

**COURSE DATA****DATA SUBJECT**

Code: 36122
Name: Dynamic macroeconomics
Cycle: Undergraduate Studies
ECTS Credits: 6
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1316 - Degree in Economics	Facultat d'Economia	3	First quarter

SUBJECT-MATTER

Degree	Subject-matter	Character
1316 - Degree in Economics	Macroeconomics	COMPULSORY

COORDINATION

GOMEZ TELLO ALICIA

SUMMARY

The objective of the Dynamic Macroeconomics course is to study the intertemporal decisions of consumers (savings and labor supply) and firms (investment and price setting). The course adopts a general equilibrium approach, analyzing both short-term and long-term aspects. Special emphasis is placed on the analysis of macroeconomic policies, particularly monetary and fiscal policy.

PREVIOUS KNOWLEDGE**RELATIONSHIP TO OTHER SUBJECTS OF THE SAME DEGREE**

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

OTHER REQUIREMENTS

Students are expected to have prior knowledge of intermediate macroeconomics, as covered in the courses Macroeconomics I and Macroeconomics II.

COMPETENCES / LEARNING OUTCOMES



1316 - Degree in Economics

Apply the principles of economic analysis (rational decision) to the diagnosis and resolution of problems.

Be able to learn autonomously.

Be able to use English in a professional environment.

Have appropriate knowledge of the determinants of aggregate consumption, savings and investment.

Have decision-making skills and be able to apply knowledge to practice.

Know and understand the determinants of the long-term sustainable growth of an economy.

Know and understand the functioning of labour markets and the determinants of unemployment and wages.

Show critical thinking skills.

Understand and apply the scientific method, which involves formulating hypotheses, deducing verifiable results and contrasting them with empirical and experimental evidence.

Understand the functioning of the economy at the aggregate level and the effect of different economic policies.

Understand the possible causes of economic cycles and the effects of stabilisation policies.

DESCRIPTION OF CONTENTS

1. Economic growth

- 1.1. Long-run growth: stylized facts
- 1.2. A basic model of exogenous growth
- 1.3. Growth and convergence

References: Romer (2019), ch. 1. Mankiw (2025), chs. 9, 10, and 11.

2. Models of endogenous growth

- 2.1. Other facts
- 2.2. Models of endogenous growth
- 2.3. "Learning by doing," human capital and growth

References: Romer (2019), ch. 2. Sala-i-Martin (1994), chs. 7 and 8. Barro and Sala-i-Martin (2003), chs. 2



and 4

3. Models of business cycle

- 3.1. Growth and economic cycles
- 3.2. The basic model of the real cycle

References: Romer (2019), ch. 5. Mankiw (2025), chs. 12 and 17.

4. The Neo-Keynesian Model with price rigidity

- 4.1. "Forward-looking" aggregated supply and demand
- 4.2. Monetary rule and price determination
- 4.3. Monetary policy in the Neo-Keynesian canonic Model

References: Romer (2019), chs. 6 and 7. Mankiw (2025), ch. 17.

5. Expectations and macroeconomic policy in the Neo-Keynesian Model

- 5.1. The structural time of interest rates
- 5.2. Optimal monetary policy
- 5.3. Credibility in a model with expectations

References: Romer (2019), ch. 12.

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Theory	30,00
Classroom practices	30,00
Total hours	60,00

NON PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at other activities	0,00
Individual or group project	0,00
Independent study and work	25,00
Preparation of lessons	45,00
Preparation for assessment activities	20,00
Resolution of case studies	0,00
Total hours	90,00



TEACHING METHODOLOGY

The course is structured around several components:

- Classes are divided into theory sessions (2 hours per week, in which the course content is presented by the instructor) and practical sessions (2 hours per week, focused on solving different types of exercises that help reinforce the theoretical concepts).
- To support the learning of theoretical topics, lecture notes covering the most formal aspects of the material will be provided. For practical sessions, students will be given an exercise booklet containing problems similar to those that may appear on the final exam.
- Students are expected to attend theoretical classes in person and to participate actively in practical sessions by submitting exercises and answering the questions posed by the instructor.
- Students are also expected to dedicate time to individual study and preparation of the course material, making use of tutorials whenever they deem it appropriate.

EVALUATION

- In addition to the official final exam, a series of continuous assessment activities will be carried out during the course (multiple-choice tests, attendance at seminars, submission of exercises, problem-solving tasks).
- The final grade for the course will be the result of the following sum: up to 8 points for the final exam and up to 2 points for continuous assessment activities. Additionally, active participation during classes may earn up to 1 extra point. If the total score exceeds 10 points, the final grade will be capped at 10, although the total score will be considered for the award of distinction (*matrícula de honor*).
- For continuous assessment to be taken into account, the student must obtain at least 3 out of 8 points in the final exam.
- The course will be considered passed if the student obtains at least 5 out of 10 points.
- Grades obtained from continuous assessment activities are non-recoverable. It is not possible to design a substitute exam in the second examination session that adequately reflects or assesses the objectives of these activities, which are intended to measure sustained effort and progress in the acquisition of knowledge.

REFERENCES

Basic

- Romer, D. (2006): *Macroeconomía Avanzada* (3.^a ed.). McGraw-Hill.
- Romer, D. (2019): *Advanced Macroeconomics* (5th ed.). McGraw-Hill.
- Mankiw, N. G. (2025). *Macroeconomics* (12th ed.). Macmillan Learning.

Additional



- Barro, R. J., & Sala-i-Martin, X. (2003): *Economics growth* (2nd ed.). The MITS Press.
- García de Paso, J. L., Valero Perandones, I., Pérez Sánchez, R., & García Greciano, B. (2016): *Crecimiento económico: Modelos teóricos y ejercicios resueltos*. Pearson Educación.
- Gillman, M. (2011): *Advanced modern macroeconomics. Analysis and application*. Prentice Hall.
- Sala-i-Martin, X. (1994): *Apuntes de Crecimiento Económico*. Antoni Bosch Editor.