



UNIVERSITÀ
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del Sacro Cuore

Industrial organization

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Course aims and intended learning outcomes

The goal of the course is to provide the student with a solid logical background which allows him to understand how markets work and the most fundamental firms' choices in terms of market strategies.

- At the end of the course students will be able to read any article in a specialized Journal of Industrial Organization.
- They will be able to apply the main notion of industrial organization to empirical cases.
- They will be able to develop autonomously simple variations of scientific models.
- They will be able to describe articles at the frontier of current research.
- They will be able to attend more advanced studies of industrial organization.

Course content

The course analyses in a simple way the economic foundation of firms' competitive strategy. It will develop some of the issues dealt with in a basic micro course. After an introduction to monopoly and perfect competition theory, it will deal with the more general cases of oligopolies, with reference to price and non-price competition, such as product differentiation, advertising, R&D and network industries. Moreover, entry, barrier to entry, market power, horizontal and vertical agreements will be an essential part of the classes.

ANALYTICAL PROGRAM

Overview of Basic Microeconomics: Market Power

Market Power and Concentration

Firms Pricing. Price Discrimination

- The conditions for the three degree discriminations;
- Linear Tariffs;
- Two- Part Tariffs;
- Other Forms of Discrimination.

Monopolist product choice

- Product Differentiation in the Space (Hotelling);
- Horizontal Differentiation and Varieties;
- Vertical Differentiation and Quality Choice.

Oligopoly – Price Strategies

Methods for the Economic Analysis

- Elements of Game Theory;
- Nash Equilibrium;
- Dynamic Games and Backwards Induction.

Basic Models

- Bertrand and Cournot Models;
- Capacity Constraints (slides);
- Comparative Statics;
- Strategic Substitutes and Complements;
- The Order of Moves: The Stackelberg Model.

Oligopoly – “Anticompetitive” Strategies

Entry, Entry Barrier and Predatory behaviour)



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- Entry Costs;
- Entry Barriers, Capacity and Credibility (limit pricing);
- The Role of Asymmetric Information.

Dynamic Models and Collusion

- Repeated Games and Collusion;
- Facilitating Factors;
- The Role of Asymmetric Information;
- Facilitating Behaviours.

Horizontal and Vertical Relations

The Boundaries of the Firms and Mergers

- Mergers;
- Horizontal Mergers.

Vertical Structure

- Double Marginalization and Vertical Integration;
- Two-Part Tariffs;
- Vertical and Horizontal Externalities with Vertical Separation;
- Contractual Remedies to the Externalities;
- Vertical relation with asymmetric information.

Oligopoly – Non-Price Strategies

Product Differentiation

- Differentiated Oligopoly;
- The Linear City Model and the Transportation Costs;
- Product Proliferation and Entry Barriers;
- Vertical Differentiation and Competition;
- Switching Costs.

Advertising

- Informative and Persuasive Advertising;
- Market Structure and Advertising Expenditure (Dorfman – Steiner);
- Information and Advertising;
- Advertising and Competition.

Research and Development (chap. 18)

- R&D Incentive to Invest and Market Structure;
- Patents;
- Technological and strategic uncertainty (slides);
- Long Run Dynamic Competition (slides).

Net and Regulated Industries

Competition in net industries (chap. 19)

- Network Externalities and Monopolization;
- Adopting Innovations;
- Compatibility among Networks.

Monopoly and Regulated Industries (slides)

- Monopolistic (network) Industries Regulation;
- The Notion of essential facility;
- Access to Networks.

Two-sided Markets.



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Reading list

P. Belflamme-M. Peitz, Industrial Organization: Markets and Strategies, Cambridge University Press, 2015.

During the classes prof. Piero Tedeschi may use slides, available in the personal page, and they will integral part of the references.

Teaching method

Classes will alternate traditional lessons held by the teacher and presentation organized by small groups of students. Presentation by students will typically be devoted to the analysis of empirical papers in the field of industrial organization. The quality of the presentation will be taken into account in the final evaluation.

During classes students will receive also take-home assignments.

Assessment method and criteria

The typical assessment method will be a written exam, with theory and exercises. For students who actively participate to classes, the solution of the take-home assignments and the presentation of a paper will be a fundamental part of the final evaluation.

Further information can be found on blackboard page of the course.

Notes and prerequisites

Familiarity with the basic notion of microeconomic theory are very helpful in the attendance of the classes. It is advisable to look over to the basic microeconomic notions, namely demand and cost curves, even though we will refresh them extensively.