

27424 - Microeconomics IV

Syllabus Information

Academic year: 2023/24

Subject: 27424 - Microeconomics IV

Faculty / School: 109 - Facultad de Economía y Empresa

Degree: 417 - Degree in Economics

ECTS: 6.0

Year: 3

Semester: Second semester

Subject type: Compulsory

Module:

1. General information

The main objectives of this subject are that the student learns to:

- Use the basic tools provided by *game theory* to study the optimal behaviour of individual agents in situations where they must make *strategic decisions*.
- Apply these tools to:
- study the "failures" that can occur in oligopolistic markets as a result of the market *power* of firms, and to analyse the importance of certain economic policies to mitigate them.
- Identify some of the inefficiencies generated in markets when *information* in decision making is asymmetric, and propose solutions to improve efficiency.

These approaches and goals are aligned with the Sustainable Development Goals (SDGs) of the 2030 Agenda of the United Nations (<https://www.un.org/sustainabledevelopment/es/>), specifically, the activities planned in the subject will contribute to the achievement of the goals:

4. Ensure inclusive, equitable and quality education and promote lifelong learning opportunities for all
5. Gender Equality.
10. Reduction of inequalities.

2. Learning results

In order to pass this subject, the students shall demonstrate they has acquired the following results:

- Correctly and accurately employ the basic terminology of game theory.
- Master the basic concepts of game theory in order to be able to understand and predict the behaviour of individual economic agents in different contexts characterized by the existence of strategic interdependence
- Explain and obtain the equilibrium result of different types of oligopolistic markets, by means of verbal reasoning, graphical representations and mathematical analysis (calculus and elementary algebra)
- Analyse the efficiency of these markets, in terms of *social welfare*.
- Predict and quantify how social equilibrium and welfare would change in the face of variations in the economic environment and in the behaviour of companies.
- Predict the consequences of some strategic behaviours that companies may engage in to restrict competition, in order to justify why they are prohibited or regulated by antitrust laws.
- Describe and predict the behaviour of individual agents in situations where there is asymmetric *information*
- Understand the role of information in agents' decision making, identifying which inefficiencies are generated in markets when there is an asymmetric distribution of information, as well as possible solutions.

3. Syllabus

Unit 1. Game theory: simultaneous games

Unit 2. Game theory: dynamic games

Unit 3. Oligopoly theory: market power

Unit 4. Oligopoly theory: antitrust defence

Unit 5. Information economy

4. Academic activities

Lectures: 30 hours

Practical classes: 30 hours

Assessment tests. 8h (4h outside class hours)

Personal study. 82 hours

In principle, the teaching methodology and its evaluation is planned to be based on face-to-face classes . However, if circumstances so require, they may be carried out online.

5. Assessment system

In the **first call** there will be two forms of evaluation, continuous or global, while **in the second call there** will only be a global test.

Continuous assessment:

The continuous evaluation will consist of two written tests. In the first one, which will represent 40% of the overall grade, the topics corresponding to Game Theory (topics 1 and 2) will be evaluated exclusively. In the second, with a weight of 60%, the remaining three topics (topics 3, 4 and 5) will be evaluated

Each test will be graded out of 10 points. In order to pass the subject, the student must obtain an average of 5 points or more , having obtained a minimum grade of 3.5 points in the first test and 4 points in the second test.

In order to be eligible for this form of evaluation, the student must have participated in at least 80% of the activities proposed in class on a weekly basis (homework and/or quizzes).

Global Assessment

A global test in which the totality of the subject taught will be evaluated out of 10 points.

Assessment Criteria:

The global test in each call, as well as the two tests of the continuous assessment, will consist of a written exam composed of a series of theoretical and theoretical-practical questions (between 40 and 60% of the total grade) and practical exercises. The structure of the tests will be uniform and homogeneous for all groups.