# uc3m Universidad Carlos III de Madrid

## Economics I (Microeconomics)

Academic Year: (2019 / 2020) Review date: 25-04-2019

Department assigned to the subject: Economics Department Coordinating teacher: SCHNEIDER , JOHANNES SIEGFRIED

Type: Basic Core ECTS Credits: 6.0

Year: 1 Semester: 1

Branch of knowledge: Social Sciences and Law

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

Elementary calculus: percentages, rule of three and basic simplifications of quotients (also sums, substractions, multiplications and quotients).

Solution of linear equations with one unknown.

Solution of two linear equations with two unknowns (by substitution).

Plot of linear equations in 2D graphs. Relationship with solutions to two linear equations with two unknowns.

Graphic interpretation of the slope of a line.

Computing elementary areas (triangles and rectangles).

#### **OBJECTIVES**

Most decisions that businesses and policy makers take are heavily influenced by the way markets operate. The competitiveness of markets, the household's decisions taking process, fiscal incentives and the regulatory intervention of the government, are some of the variables that influence the strategy to be taken by a business firm and policy makers. This course will prepare students to analyze markets. To achieve this, this courses will provide a complete overview of how markets operate, and also when market fail and generate undesirable results from the point of society.

## Skills

- Analyze and reason in a rigorous and systematic way about economic issues
- Clearly state economic problems assessing their scope and advancing viable solutions.
- Use economic systems to analyze policy recommendations
- Ability to communicate economic analysis in precise and concise manner

### Attitudes

- Respect for economic facts as a basis for decision making both in private and public policies.
- Interest in other persons' ideas and willingness to express own opinions with grounds on empirical references.
- To improve their confidence thru a better understanding of the environment where they live.

## **DESCRIPTION OF CONTENTS: PROGRAMME**

After an introduction to economic problems, the course starts discussing the the role of incentives in individual decision making, and the opportunity cost of these decisions. Thereafter we discuss how strategic interaction between economic agents (individuals, firms, government) shapes the outcomes. We discuss the (in)efficiency of institutions along a variety of problems. Finally, we address firm's decision making and price setting in various market environments. We discuss benefits and problems in markets together with the measures the state can take in order to reduce these inefficiencies. The course contents are as follows:

- 1. Introduction. Economic problems and Capitlism. Hockey Sticks, Inequality, Comparative Advantage, Housholds, and Firms.
- 2. Individual Decision Making. Scarcity, Choice, and Opportunity Cost
- 3. Collective Decision Making (1). Introduction to Game Theory and Strategic Interaction. Nash Equilibrium.
- 4. Collective Decision Making (2). Public Goods, Altruism and Social Preferences.
- 5. Collective Decision Making (3). Competition and Conflict.

- 6. Economic Institutions. Efficiency, Fairness, and Bargaining
- 7. Theory of the Firm (1). Division of Labor, Wages, Ownership and Control
- 8. Theory of the Firm (2). Customers, Cost concepts, Price Setting, Advertisement
- 9. Supply and Demand. Markets, Outcomes, Prices, and Quantities.
- 10. Market Dynamics. Rent-Seeking, Price Setting, and Equilibrium Dynamics.
- 11. Market (In)efficiency. External Effects, Incomplete Information, Government Policies.
- 12. Economic Inequality, Reasons, Results, and Policies
- 13. The Economics of the Environment. Incomplete Contracts, and Missing Markets.

## LEARNING ACTIVITIES AND METHODOLOGY

The teaching methodology is based on two types of sessions:

- 1. Master classes, where the subject is given with graphical support (slides). To facilitate learning the students have access to audiovisual materials and basic texts of reference to complete and deepen the topics explained in class.
- 2. Practical classes to smaller groups of students, where they can take a more active part in solving the proposed exercises and discussing current events. In these sessions, student's participation and problem sets are graded. Student participation in class enables them to analyze problems and communicate solutions, encouraging the exchange of opinions.

#### ASSESSMENT SYSTEM

The continuous evaluation consists of 3 problem sets and 1 quiz. Problem sets account for a total 25% of the final mark and the guiz for 25%. The remainder of the grade (50%) is based on the final exam.

% end-of-term-examination: 50 % of continuous assessment (assignments, laboratory, practicals...): 50

#### **BASIC BIBLIOGRAPHY**

- The Core Team The Economy, Oxford University Press, 2017

## BASIC ELECTRONIC RESOURCES

- The Core Team . The Economy: https://core-econ.org