# uc3m Universidad Carlos III de Madrid

## Macroeconomics

Academic Year: (2020 / 2021) Review date: 23-11-2020

Department assigned to the subject:

Coordinating teacher: JACOBS ALVAREZ, GERARDO

Type: Electives ECTS Credits: 3.0

Year: 1 Semester: 1

# REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

The course is self contained but students are expected to have completed one course of calculus. A course in microeconomics will be a plus. This course is adequate for any student, regardless of their BA degree (Economics, Business Administration, Mathematics, Engineering, or Physics). The course is taught in English.

Professor: Gerardo Jacobs (gjacobs@eco.uc3m.es)

#### **OBJECTIVES**

GENERAL COMPETENCES - This course will study economic models in order prepare students to analyze the macroeconomic environment under which policies are design. Students will learn to think critically about the limits of any economic analysis and will be able to question economist's assessments with solid arguments. They will develop the ability to communicate and discuss economic issues and will improve their confidence and leaderships skills thru a better understanding of the economic environment where they live.

SPECIFIC COMPETENCES - To analyze and reason in a rigorous and systematic way about macroeconomic issues. To interpret the main macroeconomic aggregates- To use economic models to analyze policy recommendations and to understand how economic markets operates.

DESCRIPTION OF CONTENTS- This course first studies the most relevant macroeconomic indicators that measure economic performance. After this, it will introduce one of the most used economic models for analysing stabilisation policies, in particular, we will concentrate in the conditions under which fiscal and monetary policies could reduce unemployment rates in the short run. The course then studies the Balance of Payments and the sustainability of Foreign Debt. We concentrate in the factors that explain the flow of foreign direct investment (FDI). We then study Exchange Rates and Interest Parity Theory. Following this topic, the program closes with an increasingly important topic: economic growth, paying special attention to the debate around the role of savings and technological change.

## **DESCRIPTION OF CONTENTS: PROGRAMME**

- 1. National Income Accounting (1 week).
- 1.1 Measuring economic activity.
- 1.2 The Income Method and the Value-added Method.
- 1.3 National Income Identities and Expenditure Method.
- 1.4 National Financial Accounting
- 2. Monetary and Fiscal Policies (2 weeks).
- 2.1 The Basic Macroeconomic Model.
- 2.2 Long run equilibrium.
- 2.3. Keynesian Cross and the IS/LM Model.
- 2.4. Government Spending, Taxes and Unemployment in the short run.
- 2.5. Money and Banking.
- 2.6. Monetary and Fiscal Policies.
- 2.7. The liberal vs activists debate.
- 3. Balance of Payments and Exchange rates (1 week)
- 3.1 FDI and Trade Balance.
- 3.2 The Open Economy Model.
- 3.3 Exchange Rate Determination.

- 3.4 Purchasing Power Parity and Interest Rate Parity.
- 3.5 Optimum Currency Areas.
- 4. Economic Growth (1 week)
- 4.1 The Solow Growth Model.
- 4.2 The Steady State Equilibrium.
- 4.3 Population Growth and Savings.
- 4.4 Human Capital and Technological Change.

#### LEARNING ACTIVITIES AND METHODOLOGY

The teaching methodology is based on two types of sessions: first, sessions where the main topic is explained with graphical support (slides). Second, practical classes where they take a more active part solving the exercises. To facilitate learning, students have access to basic texts of reference to complete and deepen the topics explained in class. After every topic, students will work with a practical exercise in order to become more familiar with the main concepts and to apply them to practical problems. Students will work in teams of two when solving the problem sets.

## ASSESSMENT SYSTEM

The evaluation approach is based in 3 problem sets and a closed book in-class final exam, with the following weight distribution: three problems sets (40%) and a end-of term final exam (60%). In order to pass the course, there is a minimum grade requirement of 5 out of 10 in the Final Exam. The final exam will have duration of 3 hours. Students that do not meet the minimum passing grade should retake the subject. If the resit exam is taken, the note will be based in the exam.

% end-of-term-examination: 60 % of continuous assessment (assignments, laboratory, practicals...): 40

#### **BASIC BIBLIOGRAPHY**

- Jacobs G. and Diaz-Jimenez J. Macroeconomics. , 2nd edition, CopyRed, Spain.
- Mankiw G. Macroeconomics, 7th edition, Worth Publishers.

## ADDITIONAL BIBLIOGRAPHY

- Abel, Bernanke and Croushore Macroeconomics, Pearson, 2011