

ECON 513
Microeconomics I
Fall 2022

	Instructor Ayça Tekin-Koru	Teaching Assistant Ataman İcer
Office	D205	F225
Office Hours	by appointment	by appointment
Office Phone	+90.312.585.0034	+90 312 585 0309
E-mail	ayca.tekinkoru@tedu.edu.tr	ataman.icer@tedu.edu.tr

GENERAL INFORMATION

Course Description: Tools of microeconomic analysis; Consumer theory; Expected utility theory and its applications; Producer theory; Partial equilibrium analysis; General equilibrium analysis; Welfare theorems.

Course Objective:

This course offers microeconomic theory topics with relevant applications. The course introduces the tool of microeconomic analysis. It covers consumer theory and expected utility concepts. Interactions of consumers and producers are analyzed by partial and general equilibrium frameworks. This course includes the functioning of markets and allocation of scarce resources through the decision-making processes of agents under various conditions. The course presents fundamental theorems of welfare economics.

Credits: (3+0+0) 3 TEDU Credits, 7.5 ECTS Credits

Prerequisites: None **Corequisites:** None

Learning Outcomes:

Upon successful completion of this course, a student will be able to

1. Employ tools of microeconomics to analyze the decision making of agents,
2. Implement economic theory to understand the behavior of consumers under different conditions,
3. Analyze production and cost-related actions of firms,
4. Examine interactions of economic agents in different market frameworks,
5. Conduct welfare analysis by using tools of microeconomic theory,
6. Apply concepts of microeconomic theory to various contexts in everyday life.

COURSE READINGS

Required:

- *Advanced Microeconomic Theory: An Intuitive Approach with Examples*, Felix Munoz-Garcia (FMG). MIT Press, 2017. ISBN: 9780262035446.

Optional Micro:

- *Microeconomic Theory*, Andreu Mas-Colell, Michael Whinston, and Jerry Green (MWG), Oxford University Press, 1995. ISBN: 0195073401.

- Geoffrey Jehle and Philip Reny. (JR) *Advanced Microeconomic Theory*. 2nd ed. Reading, MA: Addison-Wesley, 2000. ISBN: 0321079167. [More readable than MWG and more concise].
- Ariel Rubinstein. *Lecture notes on Microeconomic Theory: the economic agent*. Princeton University Press, 2006. ISBN: 0691120315. Downloadable for free at the following link: <http://arielrubinstein.tau.ac.il/Rubinstein2007.pdf> [Only recommended for the first chapters].
- Hal Varian. *Microeconomic Analysis*. 3rd Ed. New York, NY: W.W. Norton, 1992. ISBN: 0393957357. [Very concise].

Intermediate Micro textbooks as a support for the intuition behind the theoretical concepts in this class. Here is a few (Any edition might work):

- Walter Nicholson and Christopher M. Snyder (NS) *Microeconomic Theory: Basic Principles and Extensions*. Southwestern College Publ. (11th edition, 10th edition is also ok). [This book is good complement to MWG in terms of intuitive reasoning. It is especially useful as a bridge between Intermediate Micro and graduate level micro theory]. I especially encourage you to read Chapter 2 on useful mathematics for microeconomic theory. In addition, I highly recommend you read the corresponding chapter of the textbook before starting to read MWG.
- Ana Espinola-Arredondo and Felix Munoz-Garcia, *Intermediate Microeconomic Theory: Tools and Step-by-Step Examples*, MIT Press, 2020.
- Jeffrey F. Perloff. *Microeconomics: Theory and Applications with Calculus*. Addison-Wesley;

Optional Math:

Most comprehensive:

- Carl P. Simon and Lawrence E. Blume. *Mathematics for Economists*. W. W. Norton.
- Michael Hoy, John Livernois, Chris McKenna, Ray Rees and Anthanassios Stengos. *Mathematics for Economists*. MIT Press.
- Angel de la Fuente. *Mathematical methods and models for economists*. (Any edition might work). Cambridge University Press. [Good macro applications].

Also recommended (refreshing undergrad mathematics):

- Michael Klein. *Mathematical Methods for Economics*. (Any edition) Addison-Wesley.
- Alpha Chiang. *Fundamental Methods of Mathematical Economics*. (Any edition). McGraw-Hill.
- Knut Sydsaeter and Peter I. Hammond. *Mathematics for Economic Analysis*. (Any edition) Prentice Hall.

Also recommended (although not so comprehensive):

- Robert G. Bartle and Donald R. Sherbert. *Introduction to real analysis*. 3rd edition. Wiley. [A gentle introduction to real analysis].
- Russel A. Gordon. *Real Analysis, A first course*. Second edition. Addison Wesley. [Another gentle introduction to real analysis.]
- William Trench. *An Introduction to Real Analysis*. Free downloadable textbook at: <http://ramanujan.math.trinity.edu/wtrench/misc/index.shtml>. [Recommended if you never had courses on real analysis before.]
- Rangarajan K. Sundaram. *A first course in optimization theory*. Cambridge University Press. [Good connection of real analysis with maximization problems.]

TEACHING and LEARNING

Planned Learning Activities and Teaching Methods:

Case, Demonstrating, Hands-on Activities, Oral Presentations/Reports, Problem Solving, Questioning, Reading, Telling/Explaining, Web Searching.

Student Workload (225 hrs -7.5 ECTS):

Course readings 63 hrs, Exams/Quizzes 75 hrs, Lectures 42 hrs, Homework 45 hrs.

Computer Usage:

Students may use MS Office applications or similar software (Word, Excel, and PowerPoint) to work on their assignments/case study/research review.

ASSESSMENT METHODS

Homework Assignments (40%):

There will be five assignments (10% each) in the course of semester, which are due in the beginning of class. No late assignments are accepted.

Exams (60%):

There will be the midterm exam (30%) and a final exam (30%) The midterm covers the material up until the exam. Final covers the material from the midterm exam to the final.

STUDENT CONDUCT

Academic Integrity:

Academic dishonesty in assignments, examinations, or other academic performance is prohibited and considered a violation of the Student Conduct Regulations. It includes 'cheating' (the intentional use or attempted use of unauthorized materials, information or study aids); 'fabrication' (the intentional falsification or invention of any information); 'assisting in dishonesty or tampering' (intentionally or knowingly helping or attempting to help another commit an act of dishonesty or tampering with evaluation instruments and documents); and 'plagiarism' (intentionally or knowingly representing the words or ideas of another person as one's own). Penalties for academic dishonesty may result in receiving an 'F' in the course, or referral to the Dean of the Faculty in which you are enrolled for further action.

Disruptive Behavior:

Behaviors that are disruptive to teaching and learning will not be tolerated and will be referred to the Rector's Office for disciplinary action. Behaviors that create a hostile, offensive or intimidating environment based on gender, race, ethnicity, color, religion, age, disability, marital status or sexual orientation will be referred to the Rector's Office.

COURSE OUTLINE

Week 1:

Introduction
Mathematical Review

Week 2:

Mathematical Review

Week 3:

Preferences and Utility

Week 4:

Preferences and Utility

Week 5:

Demand Theory

HW1 due

Week 6:

Demand Theory

Week 7:

Demand Theory Applications

HW2 due

Week 8:

Midterm Exam

Week 9:

Production Theory

Week 10:

Production Theory

Week 11:

Production Theory

Week 12:

Partial and General Equilibrium

HW3 due

Week 13:

Partial and General Equilibrium

Week 14:

Partial and General Equilibrium

HW4 due