



FACULTY OF ARTS AND SOCIAL SCIENCES

ECON 502 – Microeconomics II

Spring 2021

Lecture: Thursday 13:40 – 16:30 (via Zoom)

Recitation: Friday 12:40 – 13:30 (via Zoom)

Instructor:

Eren Inci

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Teaching Assistant:

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Course Requirements:

Midterm Exam (08 April 2021, 13:40 – 16:30) (via Zoom and SUCourse+) : 40%
Final Exam (scheduled by Student Resources) : 50%
Homework Assignments : 10%

Suggested Textbooks:

Microeconomic Theory (Mas-Colell, Whinston, and Green)
Game Theory (Fudenberg and Tirole)
Game Theory for Applied Economists (Robert Gibbons)
The Theory of Incentives (Laffont and Martimort)
Contract Theory (Bolton and Dewatripont)
Papers mentioned in the lectures

Course Description:

This course is the second part of the graduate level microeconomic theory sequence. Its main goals are to introduce the basic concepts and tools of game theory and to analyze strategic decisions of economic agents in interactive situations. The first module covers decision making under uncertainty and games of complete information. The second module covers games of incomplete information and basics of theory of incentives and contracts. Some of the topics covered in the class might be familiar to you from undergraduate or previous studies, but where they are they will be treated in greater depth. ECON 501 (or an equivalent course) is a prerequisite for the course.

One important point to mention is that each subject covered in this course builds on the previous ones. Therefore, you should read assigned chapters and/or papers closely from the very beginning of the course and not miss any class. As noted in *Sabancı University Catalogue*, students are expected to attend class. Attendance is also a central concern for me. I am not going to keep track of day-to-day attendance. However, by the end of the semester, I will certainly have a general idea of attendance of every one of you and keep in mind that your active participation in the class has a considerable importance in your understanding of the topics.

You are always welcome to ask questions or raise issues of interest in and out of the class. This gives me instant feedback and let me know which concepts are difficult to grasp. If there is anything that you do not understand from the lectures, feel free to come and see me during our office hours. Note that you are held responsible for all readings, assignments, and announcements made in class.

There will be one midterm exam and one final exam. No make-up exams will be given unless you have a serious excuse. In such a case, you need to follow the formal procedures of the FASS in a timely manner. You must always document your excuse. The exam grade for an unexcused exam will be zero. What to do with an excused exam is decided on a case-by-case basis. Make-ups are given on very rare occasions and they are usually harder than usual exams. If you have a valid excuse for an exam, you (as a person) must inform me of your situation in three days after the exam. Any excuse after three days will not be considered.

Several problem sets will be assigned and graded during the semester. You are required to hand in problem sets for two reasons. First, in that way, you can increase your understanding of the course material which will positively affect your performance in the exams. Second, as indicated in course requirements above, the problem set performance has significant weight on your final grade. So, you must put fair effort in preparing your solutions. You are encouraged to work on problem sets in groups, but you should hand in your own solutions. Late homework will not be accepted in any condition regardless of the excuse. If you are not in the class on the day a problem set due, you should arrange for someone to turn it in for you.

Academic integrity is central to the mission of higher education. Please observe the highest standards of academic integrity in this course. Any kind of academic dishonesty will not be tolerated. Please review the standards and procedures that are published in the university catalog and on the web, at:

http://www2.yonerge/Akademik_durustluk/E-Academic_durustluk.html

Make sure that the work you submit is in accordance with university policies. If you have any questions, please consult with me. Violations will be reported to the Deans' Office and reviewed by the Committee on Academic Integrity. This could result in failure in the course or even more severe sanctions.

The online content for this course can be found at SUCourse. Every comment related to the course is welcomed.

I wish you a nice and fulfilling semester!

ONLINE EDUCATION AND ONLINE EXAMS

- Due to the COVID-19 pandemic, all lectures, recitation hours and exams in this course will be fully online (until the university administration makes a new decision).
- Homework assignments and solutions of exams must be submitted online via SUCourse+. All submitted files must be combined in one file in pdf format. Other formats and multiple files will not be accepted.
- Lectures and recitation hours will be synchronous, and all students are required to attend regularly. Your attendance will be extracted from Zoom reports and recorded.
- Your webcam must always be on during lectures and exams.
- All lectures, recitation hours, and exam sessions will be recorded. Lectures and recitation hours will be made available in SUCourse+ through links to the relevant files in a shared google drive folder. By registering this course, you give your consent to all recordings.
- Exams and homework assignments will be sent to you via SUCourse+. You will also submit your solutions via SUCourse+.
- Exams will be proctored through Zoom. Exams will be closed book and you must work on it on your own. Violation of academic integrity will not be tolerated.
- You must connect to the Zoom link for this course with your official Sabanci University e-mail account.

TOPICS TO BE COVERED

A. (SOME) COOPERATIVE GAME THEORY

1. Arrow's Impossibility Theorem

B. DECISION MAKING UNDER UNCERTAINTY

1. Expected Utility Theory
2. Money Lotteries and Attitudes towards Risk

C. NONCOOPERATIVE GAME THEORY

1. Static Games of Complete Information
 - a. Strategic Form Games
 - b. Nash Equilibrium
2. Dynamic Games of Complete Information
 - a. Extensive Form Games
 - b. Subgame Perfect Nash Equilibrium
3. Static Games of Incomplete Information
 - a. Bayesian Games
 - b. Bayesian Nash Equilibrium
4. Dynamic Games of Incomplete Information
 - a. Perfect Bayesian Equilibrium
 - b. Signaling
 - c. Other Equilibrium Refinements
 - d. Screening

LEARNING OUTCOMES

Successful student is expected to

- demonstrate a broad (but not necessarily deep) knowledge of some core topics in microeconomic theory (especially game theory and contract theory),
- set up and solve sound microeconomic models analyzing specific problems and ideas,
- identify the standards to attend advanced specialized courses in each particular topic (especially specialized courses in game theory and contract theory)