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.

Readings:

The organization of the course is mostly going to follow


But the material is going to be extended in the classes.

Higher level books, very useful for the formal treatments of the course are


In addition, 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:**

Chen Gao and Youming Liu are the teaching fellows assigned to the course. Chen Gao office hours: B17, T 11:00-12:00 pm. E-mail: cgao14@bu.edu. Youming Liu office hours: 20, T 2:00-3:00 pm. Email: yorkliu@bu.edu.

**Assignments, exams and grading:**

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. Exams will be based on problems and exercises similar to those assigned during the course in the problem sets and the practices. 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%.

**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: Wednesday, February 20**

*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: Wednesday, March 27

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

Final Exam: TBA by the university