

Kyiv School of Economics
Microeconomics
Term 3
Academic Year: 2022-23

Instructor: Pavlo Prokopovych
Lectures: Twice a week (TBA)
Office Hours: Once a week (TBA)
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DESCRIPTION: This third part of the 2022-23 microeconomic sequence is the most interesting one from applications' point of view. Real markets more often than not violate the abstract tenets of the hypothetical perfect competition model. Companies sell different products and services, set their own individual prices, fight for market share, and are often protected by barriers to entry and exit. On the positive side, imperfect competition creates opportunities for companies to generate more profit, unlike in a perfect competition environment, where businesses earn just enough to break even. Moreover, buyers and/or sellers might not have all of the necessary information to make an informed decision about the product's price or quality, or one party, either the buyer or the seller, might have more information about the product's quality or price than the other party. The Microeconomics 3 course covers a number of topics concerning market structures under imperfect competition, namely monopoly, monopolistic competition, and oligopoly. The pricing behavior of monopolists and oligopolists is studied within the framework of classic game theoretical models. Among them are price discrimination models, information economics models, and the Cournot, Bertrand, and Stackelberg oligopoly models. Basic concepts of game theory are also illustrated on auction games.

PREREQUISITES: Basic calculus, basic consumer and producer theories, perfect competition, choice under uncertainty

LEARNING OBJECTIVES: Upon completion the course, students will be able to explain the pricing behavior and market structure of industries, solve basic game theoretical models, and deepen their knowledge in application of game theory to economics and business models.

READINGS:

“Microeconomic Theory” and “Intermediate Microeconomics” by Hal Varian
“An Introduction to Game Theory” by Martin Osborne
“Microeconomic Theory: Basic Principles and Extensions” by W. Nicholson
and several handouts

GUIDELINES:

1. Do all problems assigned for homework. If you get stuck or have any questions, come and see me, and we shall go through the steps together.
2. Budget your time and effort. The course is pretty challenging.

GRADING:

Your final grade will be determined from a final comprehensive exam (45%), a midterm (30%), attendance and participation (10%), four-five homework assignments (15%). All the tests are closed-book. The grading system is the one recommended by the Ministry of Education and Science of Ukraine:

91-100	As (the students with the highest number of points get an A+)
76-90	Bs
60-75	Cs

MISSED EXAMS OR ASSIGNMENTS: There should be a valid excuse for a student to be permitted to take a make-up exam. Late submissions of HW assignments are penalized or not accepted at all, depending on the length of the delay.

COURSE OUTLINE:

1. A Refresher: Market Demand
2. Monopoly.
3. Price Discrimination.
4. A Basic Model of Nonlinear Pricing.
5. The Notion of Equilibrium: Nash Equilibrium.
6. Basic Applications of Nash Equilibrium. Auctions.
7. Oligopoly. The Cournot and Bertrand duopoly models.
8. Dynamic Oligopoly. Subgame Perfection. The Stackelberg duopoly model.
9. Economics of Information. Adverse selection and Moral Hazard.

ACADEMIC INTEGRITY: Cheating, plagiarism, helping other students to commit an act of dishonesty, and any other form of academic dishonesty will lead to a failing grade for this course.