

Bernard Lebrun

Winter 2017

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Office hours: T-F: 3:00-4:00.

GS/ECON 6100 3.0MW: TOPICS IN MICROECONOMICS THEORY

Course Description:

The topic of the course this year will be game theory.

Lecture Schedule:

Friday: 11:30 - 2:30 in VH-1018

Main Textbook:

We will follow the textbook below:

Martin J. Osborne and Ariel Rubinstein, 1994: *A Course in Game Theory*, M.I.T. Press.

The complete textbook and the solutions to the exercises are freely accessible on the Website the authors maintain at <http://www.economics.utoronto.ca/osborne/cgt/index.html>

An introduction at the undergraduate level of much the same material can be found in:

Martin J. Osborne, 2004, *An Introduction to Game Theory*, Oxford University Press.

Additional Books: The student interested in the material may also consult the following textbooks:

Michael Maschler, Eilon Solan, and Shmuel Zamir, 2013, *Game Theory*, Cambridge University Press

George J. Mailath and Larry Samuelson, 2006, *Repeated Games and Reputation*, Oxford University Press

Drew Fudenberg and Jean Tirole, 1992, *Game Theory*, M.I.T. Press

Roger B. Myerson, 1991, *Game Theory*, Harvard University Press

Guillermo Owen, 1995, *Game Theory*, Academic Press

Eric van Damme, 1991, *Stability and Perfection of Nash Equilibria*, Springer-Verlag

For the more “human” side of game theory, see:

Sylvia Nasar, 1998, *A Beautiful Mind*, Simon & Shuster

Ariel Rubinstein, 2012, *Economic Fables*, OpenBook Publishers (freely accessible on line)

Website:

I will post announcements on the Moodle course site.

Tentative Course Outline:

Strategic games

- Nash equilibrium

- Mixed, correlated, and evolutionary equilibrium

- Rationalizability and iterated elimination of dominated actions

Extensive games with perfect information

- Extensive games with perfect information

- Repeated games

Extensive games with imperfect information

- Extensive games with imperfect information

- Sequential equilibrium

Coalitional games

Grading:

There will be two examinations: one midterm and one final. The midterm will be held in class time on Friday February 17. It will cover the material seen up to and including Friday February 10. The final will be held during the examination period from April 7 to April 24.

Your mark on the final will also be your total mark for the course if it is higher than your mark on the midterm or if, for any reason, you do not write the midterm. Otherwise, your mark on the midterm will count for one third of your total mark and your mark on the final for two thirds.