

EC531 Market Structure and Industrial Organization

Fall 2021

Prof. Jordi Jaumandreu

E-mail: jordij@bu.edu

Department of Economics, 270 Bay State Road

Room 416; Phone: 617 358 5925

Office hours: T, W 12:30-2 pm.

Course overview:

Perfect competition is known to generate the best possible welfare outcomes but real markets are often quite separated from this benchmark. In many markets firms possess some market power, or ability to sustain a price above marginal cost for the products they produce and sell. This course studies the relationships between different market structures, firm behavior and the efficiency and welfare results. It is a course on “Industrial Organization,” or the economics of imperfect competition. It deals with monopoly positions and competition among few, mergers and agreements among competitors, pricing practices and product choices, industry entry and exit and barriers to entry and exit, advertising expenses to differentiate the products and R&D investments to innovate and so on. It focuses on the analysis of these market situations, including the possible government interventions designed to remedy the problems and maximize social welfare (regulation and antitrust). The views about the working of the markets and the economic policy instruments to be used have evolved very rapidly in the last 30 years, and real policy has changed dramatically everywhere. The aim of this course is to provide an up-to-date introduction to the micro tools to analyze markets and develop the ability to apply them to the analysis of the real world industries.

Readings:

You can follow the course in the textbook

Introduction to Industrial Organization, Luis M.B. Cabral, 2017 MIT Press.

However, the material is going to be extended in the classes. Higher level books, very useful for the formal treatments of the course are

The Theory of Industrial Organization, Jean Tirole, 1989, MIT Press

Industrial Organization, Markets and Strategies, Paul Belleflame and Martin Peitz, 2010, Cambridge University Press.

Handouts and other readings will be given during the course and posted on the website.

Course Website:

All course announcements and documents will be posted on the Blackboard website.

Teaching Assistants:

Yajie Tang is the teaching fellow assigned to the course. Office hours: By appointment.
Email: yjtang@bu.edu.

Assignments, exams and grading:

There will be about 11 problem sets and a number of practices. Selected problems will be solved and discussed in class and all solutions posted. Exams will be based on problems and exercises similar to those assigned during the course in the problem sets and the practices.

Exams will be open-book and take place during class time in the dates specified in the course outline. In the exams taken remotely the student should be logged in Zoom with the camera on during the entire exam, showing up in the record with her/his official registration name. Exams will be scanned and uploaded at the end of the allocated time.

Course grades will be based on two midterm exams and a cumulative final exam. In principle, each midterm will count for 25% of the final grade and the final exam 50%, but if a student's score on the final exam is higher than the average of the midterms, these weights will be updated to 15%, 15% and 70%.

There will be no makeup exams. Any student who goes through an especial situation (e.g. medical emergency) must report the situation by email before the exam takes place and contact me as soon as possible to set a solution.

Course outline

Minor changes might be made during the course. They will be announced at class and posted on the website.

Review: Basic Microeconomics, Firms (Chapters 2 and 3, PS #1)

Competition, Efficiency and Welfare (Chapter 4, PS #2)

Competition maximizes welfare

Market power and efficiency: allocative, productive and dynamic

Market structure: Monopoly, Market power, Competition (Chapters 4 and 5, PS #3)

Monopoly and market power. Multimarket monopoly.

Markets with dominant firms

Almost perfect competition: Monopolistic competition. Dixit-Stiglitz.

Perfect competition

An introduction to Regulation (Chapter 5, PS #4)

First and second best

Imperfect information and incentives. Fixed-price and Cost-plus contracts.

Midterm Exam 1: Thursday, September 30

Background: Games and strategy (Chapter 7)

- Nash equilibrium
- Sequential and repeated games
- Oligopoly competition (Chapter 8, PS #5)
 - Bertrand, Cournot, Stackelberg
 - Cournot in capacity plus Bertrand in prices.
 - Applications
- Collusion (Chapter 9, PS #6)
 - Coordination
 - Factors that facilitate and hinder collusion
 - Antitrust
- Product differentiation (Chapter 14, PS #7)
 - Types of product differentiation
 - Hotelling. Models of product differentiation
 - Discrete-choice demand models.

Midterm Exam 2: Thursday, November 4

- Price discrimination (Chapter 6, PS #8)
 - Definition and types
 - Third degree of price discrimination
 - Ramsey pricing
 - Nonlinear pricing and sorting
- Advertising (Chapter 14.3, PS #9)
 - Functions of advertising
 - Determinants of advertising intensity
 - Competition in advertising.
- Market structure, Entry and exit (Chapter 10 and 11, PS #10)
 - Entry costs and market structure
 - Strategic behavior
 - Vertical relationships and mergers
- Networks and two-sided markets (Chapter 16, PS 11)
 - Network externalities
 - Platforms
 - Public policy

Final Exam: TBA by the university