UAB
Universitat Autònoma de Barcelona

Economics II

Code: 40096
ECTS Credits: 15

2025/2026

Degree	Type	Year
Economic Analysis	OB	1

Contact

Name: Amedeo Stefano Edoardo Piolatto

Email: amedeo.piolatto@uab.cat

Teachers

Esther Hauk

Luis Eduardo Rojas Duenas

(External) Pau Roldán

Teaching groups languages

You can view this information at the end of this document.

Prerequisites

No specific prerequisits.

Objectives and Contextualisation

This module covers the second part of the core in modern microeconomics and macroeconomics. The topics seen in this module are the foundation to the models that are used in advanced microeconomics and macroeconomics. The section on microeconomics formally demonstrates, through advanced mathematical techniques, the existence of a general equilibrium and its properties, discussing the fundamental theorems of welfare economics. This section also discusses cases where classical assumptions fail and its consequences. The section on macroeconomics studies mathematical models of general equilibrium under uncertainty and their implications for asset evaluation. This section also provides the student with dynamic programming techniques; these techniques are the necessary tools for solving dynamic models.

Competences

- Capacity to articulate basic economic theory, analytically deriving them from mathematical reasoning
- Conceptually analyse a specific economic problem using advanced analytical tools
- Develop the ability to assess sex and gender inequalities in order to design solutions.

- Express recommendations about economic policy at macro and micro levels
- Make independent judgements and defend them dialectically
- Possess and understand knowledge that provides a basis or opportunity for originality in the development and/or application of ideas, often in a research context
- Student should possess the learning skills that enable them to continue studying in a way that is largely student led or independent
- Students should know how to communicate their conclusions, knowledge and final reasoning that they hold in front of specialist and non-specialist audiences clearly and unambiguously
- Use new technology for the collection and organisation of information to solve problems in professional activities

Learning Outcomes

1. Distinguish between general and partial equilibrium models
2. Frame an economic question in a general equilibrium mathematical model and know how to derive and understand the conclusions deriving from it
3. Know how to apply the instruments of gender perspective in the analysis of organisations.
4. Know how to carry out a gender-sensitive analysis.
5. Know how to carry out research with a gender perspective.
6. Know how to integrate the conditions and needs of women and men, in addition to a human- rights approach, into development-cooperation policies.
7. Know how to make an inclusive and non-sexist use of language.
8. Know the neoclassical assumptions and describe their implications for the behaviour of an aggregate market and for the behaviour of economic aggregates
9. Make independent judgements and defend them dialectically
10. Make recommendations based on genera equilibrium models
11. Possess and understand knowledge that provides a basis or opportunity for originality in the development and/or application of ideas, often in a research context
12. Produce, collect and interpret empirical data in a gender-sensitive manner.
13. Student should possess the learning skills that enable them to continue studying in a way that is largely student led or independent
14. Students should know how to communicate their conclusions, knowledge and final reasoning that they hold in front of specialist and non-specialist audiences clearly and unambiguously
15. Use new technology for the collection and organisation of information to solve problems in professional activities

Content

I. Microeconomics II

1.Introduction to General Equilibrium

2.Equilibrium and its Basic Welfare Properties

3.The Positive Theory of Equilibrium

4.The Core and Equilibria

5.Market Power

6.Adverse Selection, Signaling and Screening

7.The Principal Agent Problem

II. Macroeconomics II

1. Asset pricing

2. OLG with money

3. Sidrauski model

4. Cash-in-Advance model

5. Kiyotaki-Wright search theory

6. Imperfect information: Lucas' Islands model

7. New-Keynesian monetary model

8. Monetary and fiscal policy

III. Macroeconomics III

1. Introduction

2. The IM model

3. The general equilibrium of the IM model

4. Optimal income taxation

5. Optimal income taxation in IM economies

6. Models of the labor market

7. Heterogeneous firms

For a detailed description of the content of this module go to
https://sites.google.com/view/idea-program/master-program .

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Theory classes	112.5	4.5	8, 10, 1, 9, 2, 14, 13, 11, 15
Type: Supervised			
Problems sets, tutorials	75	3	8, 10, 1, 9, 2, 14, 13, 11, 15
Type: Autonomous			
Personal study, study groups, textbook readings, article readings	187.5	7.5	8, 10, 1, 9, 2, 14, 13, 11, 15

The course will consist of sessions where the instructor presents the material, and sessions specifically dedicated to problem solving. Students are encouraged to form study groups to discuss assignments and readings.

The proposed methodology may undergo some modifications according to the restrictions imposed by the health authorities on on-campus courses.

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
Class Attendance and Problem sets and assignments	22%	0	0	8, 10, 1, 9, 2, 12, 14, 13, 3, 5, 7, 4, 6, 11, 15
Exam Part I	26%	0	0	8, 10, 1, 9, 2, 12, 14, 13, 3, 5, 7, 4, 6, 11, 15
Exam Part II	26%	0	0	8, 10, 1, 9, 2, 12, 14, 13, 3, 5, 7, 4, 6, 11, 15
Exam Part III	26%	0	0	8, 10, 1, 9, 2, 12, 14, 13, 3, 5, 7, 4, 6, 11, 15

This modul does not contemplate an evaluation from a single comprehensive exam

Exam Part I	26%
Exam Part II	26%
Exam Part III	26%
Problem sets, assignments & Class attendance and active participation	22%

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

In this course, the use of Artificial Intelligence (AI) technologies is not permitted in any of its phases. Any work that includes fragments generated with AI will be considered a breach of academic honesty and may result in a partial or total penalty to the activity's grade, or more severe sanctions in serious cases.

Bibliography

Microeconomics II:

Mas-Colell, A, M. Whinston and J. Green, Microeconomic Theory, Oxford University Press

Macroeconomics II:

Blanchard, O. and Fischer, S., Lectures on Macroeconomics

Walsh, C, Monetary Theory and Policy by (W), MIT Press

Macroeconomics III:

Ljungqvist, L. and T. Sargent, Recursive Macroeconomic Theory, MIT Press

Stokey, N. L., and R. E. Lucas, Recursive Methods in Economic Dynamics, Harvard University Press

Additional references will be provided during the course.

Software

- Matlab
- R
- Phyton
- Stata

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
(PLABm) Practical laboratories (master)	30	English	second semester	morning-mixed
(TEm) Theory (master)	30	English	second semester	morning-mixed