

# **COURSE DESCRIPTION**

# MACROECONOMICS III

# Economics and International Business Degree Universidad de Alcalá

2025/2026

**Third Course- Fifth Term** 

Issue:	Macroeconomícs III
Code:	362003
Degree:	Economics&International Business
Department and unit:	Economics



	Fundamentos del Análisis Económico
Character:	Compulsory
Credits ECTS:	6
Course and term	Third course-fifth term
Instructors:	Mercedes Burguillo Cuesta  Mercedes.burguillo@uah.es
Consultation Hours:	To be announced
Language:	English

# 1. PRESENTATION

The subject on "Macroeconomics III" provides an overview of facts, concepts and basic theories, all of them necessary to understand and explain the huge differences of income among countries and their evolution along time. The main objectives of this subject are the following. First, it aims at making the student used to the key concepts and theoretical models which allow one to understand the functioning of an economy in the long run. Second, it tries to develop the abilities of students to apply such concepts and theories in order to better understand the problems an economy faces in the long run. And third, it aims at helping the student understand the policies favouring economic growth and development.

This subject focuses its attention on the study of the elements of difference between more developed and less developed economies as well as the analysis of key factors for growth and development: the accumulation of physical capital, human capital, natural resources, technology and the institutional context. The analysis is formalized thanks to the use of classical models of accumulation, the neo-classical (Solow-Swan) model, to which factors and complexity are added up, and endogenous growth models. Institutional factors, which are key determinants of the dynamics in the long run, are also examined.

# 1b. PRESENTACION

El curso de "Macroeconomía III" ofrece una visión panorámica de los hechos, los conceptos y las teorías básicas necesarias para comprender y explicar las enormes diferencias de renta entre países y su evolución a lo largo del tiempo. Los principales objetivos del curso son los siguientes. En primer lugar, familiarizar al alumno/a con los principales conceptos y modelos teóricos que permiten comprender el funcionamiento de la economía en el largo plazo. En segundo lugar, desarrollar las habilidades necesarias para aplicar tales conceptos y teorías para una mejor comprensión de los problemas planteados en la economía no en el corto plazo sino



en el largo plazo. En tercer lugar, ayudar al estudiante a comprender las políticas encaminadas a promover el crecimiento y el desarrollo económico.

La asignatura se centra en el estudio de los principales elementos diferenciales entre las economías desarrolladas y subdesarrolladas, así como en el análisis de los factores del crecimiento y el desarrollo económico: la acumulación de capital físico, el capital humano, la población, los recursos naturales, la tecnología y el marco institucional. El análisis se formaliza con ayuda de los modelos clásicos de acumulación, el modelo neoclásico de Solow-Swan, al que se va añadiendo factores y complejidad, y modelos de crecimiento endógeno. También se examinan los factores institucionales que son determinantes fundamentales de la dinámica económica en el largo plazo.

# 2. COMPETENCES

#### **BASIC AND GENERAL COMPETENCES:**

- CG1-Acquire skills in negotiation techniques that are used in international institutions and companies.
- CG2. Ability to analyze data and reports coming specifically from international sources (companies, international institutions such as the IMF, the WTO or the Bank for International Settlements)
- CG3. Interest in updating the permanent requirements of organization techniques and planning of international business and public activities.
- CG4. Ability to assess the multiplicity of social, political, technical factors, etc. that converge in international business and institutional decisions
- CG5. Acquire the current ethical criteria that can be permanently updated, manifested in the different countries through anti-corruption codes, international economic rights charters, etc.
- CG6. Ability to integrate into interdisciplinary teams made up of people from very different countries and backgrounds
- CG7. Scientific and professional curiosity for the permanent use of analytical and conceptual instruments typical of international economic relations.
- CG8. Motivation for the search for quality in professional practice and in its development
- CG9.- Curiosity for learning the new techniques and instruments that are continually presented in the international world
- CG10. Written and oral expression skills possible to use in different environments



- CG11. Ability to use the English language to search for information and use resources in that language, and in the preparation and presentation of academic activities.
- CB1. That students have demonstrated possession and understanding of knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that imply knowledge coming from the forefront of their field of study.
- CB2. That students know how to apply their knowledge to their work or vocation in a professional way and possess the skills that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.
- CB3. That students have the ability to gather and interpret relevant data (normally within their area of study) to make judgments that include a reflection on relevant issues of a social, scientific or ethical nature.
- CB4. That students can transmit information, ideas, problems and solutions to both a specialized and non-specialized audience.
- CB5. That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

#### TRANSVERSAL COMPETENCES:

- CT1. Acquire techniques and skills related to professional practice, including the application of the applicable ethical regulations.
- CT2. Know the resources available for access to information and use them effectively.
- CT3. Acquire oral and written communication skills in modern languages, both in professional environments and in other types of contexts.
- CT4.Understand the ideas and arguments that are expressed in a foreign language, in writing and orally, both in everyday situations and in professional and specialized contexts
- CT5. Manage in an advanced way the office automation tools most frequently used in a professional environment (word processor, databases and spreadsheets) and advanced use of electronic communication programs,
- navigation and data search (email and Internet).
- CT6. Design presentations using computer programs and the ability to structure information appropriately and transmit it clearly and effectively, with a basic understanding of the operation of data transmission networks.
- CT7. Know the main techniques of management, conflict resolution, job selection and motivation of human teams in a work environment with the use of effective strategies in time management.



CT8. Plan and develop research in a specific field of study, in accordance with the academic and scientific requirements that are specific to it.

CT9. Learn about the history of the University of Alcalá, the functioning of European institutions and the historical, social, economic and cultural reality of European and Latin American countries

#### SPECIFIC COMPETENCES:

CE2. Acquire analytical skills and master the handling of concepts and usual techniques of modern intermediate microeconomic and macroeconomic theory.

CE9. Strengthen and/or acquire mathematical analysis skills for economics.

CE15. Acquire the ability to analyse, synthesize and critically summarize economic-business information using quantitative tools in the different economic-business areas.

#### TRANSVERSAL SKILLS:

The subject incorporates the soft and digital skills for an excellent oral and writing expression as outlined in the Department's Master plan which is part of the University of Acala's Strategic Plan 2036.

#### **LEARNING OUTCOMES:**

The main objectives of the subject are to familiarize the student with the main concepts and theoretical models that allow them to understand the functioning of the economy in the short, medium and long term. The subject also aims to develop the necessary skills to apply such concepts and theories for a better understanding of the problems that arise in the economy at any given time, such as economic recession, unemployment, inflation, growth, development, etc. Likewise, the subject aims to help the student understand the role of expectations and macroeconomic policy options, such as fiscal and monetary policies and supply policies, evaluating their effectiveness and relevance depending on the economic situation and analyzing the determining factors of economic development in the long term.

# 3. CONTENTS

The general contents of 'Macroeconomics' are as follows:

- Introduction.
- Short-term macroeconomics.
- The macroeconomics of the short and medium term.
- Microeconomic foundations of macroeconomics: the role of expectations.
- Macroeconomic policy and pathologies.
- Long-term macroeconomics.
- Functioning of the economy in the long term and the determinants of growth and development.

In the case of 'Macroeconomics III', these contents have to do with long-term macroeconomics, the functioning of the economy in the long term and the



determinants of growth and development. The contents are reflected in the following blocks:

#### Part I

# **Topic 1. Introduction to economic growth**

- The fundamental questions of economic growth.
- Measurement of economic growth: apparent labor productivity and PPP.
- Relevant facts of economic growth.
- The analytical framework.

# **Topic 2. Development and underdevelopment**

- The fundamental questions related to the phenomenon of underdevelopment.
- Underdevelopment, poverty and backwardness.
- Measurement of the degree of development: the Human Development Index.
- The analytical framework: the Magna Theories of Development..

#### Part II

# Topic 3. Growth and physical capital

- Characteristics of physical capital.
- The role of physical capital in production.
- The Solow-Swan model with physical capital.
- Relationship between investment and saving: the optimal saving rate.

# Topic 4. Contribution of the population to economic growth

- Historical evolution of the level and growth rate of the population.
- Traditional theories of economic growth with population increase: the Malthusian model.
- The Solow-Swan model with population growth.
- Explanatory theories of the demographic transition: changes in mortality, birth and fertility.

#### Topic 5. Contribution of human capital to economic growth

- Characteristics of human capital.
- Human capital in the form of health: facts and measurement.
- Human capital in the form of education: facts and measurement.
- The Solow-Swan model with human capital.
- Explanatory theories of the demographic transition: changes in mortality, birth and fertility.

# Topic 6. Contribution of technology to economic growth

- Definition and measurement of technology in the production function.
- The Solow-Swan model with technological progress.
- The nature of technological progress.



- Models of endogenous growth.

# Topic 7. Contribution of efficiency to economic growth

- Breakdown of productivity into technology and efficiency.
- Types of inefficiency.
- The role of the State.

### **Topic 8. Contribution of openness to economic growth**

- Measurement of opening and causes.
- Relationship between openness to the outside world and growth.
- Channels through which openness affects growth.
- Reasons for opposition to the opening.

# Topic 9. Convergence between countries and regions: empirical evidence

- Concepts of convergence.
- International and interregional evidence.

#### Part III

#### Topic 10. The role of the Government in economic growth

- -Definition of the Government's role in the economy.
- -How Government affects economic growth.
- -Why Government's do things that are bad for growth.
- -Why poor countries often have bad governments

# **Topic 11. Income inequality and economic growth**

- Income inequality: facts and measurement.
- Sources of income inequality.
- Effect of income inequality on economic growth.

#### **Topic 12. Culture and Economic Growth**

- The effect of culture on economic growth.
- Determinants of culture.
- Cultural change.

#### **Topic 13. Geography, Climate and Natural Resources**

- Geography.
- Climate.
- Natural resources.

#### **Topic 14. Resources and Environment at the Global level**

- Natural Resources: Concepts.
- Incorporating natural resources into the analysis of economic growth



- Growth and the environment.

Content Blocks	Total sessions
Part I (topics 1 and 2)	<ul><li>4 sessions</li><li>2 Theory lectues</li><li>2 Practice sessions</li></ul>
Partell (topics 3 to9)	<ul><li>14 sessions</li><li>7 Theory sessions</li><li>7 Practice sessions</li></ul>
Part III (topics 10 to14)	<ul><li>10 sessions</li><li>5 Theory Lectures</li><li>5 Practices sessions</li></ul>
	1 final exam

# 4. LEARNING METHODS

# 4.1. Credits and hours

Face to fasce lessons: 48	<ul> <li>Classroom lessons: 48 hours</li> <li>Theory: 22,5 hours</li> <li>Practice: 22,5 hours</li> <li>Assessment: 3 horas</li> </ul>
Student's own work: 102 hours	<ul> <li>Students own work: 102         <ul> <li>Independent study</li> <li>Reading, practical case analysis, exercises, etc.</li> <li>Exams' preparation</li> </ul> </li> <li>ECTS tutorials</li> </ul>
Total hours: (25hours per credit)	150

# 4.2. Materials and Methods

#### Face-to-face classes.

They will be dedicated to theoretical classes, exercises and analysis and critical discussion of theoretical and practical content, in which the student acquires the basic knowledge of the

Theoretical lectures

In the theoretical lectures, the professor will offer a global vision of the subject, emphasizing the most relevant aspects. Through these classes, students will be



subject. In these classes, the skills of analysis, interpretation and resolution of exercises and problems will be developed. guided in the knowledge and use of the principles and instruments of economic theory.

#### Practical sessions

The practical classes will be dedicated to solving exercises and problems and to the presentation and critical discussion of articles and papers on current issues, so that students can become familiar with real-world problems and see their relationship with the theoretical models analyzed below. throughout the course. With the resolution of exercises and problems, the skills to work autonomously will be reinforced, which the student must also develop through the personal preparation of the theoretical classes and the evaluation tests.

The work that will be carried out in the practical classes will allow the promotion of teamwork and the student's critical and analytical capacity, through interaction with other students.

The recommended manuals constitute a basic material that provides the necessary learning tools for the study of theoretical models, the analysis of exercises and problems, and the critical discussion of practical cases (in this regard, it is convenient to note that most of the manuals incorporate case study boxes that facilitate the understanding of the concepts through real examples).

The specific material prepared by the teacher will also be made available to the student: worksheets, readings and complementary articles and Internet tools. In any case, the materials proposed by the teacher will always be in line (degree of difficulty) with those proposed in the recommended manuals.

In addition, students will be able to carry out their work with the support of the virtual platform, which will facilitate access to new content, allow activities and evaluations to



	be carried out and will favor the interaction between students and teachers and among the students themselves.
Autonomous work.  It will be dedicated to the individual work of the student, in which the study of theoretical topics, the carrying out of exercises and resolution of cases and the reading of articles of interest will be promoted. This effort will be dedicated to developing skills such as searching for information, interpreting texts, and problem solving.	The student must study the materials proposed in the theoretical classes and carry out the tasks that are proposed in the practical classes: problem solving, readings, etc.
Individual consultation hours	The student will have at their disposal two types of consultation hours virtual through the platform, in which students can ask the teacher their questions; and personalized tutorials that the student can request from the teacher when he deems it appropriate, in which he will be guided in a particular way about her work.

We will collaborate with the CRAI-Library professionals so that the students carry out an activity that develops the informational competences in the use and management of the information.

Se colaborará con los profesionales del CRAI-Biblioteca para que los estudiantes realicen una actividad que desarrolle las competencias informacionales en el uso y gestión de la información.

# 5. ASSESMENT 1

Students following this course must choose between two assessment systems:

- 1. A continuous evaluation system (this evaluation procedure is detailed in the epigraph CONTINUOUS ASSESMENT. In the case of not passing it, the student will be able to take an extraordinary final exam (June).
- 2. An ordinary final exam (January) and an extraordinary final exam (June).

\_

¹ Siguiendo la Normativa reguladora de los procesos de evaluación de los aprendizajes, aprobada en Consejo de Gobierno de 24 de Marzo de 2011, es importante señalar los procedimientos de evaluación: por ejemplo evaluación continua, final, autoevaluación, co-evaluación. Instrumentos y evidencias: trabajos, actividades. Criterios o indicadores que se van a valorar en relación a las competencias: dominio de conocimientos conceptuales, aplicación, transferencia conocimientos. Para el sistema de calificación hay que recordar la Normativa del Consejo de Gobierno del 16 de Julio de 2009.



In accordance with the provisions of the regulations governing learning assessment processes approved by the Governing Council on March 24, 2011, to pass the subject, all students must submit to the continuous assessment system. Only exceptionally can you take an ordinary final exam.

The continuous activities will represent a minimum of 60% of the final grade, and the final exam will represent a maximum of 40% of the final grade.

#### CONTINUOUS/ORDINARY ASSESSMENT

The continuous assessment system will be based on the control and monitoring of the student's work throughout the course. It will be adapted to the teaching resources and the number of students per group and will be communicated in a timely manner at the beginning of classes.

Specifically, the evaluation will consist of two mid-term exams on the theoretical and practical knowledge acquired through face-to-face classes and the individual work of the student. These exams will evaluate the skills associated with the acquisition of fundamental knowledge, the search for information, the ability to interpret, communicate and work in a team, and the specific knowledge of the students.

In addition, the student's progress in the different tasks and practices proposed by the teachers will be considered. The presentation of works and exercises that are carried out in face-to-face classes will be valued, as well as the tests that are carried out in the virtual classroom and that the student will solve remotely. With this, the competences associated with the search for information, interpretation capacity, communication, group work and specific knowledge of the students will be evaluated.

In the continuous assessment system, the student's grade is deducted from the following weighting -the maximum weight of each exam or activity will be 40%-of the grades obtained throughout the course:

- a) Mid-term exams: their joint qualification will represent 70% of the grade. This means that each exam will represent 35% of the final grade.
- b) The participation and presentation of works and exercises that are carried out in the practical classes and the tests in the virtual classroom will represent 30% of the final grade.

The final grade will be obtained from the weighted sum of the grades of the partial tests and the mark of practices and tests of the virtual classroom. All those students who have obtained an average between the partial evaluations of at least 5 (out of 10) and who obtain a final grade of continuous evaluation equal to or greater than 5 will pass the course. Those who do not pass the continuous evaluation will be suspended in the call. ordinary and may take the extraordinary exam. To pass the course through the continuous assessment procedure, a minimum final score of 5 points out of 10 must be obtained.

Students who do not opt for the continuous assessment system and take the final exam of the ordinary call in May must demonstrate that they have acquired the skills established for this subject. To do this they must pass an exam on all the contents of



the subject. To pass the subject by this procedure, a minimum score of 5 points out of 10 must be obtained.

#### **EXTRAORDINARY ASSESMENT**

It consists of a final exam with characteristics like those of the ordinary evaluation.

#### **DIVERSITY**

The teaching-learning methodology and the assessment process will be adapted as needed, in accordance with the guidelines of the Diversity Support Unit, to implement curricular adaptations for students with specific needs."

# 6. BIBLIOGRAPHY

#### **Basic:**

Weil, D. (2016), Economic Growth, 3rd edition, Routledge.

Hess, P. (2016), *Economic Growth and Sustainable Development*, 3<sup>rd</sup> edition Routledge.

#### **Complementary:**

Acemoglu, D. y Robinson, J. A. (2012), *Por qué fracasan los países. Los orígenes del poder, la prosperidad y la pobreza*, Barcelona: Deusto S.A. Ediciones.

Banerjee, A. y Duflo, E. (2012), Repensar la pobreza: Un giro radical en la lucha contra la desigualdad global, Taurus.

Barro, R. J. y Sala-i-Martín, X. (2004), *Economic growth*, 2<sup>nd</sup> edition, McGraw-Hill.

Blanchard, O. (2017), *Macroeconomía*, 7<sup>a</sup> edición, Pearson Educación.

Easterly, W. y Easterly, W. R. (2003), En busca del crecimiento: andanzas y tribulaciones de los economistas del desarrollo, Antoni Bosch Editor.

García de Paso, J.I.; Valero, I.; Pérez, R. y García Greciano, B. (2016), *Crecimiento económico: modelos teóricos y ejercicios resueltos*, Pearson.

Gimenez Esteban, G. (2017), *Introducción al crecimiento económico y desarrollo*, Ed. Pirámide.

Jones, Ch. (2000), *Introducción al crecimiento económico*, Prentice Hall, México. Ultima edición en inglés: Jones, Ch. (2013), *Introduction to Economic Growth*, 3<sup>rd</sup> edition, W.W. Norton & Company: Nueva York.

Sala-i-Martín, X. (2002), *Apuntes de crecimiento económico*, 2ª edición, Antoni Bosch.

Romer, D. (2002), Macroeconomía avanzada, 2ª edición, McGraw Hill.

Ros, J. (2013), *Rethinking economic development, growth, and institutions*, Oxford University Press.

The recommended text books constitute a basic material that provides the necessary learning tools for the study of the theoretical models, the analysis of the exercises and problems and the critical discussion of practical cases. The specific material prepared by the teacher will also be made available to the student: worksheets, readings and complementary articles and Internet tools. The new communication tools will be used to develop a "virtual classroom" that will serve as support especially for the operation of practical classes and guided tutorials.



# 7. NOTE

The University of Alcalá guarantees its students that if due to health requirements the competent authorities prevent the totally or partially face to face teaching activity, the teaching objectives would be reached through alternative teaching-learning methodology and evaluation in online format, which would return to the face-to-face modality as soon as these impediments ceased.