# uc3m Universidad Carlos III de Madrid

### Microeconomics I

Academic Year: (2019 / 2020) Review date: 09-10-2019

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

Type: Compulsory ECTS Credits: 9.0

Year: 1 Semester: 1

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

Introduction to Statistics and Mathematics

#### **OBJECTIVES**

This course provides an introduction to microeconomic theory designed to meet the needs of students in the economics Ph.D. program. Some parts of the course are designed to teach material that all graduate students should know. Others are used to introduce methodologies. The topics include some of the most fundamental topics of classical microeconomics: consumer and producer theory, markets and competition, general equilibrium, social choice, and tools of comparative statics.

### **DESCRIPTION OF CONTENTS: PROGRAMME**

Description of contents. Programme.

The following list describes the main structure of the course, and the Chapters in the main textbook that cover each topic.

- 1. Consumer Theory: preference, utility functions, utility maximization, demand functions, indirect utility functions, expenditure minimization, duality, comparative statics, revealed preference (Chapters 1 to 4)
- 2. Production Choice: technology, production sets, profit maximization and cost minimization, input demands, supply function (Chapter 5)
- 3. Partial Equilibrium: supply and demand, equilibrium in competitive markets, efficiency, taxes, subsidies, price controls (Chapter 10)
- 4. General Equilibrium in Competitive Economies: partial and general equilibrium, existence of competitive equilibrium, cooperative and non-cooperative foundations of competitive equilibrium, welfare theorems (Chapter 15 to 19)
- 5. Social Choice Theory: preferences aggregation, social choice functions, Arrow's Theorem (Chapter 21)

### LEARNING ACTIVITIES AND METHODOLOGY

Learning activities and methodology

Learning activities:

Lectures

Recitation sessions

Individual study by student

Teamwork

Office hours

#### Methodology:

The focus of the lectures is the introduction of key concepts, the economic modelling and the analysis of the fundamental results, with emphasis on economic reasoning and intuition. Several problem sets (to be solved individually or in teams) aim at improving the students; understanding of the theory by applying it to various particular problems. They also provide students with exercises that allow them to explore the scope of the key concepts on their own (beyond their main immediate implications discussed in lectures). Recitation sessions offer the opportunity to illustrate and discuss the solutions to the problem sets while giving students feedback on their progress.

### ASSESSMENT SYSTEM

Sistema de evaluación

There will be a midterm and a final exam, which account for 40% and 60% of the final grade, respectively.

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

## **BASIC BIBLIOGRAPHY**

- A. Mas-Colell, M. Whinston and J.Green Microeconomic Theory, Oxford UP, 1995

### ADDITIONAL BIBLIOGRAPHY

- B. Ellickson Competitive Equilibrium: Theory and Applications, Cambridge , 1993
- C. Hara, I. Segal and J. R. Green Solutions Manual for Microeconomic Theory, Oxford University Press, 1997
- D. Kreps, A course in Microeconomic Theory, Princeton U Press, 1990
- G. Debreu Theory of Value, Cowles Foundation, 1959
- G. Jehle, and P. Reny Advanced Microeconomic Theory, Prentice-Hall, 2000
- K. Arrow and F. Hahn General Competitive Analysis, Holden Day, 1971
- W. Hildenbrand and A. Kirman Introduction to Equilibrium Analysis, North-Holland, 1976