

# Information Economics (20854)

**Degree/study:** Economía and ADE

**Course:** third

**Term:** third

**Number of ECTS credits:** 5 credits

**Hours of student's dedication:** 125 hores

**Language or languages of instruction:** english

**Professor:** Joan de Martí

## 1. Presentation of the subject

This course is divided into two parts. The first one is an introduction to decision-making with uncertainty and risk-sharing. The second one is an introduction to the study of models with asymmetric information: moral hazard, adverse selection, and signaling.

## 2. Competences to be attained

G1, G2, G9, G10, G11

The student will understand the relations between economic agents when the available information is imperfect and asymmetric.

## 3. Contents

3.1 Decision-making with Uncertainty

3.2 Risk

3.3 Moral Hazard

3.4 Adverse Selection

3.5 Signaling

## 4. Assessment

There will be a mid-term exam during the course. It will count a 20% of the final grade. Another 10% of the final grade will depend on attitude and participation in class, specially in seminar sessions. The rest of the grade will be based on the final exam.

$$\text{Final Grade} = 0.2 * \text{Mid-Term} + 0.1 * \text{Participation} + 0.7 * \text{Final\_Exam}$$

There will be an exam in July for those that don't pass the course given the above rule. The grade when taking this exam in July will be

Final Grade=  $\max\{0.2 * \text{Mid-Term} + 0.1 * \text{Participation} + 0.7 * \text{July\_Exam}, \text{July\_Exam}\}$

## 5. Bibliography and teaching resources

### 5.1. Basic bibliography

- I. Macho-Staedler & David Pérez-Castrillo, *Introducción a la Economía de la Información*, Editorial Ariel

There is a translation available:

- *An Introduction to the Economics of Information*, Oxford University Press

There will also be available lecture notes and problem sets.

### 5.2. Additional bibliography

- Louis Eeckhoudt, Christian Gollier and Harris Schlesinger, *Economic and Financial Decisions Under Risk*, Princeton University Press

### 5.3. Teaching resources

Articles related to the topics covered in class taken from press, specialized journals, and blogs.

## 6. Methodology

Lectures will focus on presenting the theoretical basis of the course. Seminar sessions will be devoted to solve questions about the problem sets and to the discussion of other problems that can help to deepen into alternatives, extensions, or critiques to the ideas and models presented in the lectures.

## 7. Activities Planning

Week 1: Decision-making under Uncertainty (Theory)

Week 2: Decision-making under Uncertainty: Risk (Theory)

Week 3: Applications: Insurance, Investment, and Risk-Sharing (Theory)

Week 4: Markets and Risk ; Moral hazard (Theory)

Decision-making and risk (Seminar)

Week 5: Moral Hazard (Theory)

Information and Economics (Seminar)

Week 6: Applications – Moral Hazard ; Adverse Selection (Theory)

Moral Hazard (Seminar)

Week 7: Adverse Selection (Theory)

Adverse Selection and Mechanism Design (Seminar)

Week 8: Applications – Adverse Selection; Signaling (Theory)

Adverse Selection and Mechanism Design II (Seminar)

Week 9: Signaling (Theory)

Signaling (Seminar)

Week 10: Applications - Signaling (Theory)