# uc3m Universidad Carlos III de Madrid

## **Economics of Information**

Academic Year: (2023 / 2024) Review date: 02-06-2023

Department assigned to the subject: Economics Department Coordinating teacher: FERREIRA GARCIA, JOSE LUIS

Type: Electives ECTS Credits: 6.0

Year: Semester:

#### **OBJECTIVES**

The objective of this course is to provide students with an introduction to the problems and methods of the economics of information, developed en the last decades to investigate the consequences of the presence of asymmetric information in a variety of economic and political environments. This methodology provides an analysis of the incentive problems present in these settings as well as instruments to investigate the design of contracts and/or institutions that alleviate the inefficiencies caused by asymmetric information.

## **Abilities**

The course material teaches students how to:

- Identify the problems studied by the economic of information in different contexts
- The tools provided by this theory to treat and solved the problems associated to the presence of asymmetric information
- Evaluate the pros and cons of the alternative mechanisms proposed to deal with these problems
- Get familiar with the literature and the basic textbooks that will allow to continue the learning process.

## **Aptitudes**

The course encourages students to:

- Analyze economic problems without prejudices, and with precision and rigor.
- Reason critically.
- Learn autonomously.
- Argue a viewpoint showing its foundation and appreciating the merits of other opinions.

# **DESCRIPTION OF CONTENTS: PROGRAMME**

The program includes the following topics:

- 1. The Agency Model: Risk Sharing
- 2. Moral Hazard
- 3. Competitive Markets with Adverse Selection
- 4. Adverse Selection in the Agency Model: Screening, Signaling
- 5. Auctions.

## LEARNING ACTIVITIES AND METHODOLOGY

The teaching methodology includes:

- (1) Master classes, where the student will be introduced to the contents of the course. To facilitate the lecture, the students will have the basic reference texts. This will allow them to complete the topics in deep.
- (2) Case studies from the economic literature. These cases will be closely related to the specific capacities and skills that the students must develop.
- (3) Problems resolution. With these problems, the student should be able to self evaluate their knowledge and acquire the necessary skills.
- (4) Various quizzes during the course.
- (4) Presentation of team-work.

#### ASSESSMENT SYSTEM

The course grade will be the weighted average of the grade obtained in the continuous evaluation (50%) and a final comprehensive exam (50%). The continuous evaluation will be based on several quizzes, homework and a class presentation of an academic article on one of the topics of the course.

Students who do not pass the subject in the ordinary call will have an extraordinary call to pass:

- 1. If the student followed the continuous evaluation: the qualification will be the one established in the subject program for the ordinary call. However, you will have the right to be qualified only with the grade obtained in the final exam if this is more favorable.
- 2. If the student did not follow the continuous evaluation: the grade will be the one obtained in the final exam. However, the teacher may authorize the delivery of the continuous assessment exercises in the extraordinary call, evaluating in such a case in the same way as in the ordinary call.

% end-of-term-examination: 50

% of continuous assessment (assigments, laboratory, practicals...): 50

#### **BASIC BIBLIOGRAPHY**

- I. Macho y D. Pérez-Castrillo An Introduction to the Economics of Information, Oxford, 2001
- V. Krishna Auction Theory, Academic Press, 2010

## ADDITIONAL BIBLIOGRAPHY

- J. E. Harrington Games, Strategies, and Decision Making, Worth Publishers, 2009
- J.-J. Laffont, D. Martimort The Theory of Incentive, Princeton UP, 2002
- M. J. Osborne An introduction to Game Theory, Oxford UP, 2003
- B. Salanie The Economics of Contracts: A Primer, MIT Press, 2005
- P. Bolton, M. Dewatripont Contract Theory, MIT Press, 2005