

Approval date: 26/06/2023

COURSE GUIDE

**Macroeconomics 3 (2391133)**

<b>Grado (Bachelor's Degree)</b>	Grado en Economía		<b>Branch</b>	Social and Legal Sciences			
<b>Module</b>	Análisis Económico		<b>Subject</b>	Macroeconomía III			
<b>Year of study</b>	3º	<b>Semester</b>	1º	<b>ECTS Credits</b>	6	<b>Course type</b>	Compulsory course

**PREREQUISITES AND RECOMMENDATIONS**

To have completed and to have specific knowledge of the basic subjects of the Basic Training Module: Intermediate Microeconomics, Intermediate Macroeconomics, Mathematics.

**BRIEF DESCRIPTION OF COURSE CONTENT (According to the programme's verification report)**

- Basic models of Dynamic Macroeconomics: investment and business cycles.
- Growth Models.
- Development Theory

**SKILLS**

**GENERAL SKILLS**

- CG03 - Ability to analyse and summarise.
- CG05 - Oral and written communication skills in Spanish.
- CG08 - Problem-solving skills.
- CG11 - Ability to work in an interdisciplinary team.
- CG12 - Ability to work in an international context.
- CG15 - Ability to communicate with other areas of knowledge.
- CG16 - Ability to engage in critical and self-critical reasoning.
- CG17 - Ability to learn and work autonomously.
- CG24 - Ability to apply knowledge to practice.
- CG25 - Ability to search for information and research.
- CG26 - Ability to design and manage projects.

**SUBJECT-SPECIFIC SKILLS**

- CE17 - Identify and anticipate economic problems relevant to the general allocation of resources in the public and private sector.



- CE22 - Bring rationality to the analysis and description of any aspect of economic reality.
- CE23 - Evaluate the consequences of alternative courses of action and select the best ones given the objectives.
- CE24 - Understand economic institutions as the result and application of theoretical or formal representations of how the economy works.
- CE30 - Issue advisory reports on specific situations in the economy (international, national or regional) or its sectors.
- CE32 - Communicate fluently in an environment and work in a team.
- CE38 - Derive from the data relevant information not accessible to non-professionals.
- CE39 - Regularly use Information and Communication Technologies (ICTs) in their professional activities.
- CE40 - Read and communicate professionally in more than one language, especially in English.
- CE41 - Apply professional criteria based on the use of theoretical instruments to the analysis of problems.
- CE42 - Ethical commitment at work. Ability to work in a team. Critical and self-critical reasoning. Work in an international context.
- CE43 - Motivation for quality.
- CE59 - Contribute to the proper management of resource allocation in both the private and public sectors.
- CE68 - Understand the main microeconomic and macroeconomic models.
- CE69 - Understand the functioning of imperfectly competitive markets.
- CE70 - Understand the main models of industrial economy.
- CE71 - Understand the Game Theory.
- CE72 - Understand economic growth and development models.

### TRANSFERABLE SKILLS

- CT01 - Through the knowledge and application of concepts learnt in the Bachelor's Degree (Grado), be able to identify and anticipate economic problems relevant to the allocation of resources, both in the public and private sectors.
- CT02 - Know, understand and apply the different economic models to provide rationality to the analysis and description of any aspect of reality, and be able to know the economic choice criteria of the different agents that make up society.
- CT03 - Learn to communicate fluently in an environment and to work in a team, both in a national and an international context.

### LEARNING OUTCOMES

The subject of Macroeconomics III advances the microeconomic foundations of macroeconomic analysis. The general objectives that are pursued are the following. The first objective is to introduce the students to dynamic macroeconomic analysis. The second objective is to develop the microeconomic foundations of consumption and investment decisions, and to use them in the analysis of the impact of economic shocks on the main macroeconomic variables. The third objective is to introduce the main models of exogenous and endogenous growth (with human capital and public spending).

After synthesizing the static macroeconomic models, in this subject we proceed to introduce the dynamic component to the model. At this point, it is necessary to show the student that the world is dynamic, and therefore, the economy must also adopt a dynamic approach. The introduction of dynamics forces us to broaden the scope of the problems and to use new formal tools. In short, the aim is to carry out rigorous micro-foundations of the decisions of economic agents in a dynamic context. For this purpose, a detailed analysis of consumption and investment theories is



carried out in an intertemporal context. The analysis of consumption is contemplated from the theory of permanent income and the life cycle. Work and leisure decisions are included separately and in conjunction with consumption decisions. Investment decisions are included afterwards. A simple general equilibrium model with goods market, labor market and capital market is built with all the elements in order for the student to apply the analysis not only in partial equilibrium, seen up to now in subjects of Macroeconomics and Microeconomics, but also in the general equilibrium. The effects of different technological and demand shocks on the equilibrium variables are analyzed.

The second part of the course focuses on the analysis of economic growth theories. The main objective of this part is for the student to learn the different theoretical approaches that have been developed in recent decades to study growth and the limitations they present, for which it is necessary to analyze in some detail the empirical evidence available for some theories. The purpose is to introduce the student to the formalized analysis of economic growth models. First, the neoclassical models of exogenous growth are formally analyzed, starting from the Solow-Swan model and proceeding with the Ramsey-Cass-Koopmans model, in which the saving rate is determined endogenously, as a consequence of the choice of economic agents in a context of intertemporal optimization. Once the exogenous growth models and their implications have been analyzed in depth, the student is introduced to endogenous growth models. For this purpose, a model with human capital is developed, which will be complemented with other endogenous growth models in the Macroeconomics IV course.

## PLANNED LEARNING ACTIVITIES

### THEORY SYLLABUS

#### PART I: DYNAMIC MODELS

- Lesson 1: Introduction
- Lesson 2: Consumption.
- Lesson 3: Investment
- Lesson 4: Public spending
- Lesson 5: A Simple Model of Dynamic General Equilibrium

#### PART II: INTRODUCTION TO ECONOMIC GROWTH

- Lesson 6: Growth models

### PRACTICAL SYLLABUS

- Seminars / Workshops: Practices of each of the topics proposed in the theoretical agenda.
- Laboratory work: not applicable.
- Field work : not applicable.

## RECOMMENDED READING

### ESSENTIAL READING

#### BASIC READING LIST

- <https://sites.google.com/site/jcconesa/teaching/libro?authuser=0>
- Mankiw, N.G. (2007): Macroeconomics, 6st Edition., Antoni Bosch: Barcelona.
- Sala-i-Martin, X. (2000): Apuntes de crecimiento económico, Antoni Bosch, Barcelona.
- Jones, C. I. (2000): Introduction to economic growth, Prentice Hall.



- Weil, D. N. (2006): Economic growth, Pearson Educación, S.A., Madrid
- Ray, D. (1998): Development Economics, Princeton University Press

### COMPLEMENTARY READING

#### PART I:

- Abel, A. y Bernanke, B.S. (2009): Macroeconomics, 6ª Edición, Addison-Wesley: New York.
- Azariadis, C. (1993): Intertemporal Macroeconomics, Basil Blackwell: Oxford.
- Bajo, O. y Monés, M.A. (2000): Curso de Macroeconomía, 2ª ed., Antoni Bosch: Barcelona.
- Barro, R.J., Grilli, V. y Febrero, R. (2005): Macroeconomía: Teoría y Política, 4ª Edición, McGraw-Hill: Madrid.
- Dornbusch R. y Fischer S. (2004): Macroeconomía, 9ª Edición, Ed MacGraw Hill
- Novales, A. y Sebastián, C. (1999): Análisis Macroeconómico, Vol. I, Marcial Pons: Madrid.
- Romer, D. (2006): Advanced Macroeconomics, 3ª Edición, McGraw-Hill: New York.
- Sargent, T.J. (1987): Macroeconomic Theory, 2ª ed., Academic Press: San Diego.

#### PART II:

- Barro R. J. and X. Sala-i-Martin (2003): Economic Growth, 2ª Edition, MIT Press.
- McNeill, J. R. and McNeill, W.H. (2003): The Human Web: A Bird's Eye View of Economic History. Norton.
- Easterly, W. (2001): The Elusive Quest for Growth, MIT Press.
- Lewis, W. L. (2004): The Power of Productivity, University of Chicago Press.
- Wolf, M. (2004): Why Globalization Works, Yale University Press

### RECOMMENDED LEARNING RESOURCES/TOOLS

To consult the class material: <https://prado.ugr.es/prado2/>

### TEACHING METHODS

- MD01 - Docencia presencial en el aula
- MD02 - Estudio individualizado del alumno, búsqueda, consulta y tratamiento de información, resolución de problemas y casos prácticos, y realización de trabajos y exposiciones.
- MD03 - Tutorías individuales y/o colectivas y evaluación

### ASSESSMENT METHODS (Instruments, criteria and percentages)

#### ORDINARY EXAMINATION DIET

According to the Regulations for the evaluation and qualification of the students of the University of Granada (last amendment approved by the Governing Council on October 26, 2016), the evaluation of the academic performance of the students will meet public, objective and impartial criteria, it will preferably be continuous.

Evaluation of the **theoretical part**:

- First written test (35%): there will be a mid-term test of the first part of the syllabus, consisting of the multiple-choice questions. Each question will have four options, so an



incorrect answer will subtract  $\frac{1}{4}$  of a correct one.

- Second written test (35%): there will be a mid-term test of the second part of the syllabus, consisting of the multiple-choice questions. Each question will have four options, so an incorrect answer will subtract  $\frac{1}{4}$  of a correct one.

Evaluation of the **practical part** (30%): It will consist of a delivery or presentation of two exercises.

The grade of the student who has passed each and every one of the elements of the previous evaluation, will be the corresponding weighted average, and the student will not have to take the final exam.

On the contrary, the student who has failed at least one of the two written tests, must take the final exam. The grade of such student will be a weighted average between the grade of the practical part (30%) and the grade of the final exam where the final exam counts for 70%. In other words, the final exam only replaces the two written tests. The structure of the final exam will be like that of the two written tests. It will be a multiple-choice questions type, with four answer options, so an incorrect answer will subtract  $\frac{1}{4}$  of a correct one.

According to Article 8 of the current Evaluation Regulations, the completion of a single final evaluation is possible, which may be permitted for those students who request it in the first two weeks of teaching the subject (or two weeks after their enrolment alteration). The request should be done through the electronic procedure, to the Director of the Department, explaining and accrediting the reasons that make the student unable to follow the continuous evaluation system (work reasons, health status, disability or any other duly justified cause). A single final evaluation is carried out in a single Academic act to prove that the student has acquired all the skills described. For more information visit [tehieco.ugr.es](http://tehieco.ugr.es)> Normativa e Impresos.

#### EXTRAORDINARY EXAMINATION DIET

Evaluation by an exam that will include a theoretical and practical part.

The structure (multiple-choice questions test) will be maintained as detailed in the evaluation section. The final exam will be: (i) preferably face-to-face if circumstances allow. (ii) if the conditions do not exist for face-to-face, it will be through PRADO and (iii) the mark of this exam corresponds to 100% of the grade for this session.

#### SINGLE FINAL ASSESSMENT (evaluación única final)

Evaluation by an exam that will include a theoretical and practical part.

The structure (multiple-choice questions test) will be maintained as detailed in the evaluation section. The final exam will be: (i) preferably face-to-face if circumstances allow. (ii) if the conditions do not exist for face-to-face, it will be through PRADO and (iii) the mark of this exam corresponds to 100% of the grade for this session.

#### ADDITIONAL INFORMATION

The Department of Theory and Economic History, in accordance with the Regulations for the care of students with disabilities and other specific needs for educational support, approved by the Governing Council of the UGR on September 20, 2016, will promote the right to education under conditions of equal opportunities for students with disabilities and other specific educational support needs. The necessary care actions will be established to achieve their full and effective inclusion, guaranteeing their right to inclusive education, in accordance with the principles of non-discrimination, equal opportunities and universal accessibility, so that they can achieve the maximum possible development of their personal capacities and, in any case, the objectives established in general for the entire student body.





The information contained in this guide may be modified by supervening circumstances, changes in regulations or new guidelines that may be given by the health authorities, the University or the Center.

