

ECON 7030: MICROECONOMIC THEORY 2

Spring 2023

Instructor: Professor Yongmin Chen
Office: ECON 108
Class Time: MW 2:15-3:30PM
Classroom: ECON 5
Office Hours: W 12:30-2:00PM
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Course Description: This is the second graduate course in microeconomic theory. It consists of two main parts: i) non-cooperative game theory; and ii) market equilibrium and market imperfections. Together with ECON 7010 (Microeconomic Theory 1), this course aims to provide students with a solid understanding of the fundamentals of microeconomic analysis.

Course Materials: The textbook is *Microeconomic Theory*, by Mas-Colell, Whinston, and Green. I plan to cover most chapters in Parts II and III of the book.

Grading: Grades are based on 6 problem set quizzes (30%) during recitations, a midterm exam (30%), and a final exam (40%). You are encouraged to form study groups to discuss homework and lecture material. Quizzes and exams will all be in closed-book forms.

Problem Sets: There will be regular assignment of problem sets. You should start working on the relevant problem set as I start each topic. The TA will hold recitations to discuss problem sets. I emphasize that solving these problems is crucial for you to learn the course material, even though problem sets will not be collected and graded. Quizzes will use questions from the problem sets.

Lecture Topics: Below is a tentative plan for the lectures. Changes to the plan will be announced in class during the semester and you are responsible for updating the information.

Topic 1 Basics of Non-cooperative Games
(Lectures 1-2) Readings: Ch.7.
 Problem Set 1: 7.C.1, 7.D.1, 7.D.2, 7.E.1.

- Topic 2 Simultaneous-Move Games
(L 3-6) Readings: Ch. 8: 8A-8E.
 Problem Set 2: 8.B.1, 8.B.2, 8.B.6, 8.B.7.
 Quiz 1
 Problem Set 3: 8.D.2, 8.D.4, 8.D.5, 8.D.6, 8.E.2, 8.E.3.
 Quiz 2
- Topic 3 Dynamic Games
(L 7-11) Readings: Ch. 9: 9A-9C
 Problem Set 4: 9.B.2, 9.B.9, 9.B.10, 9.B.11, 9.C.2, 9.C.7.
 Quiz 3
- Topic 4 Externalities and Public Goods
(L 12-14) Readings: Ch. 11.
 Problem Set 5: 11.B.3, 11.B.4, 11.B.5, 11.C.1, 11.D.1, 11.D.6.
 Quiz 4
- Midterm Exam Monday, March 6, during class time.
- Topic 5 Market Power: Static Models of Monopoly and Oligopoly
(L 15-17) Readings: Ch. 12: 12A-12C.
 Problem Set 6: 12.B.4, 12.B.5, 12.B.9, 12.C.3, 12.C.9.
- March 27-31: Spring Break
- Topic 6 Dynamic Models of Imperfect Competition and Entry
(L 18-19) Readings: Ch. 12: 12D-12E.
 Problem Set 7: 12.C.18, 12 D.2., 12 E.4., 12 E.7.
 Quiz 5
- Topic 7 Adverse Selection, Signaling, and Screening
(L 20-23) Readings: Ch. 13
 Problem Set 8: 13.B.2, 13.B.4, 13.C.1, 13.C.5.
 Quiz 6

No class on Wed., April 19

Topic 8 The Principal-Agent Problem and Applications
(L 24-28) Readings: Ch. 14
 Problem Set 9: 14.B.4, 14.C.3, 14.C.7, 14.C.8.

Final Exam:

University Policies

Classroom Behavior

Both students and faculty are responsible for maintaining an appropriate learning environment in all instructional settings, whether in person, remote or online. Those who fail to adhere to such behavioral standards may be subject to discipline. Professional courtesy and sensitivity are especially important with respect to individuals and topics dealing with race, color, national origin, sex, pregnancy, age, disability, creed, religion, sexual orientation, gender identity, gender expression, veteran status, political affiliation or political philosophy. For more information, see the

your procedure here for students to alert you about absence due to illness or quarantine. Because of FERPA student privacy laws, do not require students to state the nature of their illness when alerting you. Do not require "doctor's notes" for classes missed due to illness; campus health services no longer provide "doctor's notes" or appointment verifications. }

Accommodation for Disabilities

If you qualify for accommodations because of a disability, please submit your accommodation letter from Disability Services to your faculty member in a timely manner so that your needs can be addressed.

Religious Holidays

Campus policy regarding religious observances requires that faculty make every effort to deal reasonably and fairly with all students who, because of religious obligations, have conflicts with scheduled exams, assignments or required attendance.

See the [campus policy regarding religious observances](#) for full details.