

**Economy and Management**

Code: 101903  
 ECTS Credits: 3

Degree	Type	Year	Semester
2501230 Biomedical Sciences	OT	4	0

**Contact**

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**Use of languages**

Principal working language: spanish (spa)

Some groups entirely in English: No

Some groups entirely in Catalan: Yes

Some groups entirely in Spanish: Yes

**Prerequisites**

This is a basic course in Economics and Management. Therefore, there is no prerequisite of previous knowledge.

**Objectives and Contextualisation**

The main objective of this course is to familiarize students in Biomedical Science with the tools of economic analysis and the world of business, a context where future graduates will develop their professional lives. What determines the existence of firms? How are they organized and provide incentives? How does a monopoly company behave? And a firm under perfect competition? What does value creation mean or how can you choose between different business projects or financing sources ?

The creation of value, as a socially desirable objective of firms, is a key element of the course. Thus, the first chapters emphasize the role of transactions as the main way of creating value. Several chapters are dedicated to define value creation and the relation with other objectives traditionally considered by firms, such as their profits. Later in the course, the creation of value and its management in the different activities of the firm, especially in the topics of production, financial transactions and the internal organization of the firm.

**Content**

**PART 1: THE NATURE OF THE FIRM AND ITS ORGANIZATION**

Topic 1. The Firm

1. The problem of the Organization and the creation of value
2. Example of the tribe
3. Company versus Market
4. Intermediate solutions
5. The entrepreneur

Topic 2. Perfect competition and monopoly

1. Perfect competition solution and the creation of Value
2. Perfect competition conditions
3. Monopoly solution and value
4. Consumer surplus, price discrimination and TDC

#### Topic 3. Firm Types

1. Firms from a legal perspective: the corporation
2. The responsibility of the partners, firm financing and the losses
3. The creation of value and the legal form
4. New forms of organizations
5. Firm types in the Spanish context

### PART II. ACTIVITIES OF THE FIRM

#### Topic 4. The production activity of the firm

1. The firm as a productive unit
2. The firm as a production function
3. The costs
4. Maximize production, minimize costs
5. The relationship between costs, the volume of activity and the profits
6. Economies of scale, scope and experience
7. Innovation, Value and New Technologies

#### Topic 5. The investments and the financial activity of the firm

1. The price in financial transactions, interest rates
2. Capitalization and update operations
3. The choice of investments or financing: interest rates
4. The creation of wealth in financial transactions
5. The selection of investments (or financing): NPV
6. The price in operations with more than one time period
7. The compound interest rate and the simple interest rate

### PART III. ORGANIZATIONAL DESIGN

#### Topic 6. Organizational design and the creation of value

1. The relevance of organizational design
2. Market failures and organizational solutions

3. The Agency problem and the problem with Teams
4. Moral Hazard and incentive contracts
5. Adverse selection, self-selection and signals
6. Examples of organizational solutions