

Econ 501/401: Advanced Microeconomic Theory

Fall 2011

Concordia University

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1 Course Description

This course is an elective for advanced undergraduate students and a mandatory course for graduate diploma students in economics. The topics to be covered include consumer theory, economics of uncertainty, introduction to game theory, and economics of information.

2 Texts

The required texts for the course are

1. “*Microeconomics*,” by Hugh Gravelle and Ray Rees (2004), 3rd ed., Prentice Hall (abbreviated as GR).
2. “*Introduction to Game Theory*,” by Martin J. Osborne (2003), Oxford University Press (abbreviated as MO).

Occasionally, you may also want to refer to other books: “*Microeconomic Analysis*,” by Hal R. Varian (1992), 3rd ed., W.W. Norton and Company (abbreviated as “Varian”), and “*Game Theory*,” by Drew Fudenberg and Jean Tirole (1991), MIT Press (abbreviated as “FT”), and “*Topics in Microeconomics*,” by Elmar Wolfstetter (1999), Cambridge University Press (abbreviated as EW).

I have asked the library to put these books on reserve, subject to their availability.

3 Prerequisites

Students are presumed to have taken Intermediate Microeconomics I and II, and have working knowledge of optimization theory.

4 Requirements

The course grade consists of 5 problem sets (15 points), a midterm (35 points), and a final exam (50 points). You are urged to work in groups on the assignments, but you are required to submit your own answers. Undergraduate students please note that there are no supplemental privileges for the course, per departmental policy.

5 Course Outline

The course outline below will serve as a rough if ambitious guide to what I will cover in the course. As you may notice, the numbers of weeks add up to more than thirteen, which means some materials, especially those with an asterisk, may be skipped. Only the GR and OR readings are mandated unless otherwise announced in class, though you are encouraged to read the other ones as well, as they are specifically chosen for their merits. To find the journal articles listed below, you may use Concordia library's online E-journal database.

1. Consumer Theory (2.5 weeks)
 - GR, Chapters 2 and 3
2. Risk and Uncertainty (2.5 weeks)
 - GR, Chapter 17
 - EW, Chapters 4 and 5
3. Introduction to Game Theory (2 weeks)
 - MO, Chapter 2.
 - Gibbons, Robert (1992), *Game Theory for Applied Economists*, Princeton: Princeton University Press, Chapters 1 and 2.
 - GR, Chapter 15
4. Auctions (2.5 weeks)
 - MO, Sections 3.5, 9.6.1
 - EW, Chapter 8

5. Adverse Selection and Signalling (3 weeks)

- GR, Chapter 19 (B,F,G,H) and Chapter 20 (D)
- MO, Chapter 10
- Akerlof, George (1970), "The market for lemons: Quality uncertainty and the market mechanism," *Quarterly Journal of Economics*, 89: 488-500.
- Rothschild, Michael and Joseph E. Stiglitz (1976), "Equilibrium in competitive insurance markets: An essay in the economics of imperfect information," *Quarterly Journal of Economics*, 80: 629-649.
- Spence, A. Michael (1973), "Job market signaling," *Quarterly Journal of Economics*, 80: 629-649.

6. Moral Hazard* (1.5 weeks)

- GR, Chapter 20 (C)
- Grossman, Sanford J. and Oliver D. Hart (1983), "An analysis of the principal-agent problem," *Econometrica*, 53(1): 7-45.