# uc3m Universidad Carlos III de Madrid

## Macroeconomics

Academic Year: (2020 / 2021) Review date: 07-07-2020

Department assigned to the subject: Economics Department Coordinating teacher: JEREZ GARCIA-VAQUERO, MARIA BELEN

Type: Compulsory ECTS Credits: 6.0

Year: 2 Semester: 2

## REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

Principles of Economics, Microeconomics

#### **OBJECTIVES**

The objective of this course is to offer an introduction to macroeconomic theory at the intermediate level. To this aim students are required to acquire certain knowledge, capacities and attitudes.

As far as knowledge is concerned, by the end of the course, students should be able to:

- Understand the relationship between the marginal productivity of inputs (such as labor and capital) and their market prices.
- Understand the concept of neutrality of money and its relationship with price flexibility.
- Evaluate the impact of fiscal and monetary policy both in closed and in open economies.
- Analyze the impact of demand and supply shocks both in closed and in open economies.
- Understand the importance of technological and demographic changes, as well as the accumulation of physical capital, for economic growth.

The capacities students are supposed to acquired can be classified in two groups: specific and general. Regarding the former, students should be able to:

- Explain the relationship between national savings, investment and the current account balance.
- Determine the equilibrium in the IS-LM and Mundell-Fleming models.
- Analyze the effect of both monetary and fiscal policies in the short and in the long run.
- Determine the steady state in the Solow growth model.

Regarding the general capacities, throughout the course students will learn how to:

- Interpret macroeconomic data.
- Formulate economic policies designed to smooth business cycles and foster growth.
- Understand the main current debates among macroeconomists.
- Become more familiar with the formalization of economic problems.

Finally, the attitudes the students should show include:

- A critical assessment of the economic theories studies throughout the course in the light of empirical evidence.
- Collaboration in order to obtain necessary information and knowledge from others to carry out complex tasks.

# **DESCRIPTION OF CONTENTS: PROGRAMME**

The main objective of this course is to present the basic foundations of macroeconomic theory, starting from the basic long-run macroeconomic model where prices are flexible. We will then study the basic model of a short-run economy with fixed prices, and analyze business cycle economic fluctuations as well as the impact of monetary and fiscal policies.

The specific topics covered in class will be:

- 1. The Classical Theory.
- 1.1. National income. Relationship between the marginal productivity of production inputs and their prices. Income distribution. Relationship between public savings, private savings and investment.
- 1.2. Money and inflation. The quantity theory of money. Real and nominal interest rates.
- 1.3. Unemployment.
- 2. Growth theory: the Solow model. Demographic growth and technological progress.
- 3. Economic fluctuations.

The IS-LM model for a closed economy. The effects of fiscal and monetary policy and of exogenous economic shocks.

- 4. Open economies
- 4.1 Long run
- 4.2 Short run

The Mundell-Fleming model of a small open economy in the short run.

5. Macroeconomic policy debates. Public debt and the Ricardian equivalence. Stabilization policies.

### LEARNING ACTIVITIES AND METHODOLOGY

The teaching methodology will include:

- (1) Formal lectures whose objective is to develop a basic conceptual framework for understanding macroeconomics. Class slides and basic references will be available to students so they can follow these lectures in detail and also study in more depth those issues that they find more interesting.
- (2) In-class discussion in order to apply the conceptual tools learned in the lectures to case studies, current events, and recent policy debates.
- (3) Problem sets and assignments. By these solving these assignments, students are supposed to acquire the required capacities and evaluate their knowledge.
- (4) Several problems will be solved in class so that students can better grasp both the conceptual tools and the specific knowledge related to each assigned problem. The goal is that students develop the ability to analyze and communicate relevant information while solving these problems. Solving problems in the classroom will also facilitate critical debates between students and professors, as well as among students themselves.
- (5) Data analysis in order to study the evolution of relevant macroeconomic variables as well as to assess the predictions of the models studied in class.

#### ASSESSMENT SYSTEM

The continuous assessment will be based on one midterm that will take place in the theory class (see the timeline), several short quizzes solved in class, and a homework assignment. Specifically, the weight assigned to the midterm will be 20%, that assigned to the quizzes will be 10% and that assigned to the homework assignment will be also 10%. In addition, the grade that instructors will assign to the quizzes will depend on the students' class attendance.

The continuous assessment will only be taken into account if the grade in the final exam is greater than or equal to 3.5.

"Convocatoria Ordinaria" Final Grade = Continuous Assessment x 0.4 + Final Exam x 0.6 if Final Exam>3.5

"Convocatoria Extraordinaria" Final Grade= max{Continuous Assessment × 0.4+ Final Exam × 0.6; Final Exam} if Final Exam>3.5

% end-of-term-examination: 60

% of continuous assessment (assigments, laboratory, practicals...): 40

## **BASIC BIBLIOGRAPHY**

- Gregory Mankiw Macroeconomics, Palgrave (Worth Publishers), 2014