

**COURSE DATA****Data Subject**

Code	36158
Name	Industrial organization
Cycle	Grade
ECTS Credits	6.0
Academic year	2023 - 2024

Study (s)

Degree	Center	Acad. year	Period
1316 - Degree in Economics	Faculty of Economics	4	First term

Subject-matter

Degree	Subject-matter	Character
1316 - Degree in Economics	21 - Pathway: industrial and business economics	Optional

Coordination

Name	Department
GRANERO PEÑARRUBIA, LUIS MIGUEL	10 - Economic Analysis

SUMMARY

This course provides an introduction to industrial organization (IO). The primary focus of IO is the study of imperfect competition and the organization of markets. Based on that, this course aims at familiarizing students with both traditional and recent developments in IO, and with some applications of IO tools.

The course starts by examining the monopoly and basic models of imperfect competition. It then moves on to the analysis of several applications of those basic models, including aspects of strategic interaction between firms, the determinants of market structure, contracts, vertical relations, the role of asymmetric information, and the economics of technological innovations. Finally, the course examines a number of issues of environmental economics under imperfect competition.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

The course requires a good command of basic algebra (systems of linear equations) and basic calculus (unconstrained and constrained optimization analysis, equilibrium analysis and comparative statics analysis). Students should review the basic concepts learnt in the game theory course.

OUTCOMES

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- Show critical thinking skills.
- Have decision-making skills and be able to apply knowledge to practice.
- Be able to learn autonomously.
- Apply the principles of economic analysis (rational decision) to the diagnosis and resolution of problems.
- Understand and apply the scientific method, which involves formulating hypotheses, deducing verifiable results and contrasting them with empirical and experimental evidence.
- Understand the keys to the functioning of market economy, the difference between normative and positive reasoning and between the concepts of equity and efficiency.
- Recognise strategic conflicts and know how to use basic strategic principles to obtain cooperation and coordination in incentive problems.
- Know how to analyse and design the strategic decisions of the company and their consequences.

LEARNING OUTCOMES

Upon completion of the course, students should be able (i) to conceptualize the keys to the working of imperfectly competitive markets, (ii) to assess the determinants of agents' strategic behavior, (iii) to analyze firm behavior with the anticipation of rivals' strategies, and (iv) to apply solution concepts to particular market situations and evaluate their viability and efficiency. Students should understand the topics covered on several different levels: mathematical as well as graphical and heuristic or verbal levels. Students should be familiarized with the IO approach to explore economic issues and policies.



DESCRIPTION OF CONTENTS

1. Monopoly and basic models of imperfect competition

2. Mergers, entry barriers, and asymmetric information

3. R&D, contracts, and vertical relations

4. Industrial organization and environmental economics

WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	30,00	100
Classroom practices	30,00	100
Development of individual work	35,00	0
Study and independent work	55,00	0
TOTAL	150,00	

TEACHING METHODOLOGY

In the course, teaching deals with both theoretical models and applied exercises. Lectures are devoted to the presentation of concepts, theories and models of non-competitive markets. Some exercises will be examined in class, and other exercises will be considered as homework. Course materials will be available on the aula virtual website.

EVALUATION

The final grade follows from:

- 1) 40% for the continuous evaluation (class participation, problem sets, and interim exams);
- 2) 60% for the final exam.

The continuous evaluation will not be recoverable.



REFERENCES

Basic

- Belleflamme, P., and Peitz, M. (2010). Industrial organization: markets and strategies. Cambridge University Press.
- Martin, S. (2002). Advanced industrial economics. Blackwell.
- Shy, O. (1995). Industrial organization: theory and applications. The MIT Press.
- Tirole, J. (1988). The theory of industrial organization. The MIT Press.