

17C005

6 ECTS

## Industrial Organization

### Overview and Objectives

The course provides a graduate level introduction to the theory of Industrial Organization. Specifically, it gives a broad introduction to the analysis of the acquisition and use of market power by firms and the strategic interactions among firms. Furthermore, the course discusses theoretical foundations of modern empirical models in Industrial Organization. The presentation of every topic has two parts: (i) a formal introduction to the topic and (ii) a detailed description of some economic and business applications.

### Course Outline

1. **Monopoly**
  - a. Market definition and market power
  - b. Monopoly pricing
  - c. Price discrimination
  - d. Durable goods
2. **Basic forms of competition in oligopoly**
  - a. Bertrand model and applications
  - b. Cournot model and capacity-price games
  - c. Models of product differentiation
3. **Information and competition**
  - a. Models of consumer search
  - b. Advertising/certification
  - c. Quality choice and signalling
4. **Dynamic competition and collusion**
  - a. Cartel Enforcement
  - b. Factors facilitating tacit collusion
5. **Entry, accommodation and exit**
  - a. Natural monopoly and contestability
  - b. Long run market structures under free entry
  - c. Strategic entry deterrence: predation and reputation, strategic investment, tying, exclusive dealing
6. **Relationship between theory and empirical models in Industrial Organization**
  - a. Relationship between Industrial Organization theory and structural econometric models
  - b. Theory foundation of common empirical models

### Required Activities

Problems sets will be handed out during the course. These should be worked on in groups of three or four people.

### Evaluation

Exam (70%), Problem sets (30%)

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### Materials

Gibbons, R. (1992) *A primer in game theory*. Harvester Wheatsheaf.

Tadelis, S. (2013). *Game theory: an introduction*. Princeton University Press.

Belleflamme, P. and M. Peitz (2015), *Industrial Organization: Markets and Strategies*, Cambridge University Press.

Harrington, J. (2014), *Games, Strategies, and Decision Making*, Worth Publishers.

Reiss, P., and F. Wolak (2007), *Structural Econometric Modeling: Rationales and Examples from Industrial Organization*, in Handbook of Econometrics, Elsevier.

Shy, O. (1995), *Industrial Organization: Theory and Applications*, The MIT Press.

Tirole, J. (1988), *The Theory of Industrial Organization*, The MIT Press.