

TOBB University of Economics and Technology
Department of Economics

IKT 512 MICROECONOMICS II
(GAME THEORY)
Spring 2022

Monday 10:30-13:20

INSTRUCTOR: Ayça Özdoğan Atabay

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Website: <http://aycaozdogan.weebly.com> **Office hours:** Tue 14:30-15:30, Th10:30-12:30.

Note: You can reach me by appointment in case you can't make it to office hours. The best way to reach me is through email. I will try to respond them within 24 hours unless it is a weekend. The entire announcement about the course and course material will be posted online (*uzak* platform) and will be sent to your piazza accounts. It is YOUR responsibility to check the website, piazza accounts and your emails at least once in a week.

COURSE DESCRIPTION

This course is the second part of the microeconomics sequence, aimed to analyze the tools required to study situations when competitive markets do not work (meaning do not end up at an efficient outcome) due to strategic interaction and asymmetric information among the participants. This course offers an introduction to game theory and consists of two parts. The subject of the first part is simultaneous noncooperative games with some economic applications, whereas the second part deals with dynamic noncooperative games.

TEXTBOOKS

Required

Mas-Collell A., Whinston M. D. and J. Green, *Microeconomic Theory*, Oxford University Press, 1995.

Recommended

Osborne M. J., *An Introduction to Game Theory*, Oxford University Press, 2009.

Tadelis, *Game Theory: An Introduction*, Princeton University Press (2013)

Fudenberg D. and J. Tirole, *Game Theory*, MIT Press, 1991.

Osborne M. J. and A. Rubinstein, *A Course in Game Theory*, MIT Press, 1994.

Mailath G. J. and L. Samuelson, *Repeated Games and Reputations: Long-Run Relationships*, Oxford University Press, 2006.

Dixit, Skeath and Reiley *Games of Strategy*. 4th Edition, W.W Norton (2015)

COURSE REQUIREMENT

Almost each week a quiz and/or homework will be given. Quizzes will relate to current and previous topics and may select from homework questions. A quiz may be given at any time during

any class period, at the beginning or end of a class, etc. There will be no make-up quizzes. Assignments will be due one week after being assigned and no late assignments will be accepted. Students are encouraged to work together on homework assignments; but must write up their answers independently. Otherwise, there will be penalty discounts. The lowest homework and the lowest quiz score will be dropped. There will be one midterm and a final exam. The exams will cover all material that is taught during the class or assigned to students.

Your grade will be based on your performance throughout the semester as follows:

Homework (%25) + Midterm (%35) + Final (%40)

CLASS RULES

- **Make-ups:** Make-up for tests will be granted only in case of a valid and documented reason accepted by the Institute. Absence without any valid documentation will result in a grade of 0 from that exam. In case of an illness, you are required to bring a formal doctor's note from a hospital. You have to bring or fax the doctor's note to me within 5 business days after the exam.
- **Attendance:** Students are required to come to, and leave class, just on time. Attendance to at least 70% of classes is compulsory to get a letter grade other than U.
- **Incomplete (I)** will only be given in cases of documented emergencies. Doing poorly in the course will not be considered as a valid reason for receiving an "I."
- **Plagiarism, Cheating and Collusion:** Students are expected to refrain from any form of plagiarism, cheating and collusion. Cheating, plagiarism, and collusion are serious offenses resulting in a grade penalty and disciplinary action.
- **Grade Changes:** All students have the right to view their graded exams, quizzes and homeworks. At the end of the semester, a grade change will be made only in the unlikely case of an error of fact.

NOTES ON ACADEMIC HONESTY

All the work submitted must be that of student. You are encouraged to work with others in understanding the concepts and problems. However, each student must hand in their own homework assignment and all the sources of information and references used including a classmate (except for the textbook, lecture and recitation notes) must be **cited**. Identical answers will receive a score of zero. If the academic dishonesty occurs on a final or midterm, a grade of F or N will be received. Cheating and plagiarism will be penalized according to the disciplinary rules of the university and YOK. See the following website for the policies on academic dishonesty <http://www.yok.gov.tr/content/view/475/183/lang.tr/>.

TENTATIVE COURSE PLAN

Weeks	Topics
1	Basic Elements of Noncooperative Games (MWG, Chapter 7)
2,3,4	Simultaneous Move (Static) Games (MWG, Chapter 8)
5	Market Power (MWG, Chapter 12)
	MIDTERM
7, 8, 9,10	Dynamic Games (MWG, Chapter 9 and Chapter 13C)
11, 12	Repeated Games