

COURSE GUIDE

#### Approval date: 20/06/2022

# Macroeconomics 4 (2391138)

| Grado<br>(Bachelor's<br>Degree) | Grado en Economía     |                |                 | Branch  | Socia          | Social and Legal Sciences |  |
|---------------------------------|-----------------------|----------------|-----------------|---------|----------------|---------------------------|--|
| Module                          | Análisis Económico    |                |                 | Subject | Macr           | Macroeconomía IV          |  |
| Year of<br>study 3              | <sup>0</sup> Semester | 2 <sup>0</sup> | ECTS<br>Credits | 6       | Course<br>type | Compulsory course         |  |

## PREREQUISITES AND RECOMMENDATIONS

- To have completed and to have specific knowledge of the subjects:
  - Mathematics
  - Microeconomics I
  - Microeconomics II
  - Macroeconomics II
  - Macroeconomics III

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

- Advanced models of dynamic macroeconomic:
  - Economic growth models.
  - Economic policy models.
- Design of economic policies.

#### 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.



 Firmado electrónicamente según artículo 41.1.j) del Reglamento de Adm. Electrónica de la Universidad de Granada (BOJA nº 85 de 6 de mayo de 2021)

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#### 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.
- CE64 Draft economic management projects at the international, national and regional level.
- 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.
- CE73 Understand the main models of international economy.

### **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

• Upon completion of this module the student will understand the concept and modelling of rational and adaptive expectations, the traditional and modern conception of economic policy, the concept of uncertainty in the design of economic policies, the concept of ineffectiveness in the design of economic policies, economic policies in both open and closed economies, the concept and analysis of the dynamic inconsistency of



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economic policies, dynamic models of monetary policy, coordination problems between countries in the design and application of macroeconomic policies, the concept of sustainability of public debt, the concept of seigniorage and inflationary taxes. You will also be able to analyze the main causes of endogenous growth due to investment in R&D, learning and public spending.

• Moreover, the student will be able to propose a theoretical model for the explanation of an observed empirical fact, interpret the results, understand the consequences in terms of economic policies of the mechanisms illustrated by the models, solve models, manipulate models under alternative hypotheses, use models as tools of economic analysis, critical analysis of the models, understand the consequences in terms of economic policies of the mechanisms illustrated by the models, scientific attitude towards economic problems, critical attitude to theoretical models, pragmatic attitude that reconciles models and analysis of the environment for problem solving at the macroeconomic level.

## PLANNED LEARNING ACTIVITIES

### THEORY SYLLABUS

- Part I: Advanced models of economic growth.
  - Topic 1: Dynamic optimization models with exogenous growth.
    - Ramsey-Cass-Koopmans (RCK) model.
    - Comparison of RCK and Solow-Swan models.
  - Topic 2: Advanced models of endogenous growth.
    - Rebelo's model.
    - Sobelow's model.
    - Romer's model.
- Part II: Theory of Economic Policy.
  - Topic 3: Financing of public deficits.
    - The intertemporal budget constraint.
    - The sustainability of public debt.
    - The seigniorage and the inflation tax.
  - Topic 4: Modern theories of economic policy
    - Modelling expectations.
    - The traditional conception of economic policy.
    - Economic policies under uncertainty.
  - Topic 5: The ineffectiveness of monetary policies.
    - The ineffectiveness of an anticipated monetary policy in a closed economy.
  - Topic 6: The dynamic inconsistency of monetary policies.
    - A model of economic policy with dynamic inconsistency.
    - Solutions to the problem of dynamic inconsistency.
  - Topic 7: Coordination of macroeconomic policies.
    - From interdependence to coordination.
    - Coordination of macroeconomic policies.

## PRACTICAL SYLLABUS

- Seminars / Workshops: Problem sets of each of the topics proposed in the theoretical syllabus
- Laboratory work: not applicable





#### • Field work : not applicable

#### RECOMMENDED READING

#### ESSENTIAL READING

- Agnani G., B. y Jiménez H., C. (2021). Macroeconomía IV. Crecimiento Económico y Política Económica, Editorial Técnica AVICAM, Granada.
- Barro R. J. and X. Sala-i-Martin (2003): Economic Growth, 2<sup>a</sup> Edition, MIT Press.
- Argandoña, A., Gámez, C. y Mochón, F. (1996): Macroeconomía Avanzada I. Modelos dinámicos y teoría de la política económica, McGraw-Hill: Madrid.

#### COMPLEMENTARY READING

- Abel, A. y Bernanke, B.S. (2009): Macroeconomics, 6<sup>a</sup> 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. and X. Sala-i-Martin (2003): Economic Growth, 2nd Edition, MIT Press.
- Easterly, W. (2001): The Elusive Quest for Growth, MIT Press.
- Jacobs, J. (1985): Cities and the Wealth of Nations. Vintage.
- Leslie, D. (1993): Advanced Macroeconomics. Beyond IS-LM, McGraw-Hill: London.
- Lewis, W. L. (2004): The Power of Productivity, University of Chicago Press.
- McNeill, J. R. and McNeill, W. H. (2003): The Human Web: A Bird's Eye View of Economic History. Norton.
- Romer, D. (2006): Advanced Macroeconomics, 3<sup>a</sup> Edición, McGraw-Hill: New York.
- Sargent, T.J. (1987): Macroeconomic Theory, 2<sup>a</sup> ed., Academic Press: San Diego.

## **RECOMMENDED LEARNING RESOURCES/TOOLS**

• Additional links will be available in PRADO

### **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



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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, and it will preferably be continuous to evaluate the acquisition of content and skills to be developed in the subject, with the following scale of 10 total points:

| Final exam:                                    |     |
|--|-----|
| All topics, theory and practice                | 60% |
| Continuous assessment components:              |     |
| Participation in class and practical exercises | 10% |
| Online test, topics 1-3                        | 15% |
| Online test, topics 4-7                        | 15% |
|  |     |

- The final exam will be a multiple-choice test with some practical exercises to solve. According to Regulations (art. 22.4) student who decides not to take this final exam will appear in the records with the qualification of "No Show".
- The continuous assessment grade will only be considered if and only if, the student has a grade in the final exam greater than or equal to 5 (out of 10). Otherwise, the overall grade for the course will be "Fail", with a numerical grade that will be obtained as a minimum between 4.8 points and the weighted sum of the scores of the final exam and the continuous assessments.
- In section b). The assessment of the student's active participation in the theoretical and practical classes will be established at the subjective discretion of the Lecturer and according to the performance, behaviour, number and quality of the participations of the student. There will be two online tests (on the Prado platform) with a weight of 15% each. The first test will be on topics 1, 2 and 3, while the second will consist of topics 4, 5, 6 and 7.

### EXTRAORDINARY EXAMINATION DIET

• In the resit exam, the evaluation includes a final exam of multiple-choice questions, with practical exercises to solve, representing 100% of the total grade.

### SINGLE FINAL ASSESSMENT (evaluación única final)

- According to Article 8 of the current Evaluation Regulations, a single final evaluation is possible for those students who request it in the first two weeks of teaching (or two weeks after their enrolment). The request should be done electronically, to the Head of the Department, explaining and justifying the reasons that make the student unable to follow the continuous evaluation system (work reasons, health status, disability or any other duly justified cause).
- For the students who satisfy the requirements for the final assessment there will be a final exam based on both parts of the syllabus. It will be a multiple-choice questions type, with practical exercises to solve, representing 100% of the total grade.

### 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



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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.

