

Academic Year: ( 2023 / 2024 )

Review date: 24-05-2023

Department assigned to the subject: Economics Department

Coordinating teacher: CELENTANI , MARCO

Type: Compulsory ECTS Credits : 6.0

Year : 2 Semester : 1

## OBJECTIVES

The goal of this course is to familiarize students with the methodology for the analysis of equilibrium and efficiency in exchange economies, in production economies and in environments with external effects. To reach this goal students need to master a set of analytical tools, develop a set of skills and reach an analytical proficiency that are described in the following: (i) Students will need to master the concepts of equilibrium and efficiency, will understand their use in economic analysis and will comprehend how to apply them to analyze economic problems; (ii) In terms of specific abilities, students will be able to carry out formal analyses of economic problems; (iii) In terms of general abilities, students will develop their analytical ability and their abilities to carry out critical analyses. (iv) Students will finally need to reach sufficient proficiency in the solution of complex problems.

## DESCRIPTION OF CONTENTS: PROGRAMME

1. Equilibrium and efficiency in pure exchange economies
  - (a) Partial equilibrium vs. general equilibrium
  - (b) Efficiency
  - (c) Equilibrium
    - i. Definition
    - ii. Walras's Law
  - (d) First and Second Welfare Theorem
  - (e) Examples
2. Equilibrium and efficiency in production economies
  - (a) Efficiency
    - i. Definition
    - ii. An example with decreasing returns to scale technologies
  - (b) Equilibrium
    - i. Definition
    - ii. An example with decreasing returns to scale technologies
  - (c) First and Second Welfare Theorem
  - (d) Examples
    - i. A small open economy
    - ii. Constant returns to scale technologies
    - iii. A representative agent economy
3. Externalities
  - (a) Definitions: Externalities, equilibrium and efficiency
  - (b) Private responses to externalities
    - i. Bargaining: Property rights, bargaining power, efficiency and distribution
      - A. Not quasilinear preferences
      - B. Quasilinear preferences
    - ii. Exchange: Property rights, efficiency and distribution
      - A. Not quasilinear preferences
      - B. Quasilinear preferences
      - C. Coase theorems
      - D. First and second welfare theorems
  - (c) Public responses to externalities: Efficiency and distribution

- i. Property rights
- ii. Taxes and subsidies
- iii. Licenses

## LEARNING ACTIVITIES AND METHODOLOGY

The teaching methodology is based on:

1. Lectures, where the principles and the analytical technique that the students must acquire will be presented; to facilitate their development the students will use the basic reference texts that will allow them to complete and deepen in those subjects in which they are more interested
2. Recitations sections in which exercises will be solved that will serve to deepen the understanding of the principles and the analytical technique and make them operational.
3. The development of the learning will be evaluated through tutorials and an online midterm exam.

## ASSESSMENT SYSTEM

|   |    |
|---|----|
| <b>% end-of-term-examination:</b>   | 50 |
| <b>% of continuous assessment (assignments, laboratory, practicals...):</b> | 50 |

The overall grade is the maximum between (a) the average of the final exam grade and the continuous assessment grade and (b) the final exam grade. If the final exam grade is lower than 4, the maximum overall grade is 4.6. This rule applies both for the regular and in the retake exam. The continuous assessment grade depends on an online midterm exam that will take place simultaneously for all sections on a date and at a time to be fixed after consulting with student delegates.

## BASIC BIBLIOGRAPHY

- A. Goolsbee, S. Levitt, C. Syverson Microeconomics, Worth Publishers, 2013
- H. Varian Intermediate microeconomics: A modern approach, W. W. Norton & Co., 2014
- J. Hey Intermediate microeconomics, McGraw-Hill, 2003
- R. S. Pindyck, D. L. Rubinfeld Microeconomics, Pearson, 2012
- R. Serrano, A. Feldman A short course in intermediate microeconomics with calculus, Cambridge University Press, 2013
- Thomas J. Nechyba. Intermediate microeconomics an intuitive approach with calculus. , CENGAGE., 2018
- W. Nicholson Microeconomic theory: Basic principles and extensions, Shut-Western College Publishing, 2011