

Academic Year: ( 2022 / 2023 )

Review date: 18-05-2022

Department assigned to the subject: Economics Department

Coordinating teacher: HERNANDO VECIANA, ANGEL

Type: Compulsory ECTS Credits : 9.0

Year : 2 Semester : 1

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

Microeconomics I and Microeconomics II

**OBJECTIVES**

- Build and analyze models with asymmetric or incomplete information.
- Familiarize with the classic applications of these models to real life economic problems.
- Grasp the magnitude of the problems in real economies due to asymmetric or incomplete information.
- Develop the skills to use the analytical tools of the models of asymmetric or incomplete information: adverse selection, moral hazard, screening, signalling, mechanisms, contracts.

**DESCRIPTION OF CONTENTS: PROGRAMME**

Introduction to topics and tools of modern theory of information.

1. Games with Incomplete Information: elements of a game of incomplete and/or asymmetric information, Bayes-Nash equilibrium, perfect equilibrium.
2. Adverse selection and moral hazard: unobservable characteristics (screening and signalling); unobservable actions: ex ante, interim and ex post efficiency.
3. Introduction to contract theory: menus of contracts, guaranties, bilateral contracts: insurance, credit, labor.
4. Introduction to mechanism and information design: Bayesian implementation with transferable utility, applications: monopoly, auctions, public goods, bilateral trade. Dominant and ex post implementation with transferable utility.

**LEARNING ACTIVITIES AND METHODOLOGY**

- In person classes that are streamed online and recorded.
- Weekly problem sets solved in group work. These are discussed in the practical sessions.
- Combining textbook material with up-to-date discussion of the current research frontier.

**ASSESSMENT SYSTEM**

The final grade is computed as a weighted average: 40% the grade in the continuous evaluation and 60% the grade of the final exam. The grade in the continuous evaluation is computed based on the solutions to the problem sets and the midterm.

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

**BASIC BIBLIOGRAPHY**

- Boergers (with a chapter by Kraehmer and Strauss) An Introduction to the Theory of Mechanism Design, Oxford University Press, 2015
- Bolton and Dewatripont Contract Theory, MIT Press, 2005
- Mas Colell, Whinston and Green Microeconomic Theory, Oxford University Press, 1996

**ADDITIONAL BIBLIOGRAPHY**

- Myerson Game Theory, Harvard University Press, 1997

