

Academic Year: (2024 / 2025)

Review date: 10-04-2024

Department assigned to the subject: Economics Department

Coordinating teacher: ROMERO MEDINA, ANTONIO

Type: Compulsory ECTS Credits : 3.0

Year : 1 Semester : 1

REQUIREMENTS (SUBJECTS THAT ARE ASSUMED TO BE KNOWN)

The objective is to provide students with the standard tools of economic analysis. This material is presented formally, using differential calculus, to facilitate applications. Students are expected to have a basic understanding of economics and differential calculus.

OBJECTIVES

- Understand the functioning of markets.
- Being able to work with mathematical functions that capture the behavior of economic agents.
- Being able to develop models about the behavior of economic agents.
- Stating hypotheses from problems' descriptions based on the analyzed models.
- Being able to state and discuss the consequences of the market interventions in a clear, schematic way.

DESCRIPTION OF CONTENTS: PROGRAMME

Unit 1. Introduction: Preliminaries. The basics of Supply and Demand.

Unit 2. Household Economics: Preferences, utility function, budgetary restriction, consumer choice, individual demand, duality in consumer theory, income and substitution effects, aggregate demand, Household Production and Consumption, and labor supply.

Unit 3. Choice under uncertainty

Unit 4. Producer and Cost Theory: Production function. Cost minimization: Inputs demand, cost function. Profit maximization: Supply function.

Unit 5. Competitive Markets: Equilibrium and welfare.

Unit 6. Market Failure.

LEARNING ACTIVITIES AND METHODOLOGY

Acquire theoretical knowledge through:

- Master classes where theoretical and practical key concepts are developed in order students acquire them. Students will be provided with class notes and problem sets. Likewise, main references and complementary bibliography will be provided to go deeper into those topics in which students are more interested.
- Resolution of problems by the professor, promoting active participation of students in solving such problems, individually and/or in groups. Exercises will be solved during master classes.

Acquire abilities and skills through:

- Resolution by students of problem sets to be handed in every week. The aim will be to assess students' knowledge and to acquire the skills needed.

ASSESSMENT SYSTEM

% end-of-term-examination: 40

% of continuous assessment (assignments, laboratory, practicals...): 60

The formative evaluation will make up 60% of the final grade. It will be carried out through:

- Resolution of exercises: 20%. They will be presented to the teacher at the established times. In

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

general, these exercises will have to be done individually.

- Intermediate exam: 40%. The exam will be composed of theoretical and practical questions to determine if the student has acquired the main skills.

The final exam will account for the rest of the grade (40%). It will consist of a written theoretical and practical exam to assess the degree to which the student has acquired the established competencies.

BASIC BIBLIOGRAPHY

- Jehle & Reny Advanced Microeconomic Theory, Addison-Wesley.
- Varian Microeconomic Analysis, W. W. Norton.

ADDITIONAL BIBLIOGRAPHY

- Deaton and Muellbauer Economics and Consumer Behavior, Cambridge U.P.
- Kreps A course in Microeconomic Theory, Princeton U.P..
- Variant Microeconomic Analysis, W. W. Norton.