Barcelona School of Economics

COURSE SYLLABUS **22C032**

Industrial Organization

3 ECTS **TERM 1** **MANDATORY COURSE**

Professor

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Prerequisites to enroll

None but knowledge of basic calculus is expected.

Overview and objectives

This course aims to provide students with a graduate-level introduction to Industrial Organization. The course mainly focuses on a theoretical analysis of oligopolistic industries, emphasizing the acquisition and use of market power by firms and the role played by the strategic interactions among them. The course also explores recent theoretical developments that concern the relationship between consumer biases and firms' contractual design choices. The course also considers some relevant empirical applications of the theory, discussing the theoretical foundations of modern empirical models in Industrial Organization.

Course outline

1. **Introduction to Industrial Organization**
2. **Static oligopolistic models**
   - 2.1 The Bertrand paradox
   - 2.2 Solutions to the Bertrand paradox (such as Cournot competition and capacity constraints)
   - 2.3 Product differentiation (including the Hotelling model)
3. **Dynamic oligopolistic models**

3.1 Stackelberg model
3.2 Product positioning
3.3 Entry
3.4 Restrictions to entry (if time allows)
3.5 Cartels and collusion (if time alllows)

4. **Behavioral Economics in the fields of Competition and Regulation**
   4.1 Non-standard preferences and consumer biases
   4.2 Relationship between consumer preferences and firm contract design
   4.3 Recent empirical approaches to identify non-standard preferences and consumer mistakes from the data

Evaluation

Problems sets will be handed out during the course. These should be worked on in groups. A student's final mark will depend on his/her performance in the final exam (70%) and the problem sets (30%).

Materials

- Belleflamme, P. and M. Peitz (2015), Industrial Organization: Markets and Strategies, Cambridge University Press.
- Harrington, J. (2014), Games, Strategies, and Decision Making, Worth Publishers.
- Motta, M. (2004), Competition Policy. Theory and Practice, Cambridge UP (Only chapter 8.)
- 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.

Competencies

☒To (be able to) communicate with determination and in the English Language, the results and implications of the required analytical study using a language that the receiver can relate to.

☐To work within a heterogeneous team of researchers as economic analyst using specific group techniques.

☐To fit in diverse professional environments and varied types of collaborations in different professional projects

☐To possess and understand the knowledge that provides a basis or opportunity to be original in the development and / or application of ideas, often in a research context.

☐That students know how to apply the acquired knowledge and their ability to solve problems in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study.

☐That the students be able to integrate knowledge and face the complexity of making judgments based on information that, being incomplete or limited, include reflections on the social and ethical responsibilities linked to the application of their knowledge and judgments.

☐That the students be able to communicate their conclusions and the knowledge and the ultimate reasons that sustain them to both, specialized and non-specialized publics in a clear and unambiguous way.

☐That students possess the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous.

☒To identify and apply the insights of the theory, the models, and the analytical tools of modern economy to its global dimension.

☒To understand and apply the quantitative methods used to solve complex problems of the economy

☐To evaluate, with theoretical and quantitative instruments, the complex realities of the economy to understand the way it works.

☒Understand and apply economic theory related to the regulation of markets and competition policy.

Learning outcomes

☒Identifies the applicable knowledge of Economic Theory, particularly in the areas of microeconomics, industrial economics, information economics, game theory and strategic behavior.

☐Recognizes the principles of competition laws and their sources.

☐Describes the theory and models of regulation, and in particular, the basic regulatory framework of the main industrial sectors.

☒Applies the concepts of economic theory and methodological tools, such as game theory, in discussions and evaluations of competition policies and of market regulation.