 602 Graduate Microeconomics II

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Lectures: M & W 11:30am–1pm
Office Hours: M & W 2-3pm

Teaching Assistant:
Office:
Office hours:
Tutorial:

Description

This is an advanced course in microeconomic theory. It is divided into three parts: a small, first part that analyses consumer decision-making under uncertainty; a large, second part that covers game theory and its applications; and a third part that includes topics in information economics.

Assessment

There will be ten (weekly) assignments with the following due dates: January 19 and 26; February 2 and 9; March 2, 9, 16, 23 and 30; April 6. The average mark on your *nine best assignments* will make up 20% of your mark. There will be a midterm on February 16 (date to be confirmed), and your mark on it will constitute 30% of your course mark. Your mark on the Final Exam, which is yet to be scheduled, will make up the remaining 50% of your mark for the course.

Plagiarism

The Dean of Graduate Studies requires the addition of the following statements.

“Students must write their essays and assignments in their own words. Whenever students take an idea, or a passage of text from another author, they must acknowledge their debt both by using quotation marks where appropriate and by proper referencing such as footnotes or citations. Plagiarism is a major academic offence (see Scholastic Offence Policy in the Western Academic Calendar).”

“The University of Western Ontario uses software for plagiarism checking. Students may be required to submit their written work in electronic form for plagiarism checking.”

Textbooks

Main Texts:

Mas-Colell, A., A. Whinston and J. Green (1995): “*Microeconomic Theory*”, Oxford (henceforth **MWG**).

Fudenberg, D. and J. Tirole (1991), “*Game Theory*”, MIT (**FT**).

Osborne, M. and A. Rubinstein, “*A course in Game Theory*”, MIT (**OR**).

Jehle, G and P. Reny, “*Advanced Microeconomic Theory*”, Addison Wesley (**PR**).

Additional Texts:

X. Vives, “*Oligopoly Pricing: Old Ideas and New Tools*”, MIT.

Macho-Stadler, I. and D. Perez-Castrillo, “*An Introduction to the Economics of Information: Incentives and Contracts*”, Oxford.

M. Osborne, “*An introduction to Game Theory*”, Oxford.

Course Outline

1. Choice under uncertainty.

MWG: Chapter 6. PR: Chapter 2.4.

2. Non-cooperative Game Theory:

a. Introduction.

Monopoly, Stackelberg and oligopoly. More examples.

b. Elements.

Extensive and strategic form representations. Mixed strategies.

MWG: Chapter 7. FT: Chapter 1.1.1.

c. Static games with complete information.

Dominant and dominated strategies. Rationalizable strategies. Nash equilibrium. Application: static oligopoly.

MWG: Chapters 8.A–8.D. FT: Chapters 1 and 2. OR: Chapters 2.2-2.5, 3.1-3.2 and 4.

d. Dynamic games with complete information.

i. Subgame perfect equilibrium. Application: bargaining.

ii. Repeated games. Folk Theorem. Application: collusion.

MWG: Chapter 9.B. FT: Chapters 3,4 and 5. OR: Chapters 6, 7 and 8.

e. **Static games with incomplete information.**

Bayesian Nash Equilibrium. Application: auctions.

MWG: Chapter 8.E. FT: Chapters 6 and 7. OR: Chapter 2.6.

f. **Dynamic games with incomplete information.**

Perfect Bayesian equilibrium. Sequential equilibrium. Application: cheap talk.

MWG: Chapter 9.C. FT: Chapters 8.1-8.3. OR: Chapter 12.

3. Information Economics:

a. **Adverse Selection and signalling.**

PR: Chapter 8.1. MWG: Chapter 13.B-13.C.

b. **Moral Hazard.**

PR: Chapter 8.1. MWG: Chapter 14.B.