

Industrial Economics I

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Teaching load: 36 hours (30 hours – lectures, 4 hours – ex.sessions, 2 hours - exam)

Grading: Exam – 70%, Course project – 30%.

Course Description

This is the first part of Industrial Economics sequence, a branch of economics that studies market structures and a nature of market power, behavior of firms and government regulations in industries. We will start with introduction to a subject of Industrial Economics and continue with monopoly and oligopoly.

Monopoly theory consists of optimization problem of a monopolist, social losses and miscellaneous topics such as non-linear pricing, durable goods and multi-product firm, bundling.

In oligopoly part we will consider quantity and price competition, analyzing equilibrium conditions and comparative statics. It also includes an investigation of entry, exit and accommodation in the industry.

The course gives a basic knowledge about market structure, market power and strategic behavior, it also provides insights into further industrial analysis. Students are expected to apply theoretical conclusions to solve problems on ex.sessions, discuss and analyze real cases. In the last classes students will be introduced to the basics of empirical IE.

Final grade consists of an exam and course project. The project is a draft of a research proposal based on the material covered in the classes.

Readings:

- [BP] Belleflamme and Peitz: *Industrial Organization: Markets and Strategies*. Cambridge University Press, 2010
- [CP] Carlton and Perloff: *Modern Industrial Organization*. Addison-Wesley, 2000
- [E] Etro, Federico: *Competition, Innovation and Antitrust, A Theory of Market Leaders and Its Policy Implications*. Springer Verlag, 2007
- [M] Martin, Stephen: *Advanced Industrial Economics*. Blackwell, 2002
- [S] Shy, Oz: *Industrial Organization. Theory and Applications*. MIT Press, 1997
- [T] Tirole, Jean: *The Theory of Industrial Organization*. MIT Press, 1989

Part 1: Introduction to Industrial Economics

Lecture 1. [2h]

Industrial organization and its subject. Problems and Questions. Definition of market, industry, market power and market structures. Contestable markets. Empirical research. Structure-Conduct-Performance Paradigm.

Reading: [M] Ch.1, [S] Ch.1

Part 2. Monopoly Theory

Lecture 2. [2h]

Monopoly. Optimization problem. Social Welfare.

Reading: [CP] Ch.4, [T] Ch.1

*Posner, Richard: The Social Cost of Monopoly and Regulation. The Journal of Political Economy, Vol. 83, No.4 (Aug. 1975)

Lecture 3. [2h]

Non-linear Pricing.

Reading: [T] Ch.3, [BP] 9.2,

Lecture 4. [2h]

Multi-product monopoly. Loss Leader Products.

Reading: [T] 1.1.1, 1.1.2

Lecture 5. [2h]

Durable Good Monopoly. Intertemporal Pricing.

Reading: [T] 1.1.3, 1.5.2, 1-App.A.

[BP] 10.1

*Bulow, J. (1982), "Durable-Goods Monopolists," *Journal of Political Economy*, 90, 314-332.

*Deneckere, R. and M. Liang (2008), "Imperfect Durability and the Coase Conjecture," *RAND Journal of Economics*, 39, 1-19.

*Gul, F., H. Sonnenschein and R. Wilson (1986), "Foundations of Dynamic Monopoly and the Coase Conjecture," *Journal of Economic Theory*, 39, 155-190.

Lecture 6. [2h]

Bundling.

Reading: [BP] Ch.11, [E] 2.10

Part 3. Theory of Oligopoly

Reading: [E] Ch. 1-3, [T] 5.1, 5.2, 5.4, 8.2.1.

Lecture 7. [4h]

Oligopoly. Sources of Oligopolistic Power. Models of oligopoly. Cournot Competition. Nash Equilibrium in Cournot Competition, Its Existence and Comparative Statics.

Reading: [M] Ch.2

*Novshek, W. (1985) On the Existence of Cournot Equilibrium, *Review of Economic Studies*, 52

Lecture 8. [2h]

Stackelberg Competition

Reading: *Etro, F. 2008, Stackelberg Competition with Endogenous Entry, *The Economic Journal*, Vol. 118, 531 (October), pp. 1670-97.

Lecture 9. [2h]

Bertrand Competition.

Reading: [BP] 3.1, [T] 5.1, 5.2

Part 4. Entry Deterrence and Accommodation

Lecture 10. [2h]

Introduction to Strategic Behavior. Limiting Price. Predation.

Reading: [M] Ch.8, [BP] Ch.16, [S] 8.4

Lecture 11. [4h]

Entry Deterrence and Accommodation. Endogeneous and Exogeneous Entry. Strategic Complements and Strategic Substitutes.

Reading: *Dixit, A. (1979), "A Model of Duopoly Suggesting a Theory of Entry Barriers," Bell Journal of Economics, 10, 20-32.

*Dixit, A. (1980), "The Role of Investment in Entry Deterrence," Economic Journal, 90, 95-106.

Lecture 12. [4h]

Taxonomy of Business Strategies.

Reading: [T]Ch. 8.3, 8.4, [BP] 16.1

*Fudenberg, D. and J. Tirole (1984), "The Fat Cat Effect, the Puppy Dog Ploy and the Lean and Hungry Look," American Economic Review, 74, 361-368.

Ex.Session 1. [2h]

Empirical IO. Estimation in statistical applications

Ex.Session 2. [2h]

Estimation of Market Power. Homogeneous and Heterogeneous Goods

Examination. [2h]