

EC 513 — Game Theory

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Description

The course will focus on game theory and its applications. The theory to be covered will include basic equilibrium notions (Nash equilibrium, subgame perfect equilibrium) in normal form and extensive form games, including signaling games and repeated games.

Requirements

Your grade will be based on a midterm examination (worth 45% of the grade) and a final examination (55%). The midterm exam will be during class time on Tuesday October 16. The final exam is Monday December 17 from 9 to 11 am.

I will also provide problem sets, approximately every other week, which will not be graded or required. They are intended to give you practice with the kinds of problems likely to appear on exams. Problem sets and problem set answers will be posted on my web page.

Recommended Text

R. Gibbons, *Game Theory for Applied Economists*, Princeton University Press, 1992.

The book should be available in the bookstore. It is recommended, not required.

Office Hours

My office hours will be Mondays from 2:30 to 4 and Wednesdays from 10:30 to 12, beginning Monday September 10. My office hours are in room 558 at 270 Bay State Road. Office hours are subject to change with all changes announced in class. I will also be available by appointment at other times. The best way to set up an appointment is to email me at blipman@bu.edu with a list of days and times that work for you. I am also glad to try to answer questions by email, though sometimes it can be too difficult to communicate that way. My office phone number is 3-2995.

Course Outline and Readings

All dates are approximate. Some topics may be added or dropped.

Week 1.

Introduction.

Extensive Form Games with Perfect Information.

Weeks 2 and 3.

Normal Form Games. Chapter 1. Omit Section 1.2.C.

Weeks 4 through 6.

Extensive Form Games. Chapter 2. Omit Sections 2.2.D and 2.3.

Weeks 7 and 8.

Cooperation and Repeated Games. Section 2.3.

Week 9.

Voting and Elections.

Weeks 10 through 13.

Information, Signaling, and Incentives, Sections 4.1–4.2.

Weeks 14 and 15.

Auctions.