# EC332 Market Structure and Economic Performance (Industrial Organization)

Fall 2019

Prof. Jordi Jaumandreu E-mail: jordij@bu.edu

Department of Economics, 270 Bay State Road

Room 416

Phone: 617 358 5925

Office hours: T 9:30 am - 11:00 am; Th 3:30 pm -5:00 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 in process and products 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 25 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. This course has as prerequisites EC201 and some knowledge of calculus.

## Textbook:

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

## Other readings:

Handouts and other readings will be given during the course and posted on the website. Another book contains an alternative treatment of all the topics:

*Modern Industrial Organization*, Dennis W. Carlton and Jeffrey M.Perloff, 2005 Pearson/Addison Wesley, 4<sup>th</sup> edition

## Course Website:

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

# Office Hours and Appointments:

Contact me by email in case of course conflict with the scheduled office hours.

# **Teaching Fellow:**

Yoshifumi Yokota is the teaching fellow assigned to the course.

Office: B10; Office hours: Th 10:30 am - 12:30 pm; E-mail: yyokota@bu.edu.

# Attendance:

Students are expected to attend all lectures. Each lecture will build on the knowledge acquired in the previous one and, if you miss a class, you are responsible for getting the lecture notes from your classmates.

# Class Preparation, Participation and Assignments:

The ideal way to learn is to read the assigned chapters before lectures, attend the class and ask questions during the lecture, and to study the chapter and notes after the lecture, working at the same time on the solution of the assigned set of problems. There will be about 10 problem sets and a number of practices. Selected problems will be solved and discussed in class and all solutions posted. Students are encouraged to form small groups to work on the assignments but you must take into account that the final aim is to develop the ability to solve the problems by yourself. Assignments will not be graded.

## Exams and grading:

Exams will be based on problems and exercises similar to those assigned during the course in the problem sets. Course grades will be based on two midterm exams and a cumulative final exam. There will not be makeup midterms. 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%.

No claim on grading mistakes will be considered after two weeks of the exam. Final letter grades will be assigned taking into account the final class scores distribution.

# **Academic Conduct:**

It is the student's responsibility to understand and observe the BU Academic Conduct Code. It can be accessed at http://www.bu.edu/academics/resources/academic-conduct-code/.

## **Course outline**

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

Introduction: What is Industrial Organization? (Chapter 1)

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 4,5 PS #3)

Monopoly and market power

Dominant firms

Almost perfect competition: Monopolistic competition

Perfect competition

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

First and second best

Imperfect information and incentives

# Midterm Exam 1: Thursday, September 26

Background: Games and strategy (Chapter 7)

Nash equilibrium

Sequential and repeated games

Oligopoly competition (Chapter 8, PS #5)

Bertrand

Cournot

**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

Midterm Exam 2: Thursday, October 31

Price discrimination (Chapter 6, PS #8)

Definition and types

Third degree of price discrimination

Nonlinear pricing and sorting

Advertising (Chapter 14.3, PS #9)

Functions of advertising

Determinants of advertising intensity

Market structure, Entry and exit (Chapters 10 and 11, PS #10)

Entry costs and market structure

Strategic behavior

Mergers

Final Exam: Tuesday, December 17, 3:00 pm- 5:00 pm