

# Syllabus: Industrial Economics

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Third Term, Course 2008-2009

Theory	Monday 18:00 to 19:30. Tuesday 10:00 to 11:30.
Exercises	Tuesday 12:00 to 13:30.

This is an introductory course to the standard topics in industrial organisation together with some recent developments. Due to the lack of a comprehensive model, we shall cover different applications that range from the internal organization of the firm to the implications of product differentiation, including other topics like entry and exit of a market or the effects of advertisement policies.

We shall focus mostly on the theoretical models, and use empirical applications to widen our understanding of the theoretical concepts.

Further additional information including solutions to the problem sets will be available in the intranet page of the course.

The main bibliographic references are the following:

- Tirole J. (1988) *The Theory of Industrial Organization*, MIT Press.
- Martin, S. (2002) *Advanced Industrial Economics*, Blackwell, Second Edition.

Other useful references are:

- Shy, O. (1995) *Industrial Organization*, MIT Press.
- Vives, X. (1999): *Oligopoly Pricing: Old Ideas and New Tools*, MIT Press.
- Hart, O. (1995) *Firms, Contracts and Financial Structure*, Oxford.
- Scotchmer (2004) *Innovation and Incentives*, MIT Press.

## Program

1. Introduction: Classical Theories in Industrial Economics.
2. Theory of the Firm (Hart (ch. 1 & 2) & Tirole (ch. 0)).
  - (a) Approaches: Neoclassical, Contractual and Incomplete Contracts.
3. Monopoly (Tirole (ch. 1 & 3)).
  - (a) Introduction,
  - (b) Price discrimination,
  - (c) Durable goods and the Coase conjecture.

Additional references:

Conlisk, J., Gerstner E. and J. Sobel (1984) "Cyclic Pricing by a Durable Goods Monopolist," *Quarterly Journal of Economics*, 99 :489-505.

4. Oligopoly (Tirole (ch. 5), Martin (ch. 3)).

- (a) Cournot vs Bertrand,
- (b) Static Models with Dynamic Predictions,
- (c) Capacity constraints.
- (d) Search models.

5. Product Differentiation (Tirole (ch. 7)).

- (a) Horizontal differentiation: the linear city and the circular city, monopolistic competition.
- (b) Vertical differentiation.

Additional references:

Bresnahan, T. (1987): "Competition and Collusion in the American Automobile Industry: The 1995 Price War," *The Journal of Industrial Economics*, XXXV, pp. 457-482.

6. Entry, Exit and Predation (Tirole, (ch. 8)).

- (a) Exit in declining markets,
- (b) Barriers to entry and predation,
- (c) Reputation.

7. Advertising (Martin (ch. 9), Shy (ch. 11))

8. R&D and Innovation (Scotchmer)

## Grading

20%: Based on the grading of one exercise from each of the problem sets. There will be 6-7 problem sets and students must hand in the complete solutions of each of them.

80%: Final exam.