



Course program and reading list

Semester 2 Year 2024

School: Tiomkin School of Economics B.A

Microeconomics III-
Information, Market Power, and Game Theory

Lecturer:

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Tutors:

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Teaching Assistant:

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Course No.:	Course Type :	Weekly Hours :	Credit:
3060	Lecture	3	3

Course Requirements :	Group Code :	Language:
Final Exam	242306004	English

Prerequisites

Prerequisite:

9007 - Mathematics I for Economics
9008 - Mathematics II for Economics
9012 - Microeconomics I:consumers and firms behavior under perfect competition **OR** 9683 - Microeconomics I:Economic decision-making: Consumers and Producers
9018 - Microeconomics II :consumers and firms behavior under perfect competition **OR** 3059 - Microeconomics II- Efficiency, Markets,

and Market Failures

Students who took one of the courses listed below will not be allowed to register to the course Microeconomics III-Information, Market Power, and Game Theory (3060):

9019 – Microeconomics III :consumers and firms behavior under perfect competition



Course Description

1. **Asymmetric information in competitive markets**
 - Adverse selection:
 - The lemons market and the possibility of market failure.
 - Adverse selection in the market for insurance.
 - Signaling
2. **Monopoly**
 - Private information and the monopoly problem. Perfect price discrimination.
 - Monopolistic pricing: The rule of inverse elasticity and the Lerner index for market power.
 - The effect of a monopolistic market on social welfare.
 - Monopoly, productivity, and innovation.
 - Natural monopoly and regulation.
 - Double marginalization.
3. **Pricing strategies of suppliers with market power**
 - Price discrimination:
 - Price discrimination according to observable consumers' characteristics (third degree).
 - Price discrimination when the consumers' characteristics are not observed (second degree)
4. **Moral hazard**
5. **Introduction to game theory**
 - Simultaneous games (normal form):
 - Description of a game in normal form using a payment matrix.
 - Definition of dominating and dominated strategies and equilibrium with dominant strategies.
 - Nash Equilibrium: finding a Nash equilibrium, multiple equilibria, and non-existence of equilibrium in pure strategies.
 - Sequential games (extensive form)
 - Description of a game using a game tree.
 - Backward induction and sub-game-perfect equilibrium.
 - Repeated games.
6. **Imperfect competition and competition policy**

- Competition between a small number of firms (oligopoly).
 - Competition in quantities (Cournot).
 - Competition in prices (Bertrand) in homogeneous and differentiated products.
 - Sequential competition in quantities (Stackelberg).
 - Competition policy:
 - Background – concentrated and competitive markets.
 - Antitrust.
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Course Goals

The course objectives are:

To provide students with a theoretical framework to study and analyze markets under conditions of asymmetric information and limited competition – monopoly and oligopoly.

To provide students with an understanding of the economic forces that affect the market outcome under the conditions of asymmetric information and limited competition. Specifically, how these conditions affect the efficiency of free markets and how the government can intervene to mediate market failures.



Grading

The overall grade in the course is composed of the grade in the final exam 90% and from solutions to the problem sets 10%.

To receive a full grade on the problem sets component, you need to get a “pass” grade for 80% of the problem sets. A “pass” grade will be given if and only if the solution indicates that the student invested time and independent thinking in the solution.



Lecturer Office Hours

To be announced.



Tutor Office Hours

To be announced.



Reading List

The lectures of the course are not based on a specific textbook. The course will be accompanied by a presentation whose slides are self-contained. Nonetheless, there are two textbooks that cover some of the material:

Berhneim and Whinston: Microeconomics, McGraw-Hill

Varian, Intermediate Microeconomics: A Modern Approach, Norton