

## Economic Models of Choice and Strategic Interaction

Code: 106201  
ECTS Credits: 6

**2025/2026**

Degree	Type	Year
Contemporary History, Politics and Economics	OB	3

### Contact

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### Teaching groups languages

You can view this information at the [end](#) of this document.

### Prerequisites

It is recommended that the students already passed the following courses:

- Introduction to Economics I
- Introduction to Economics II

### Objectives and Contextualisation

The objective of this course is to introduce students to basic economic models.

At the end of the course students should be able to create basic models, solve the mathematics of the model and interpret the economic meaning of the results obtained.

### Competences

- Assess the social, economic and environmental impact when acting in this field of knowledge.
- Explain and summarise knowledge acquired in English language at an advanced level.
- Manage and apply data to solve problems.
- Recognise the basic foundations of economic analysis from both a microeconomic and macroeconomic perspective.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
- Work cooperatively in multidisciplinary and multicultural teams implementing new projects.

## **Learning Outcomes**

1. Analyse the strategic interactions between participants and the effects of their actions on third-party decisions.
2. Apply descriptive and causal quantitative techniques which allow analysis of the economic and social situation.
3. Apply game theory to the analysis of economic decisions.
4. Demonstrate motivation regarding the quality of the work performed and sensitivity regarding the consequences on the society.
5. Describe the determinants of economic growth and the international differences in income per capita.
6. Differentiate between different market structures and analyze their effects on sales and corporate profits and consumer welfare.
7. Examine the effect of economic policies on macroeconomic variables.
8. Identify the characteristics of the process of economic development and their causes and consequences.
9. Identify the constituting elements of technology and costs.
10. Identify the economic aspects that determine demand and supply.
11. Identify the price determiners and exchange quantities in all kinds of markets.
12. Innovate in the methods and processes of this area of knowledge in response to the needs and wishes of society.
13. Recognise the causes of economic crises and their impact on different sectors of activity and national economies.
14. Recognise the conditions under which public intervention in the economy is necessary.
15. Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
16. Students must be capable of collecting and interpreting relevant data (usually within their area of study) in order to make statements that reflect social, scientific or ethical relevant issues.
17. Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.
18. Work as part of a team and be able to argue own proposals and validate or refuse the arguments of others in a reasonable manner.

## **Content**

Topic I: Basic economic modeling and optimization methods with and without restrictions.

Basic Assumptions

Economic Models- definition and examples

Optimization with and without constraints

Topic II: Individual decision making - models of choice

### **2.1 Decision Theory**

Preferences and Utility Functions

Decision Making Under uncertainty

Expected value and Expected Utility

### **2.2 Consumer Theory**

Consumer's Problem

Demand Function

Elasticity of Demand

Aggregate Demand

### 2.3 Theory of the Firm

Competition

Production Function

Cost Functions

Maximization of the Benefit

Supply Curve

Elasticity of Supply

Aggregate Supply

## Topic III. Models of Strategic Interaction

### 3.1 Partial Equilibrium

Equilibrium

Welfare analysis

Taxes, Subsidies, Price floor, price ceiling

### 3.3 Game Theory

Simultaneous games - representation, solution concepts and mixed strategies

Sequential Games - representation, solution concepts and efficiency

## Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Exercises and group discussion	17	0.68	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18
Lectures	32.5	1.3	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18
Type: Supervised			
Tutorials	5	0.2	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18

Type: Autonomous

Study, preparation and discussion of exercies	77.5	3.1	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18
Text readings	13	0.52	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18

## Methodology

The teaching will be face-to-face.

The teaching material will be available in digital format in the Moodle classroom of the course.

The proposed teaching methodology may experience some modification depending on the restrictions on face-to-face attendance imposed by the health authorities.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

## Assessment

### Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Final Exam	50% of the final grade	2	0.08	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18
Midterm Exam	35% of the final grade	1.5	0.06	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18
Other evaluation exercises	15%	1.5	0.06	1, 3, 2, 5, 6, 7, 10, 11, 9, 8, 12, 4, 17, 15, 16, 13, 14, 18

## Assessment

### Evaluation process

The evaluation process will consist of:

- 1) Final exam with a weight of 50%
- 2) Midterm exam with a weight of 35%
- 3) Group Presentation with a weight of 15%

At least part of any of the three (or more) evaluation activities must be of the written-exam type and at least part of any of the three (or more) evaluation activities must be multiple-choice type.

A student that takes part on any of the evaluation activities and turns in the activity for grading cannot be considered for a "Not Evaluable" status.

## Schedule of evaluation activities

The dates of the different evaluation activities will be announced well in advance during the semester (possibly during the first week of classes).

*"The dates of evaluation activities cannot be modified, unless there is an exceptional and duly justified reason why an evaluation activity cannot be carried out. In this case, the degree coordinator will contact both the teaching staff and the affected student, and a new date will be scheduled within the same academic period to make up for the missed evaluation activity."* Section 1 of Article 115. Calendar of evaluation activities (Academic Regulations UAB).

The teaching faculty will select the type of evaluation activity most suitable and efficient for the individual reprogrammed evaluation activity, including oral examinations.

## Grade revision process

After all grading activities have ended, students will be informed of the date and way in which the course grades will be published. Students will be also be informed of the procedure, place, date and time of grade revision following University regulations.

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## Retake Process

*"To be eligible to participate in the retake process, it is required for students to have been previously been evaluated for at least two thirds of the total evaluation activities of the subject."* Section 3 of Article 112 ter. The recovery (UAB Academic Regulations).

Additionally, for a student to participate in the retake process, it is required that he or she to have achieved an average grade of the subject between 3.5 and 4.9.

The date of the retake exam will be posted in the calendar of evaluation activities of the Faculty.

Students who take this exam and pass, will get a grade of 5 for the subject. If the student does not pass the retake, the grade will remain unchanged, and hence, student will fail the course.

The grading of the retake examination will be qualitative, with two possible results: "pass" or "no pass". If the grade is "pass", the grade will be equal to 5. If the grade is "no pass", the student will not pass the subject and his final grade will be the existing grade prior to the retake examination.

## Irregularities in evaluation activities

In spite of other disciplinary measures deemed appropriate, and in accordance with current academic regulations, *"in the case that the student makes any irregularity that could lead to a significant variation in the grade of an evaluation activity, it will be graded with a 0, regardless of the disciplinary process that can be instructed. In case of various irregularities occur in the evaluation of the same subject, the final grade of this subject will be 0".* **Section 10 of Article 116. Results of the evaluation. (UAB Academic Regulations).**

## Standards of behavior

Aside of any other disciplinary measures that are considered to be adequate, and in line with the current academic rules, the professor may reduce the average grade obtained in the "additional evaluation activities" by up to 2 points out of 10 to any student who repeatedly does not follow the rules of behavior in class. The professor will announce these rules at the beginning of the course.

The proposed evaluation activities may undergo some changes according to the restrictions imposed by the health authorities on on-campus courses.

## COMPREHENSIVE EVALUATION (Art. 265 of the UAB Academic Regulations)

*By requesting the comprehensive evaluation the student waives the option of continuous evaluation.*

*The comprehensive evaluation must be requested at the Academic Management (Gestió acadèmica) of the Campus where the degree/master's degree is taught. The request must be filed according to the procedure and the deadline established by the administrative calendar of the Faculty of Economics and Business.*

Attendance :

- *Student attendance is mandatory on the day of the comprehensive assessment. The date will be the same as that of the final exam of the semester as per the evaluation calendar published by the Faculty of Economics and Business and approved by the Faculty's Teaching and Academic Affairs Committee. The duration of the comprehensive assessment must be specified in the characteristics of such activity.*
- *100% of the evaluation evidences must be handed in by the student on the day of the comprehensive assessment.*
- *The evaluation evidences carried out in person by the student on the same day of the comprehensive assessment must have a minimum weight of 70%.*

Comprehensive exam: 100% of the final assessment, 2h. duration.

RETAKE PROCEDURE :

*"For the retake procedure, no distinction is made between students who have followed the continuous evaluation and those who have opted for the comprehensive evaluation. All will be re-assessed using the same test or evaluation evidence."*

REVIEW OF THE FINAL QUALIFICATION:

*"The review of the final qualification will follow the same procedure as for the continuous evaluation".*

## Bibliography

Varian, H.. *Intermediate microeconomics: a modern approach*, W.W. Norton and Company Inc. , 9th edition.

## Software

There is no need of any specific software.

## Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	50	English	second semester	afternoon
(TE) Theory	50	English	second semester	afternoon