

## 30173 - Business economics

### Syllabus Information

**Academic Year:** 2021/22

**Subject:** 30173 - Business economics

**Faculty / School:** 179 - Centro Universitario de la Defensa - Zaragoza

**Degree:** 563 - Bachelor's Degree in Industrial Organisational Engineering

**ECTS:** 4.5

**Year:** 3

**Semester:** Second semester

**Subject Type:** Compulsory

**Module:**

## 1. General information

### 1.1. Aims of the course

From the conceptual point of view, the objective of the course is to understand the functioning of markets, the process of price formation and the strategic behaviour of companies, taking into account that this behaviour is different according to the type of market structure. In a market economy, price is determined by the interaction of aggregate supply and demand. Therefore, to understand how prices are formed we must have previous knowledge about how consumers and companies behave.

More specifically, this subject will analyse the demand and supply, the price formation mechanism, the market structure, the strategic behaviour, the different forms of competition (in prices, quantities and / or differentiation), and dynamics of the competition.

In addition, other objectives are sought, related to generic attitudes or capacities, among which we can cite:

- Develop managerial skills.
- Develop the ability to solve problems and make decisions with creativity, initiative and critical reasoning.
- Encourage students to carry out research work in their professional field.

Specialization in Defence: These approaches and objectives are in line with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/>): good health and well-being (3), decent work and economic growth (8), industry, innovation and infrastructure (9), and responsible consumption and production (12); in such a way that the acquisition of the course learning outcomes provides training and competence to contribute to their achievement to some degree.

### 1.2. Context and importance of this course in the degree

The degree in Industrial Organization Engineering is based on the consideration that, among other abilities of the graduate, there must be those related to management (of economic and human resources). It is therefore objective of the degree to provide the student with skills for making business decisions or, in general, organizational and management decisions in organizations that must relate to the business environment. This advises that there are disciplinary contents that beyond instructing in management skills, offer basic knowledge of Economics.

The subject of Business Economics is inserted in the third year of the degree, together with the subject of Production Management, within the scope of Business Administration and other subjects of a generalist nature.

The student will learn to analyse the different market contexts where the companies are located, their objectives, functioning and strategic behaviour. To this end, the subject is structured in two blocks.

The first deals with basic aspects of the economy, economic behaviour and the company and its limits. The second is dedicated to the definition of Market, types of markets, structure: monopoly, monopolistic competition, oligopoly, and competitive analysis under different market models. In addition, the concept of Strategy is introduced in the framework of the company and strategic behaviours are studied in horizontal, vertical differentiation, price and quality competition.

Specialization in Defence: This subject contributes to the training of Army Officers by developing the skills for making organizational and management decisions (concerning human resources, facilities, etc.) that Army Officers need to carry out their mission and contribute to the development of society.

### **1.3. Recommendations to take this course**

Basic knowledge on differential calculus and statistics is required. Also, students must be conversant with basic concepts studied in Fundamentals of Administration and Firm Organization. Additionally, parts of this course will require use of Internet tools (email and moodle).

## **2. Learning goals**

### **2.1. Competences**

Upon passing the final exam, the student will have acquired the following skills, essential for the development of their profession:

- Ability to combine both general and specialised engineering knowledge to produce innovative and competitive proposals within the scope of professional practice.
- Ability to solve problems and take decisions with initiative, creativity and critical reasoning.
- Ability to analyse and evaluate the social and ecological impact of technical solutions, behaving ethically, with professional responsibility and social commitment, always striving for quality and continuous improvement.
- Applied knowledge of business organisations.
- Knowledge of the economic fundamentals of internal organisation and business strategy.

### **2.2. Learning goals**

Upon completion of the course, the student

- knows the principles of human behavior from the economic perspective.
- knows the economic fundamentals of allocation mechanisms (the market as allocator, efficiency and inefficiency, etc).
- understands the relationship between market structures, company behavior and results (private and social).
- designs a company strategy based on environmental conditions.
- conceives the role of industrial policy.
- includes the different variables and decision horizons in the company and its interdependencies.
- is able to create and capture value through the company's strategy.

- is able to perform an internal analysis of the company, in order to detect their unique resources and enhance them.
- is able to analyze the results of the company and put them in relation with the strategy and economic analysis of the company.

### 2.3. Importance of learning goals

See "Context and importance of this course in the degree".

## 3. Assessment (1st and 2nd call)

### 3.1. Assessment tasks (description of tasks, marking system and assessment criteria)

The student must demonstrate that they have achieved the required learning results, through the realization of exams, whose schedule will be announced at the beginning of the semester, described below.

#### FIRST CALL

Continuous assessment

The students will be able to pass the total of the subject by the continuous evaluation procedure. To do this, they must demonstrate that they have achieved the expected learning outcomes by passing two written tests; the first on topics 1 and 2 and the second on topics 3 and 4. Each test will have a weight in the final grade of 50%.

Written tests will combine:

- Short answer questions and essay-type questions, where the students demonstrate the knowledge and comprehension of the theoretical concepts and models. The criteria for evaluating these questions will take into account the relevance and clarity of the answers, but also the use of appropriate register and style.
- Problem-solving questions, which require that students apply different solution techniques (in some cases, in novel ways). The evaluation criteria of these questions include the accuracy of the solution, the analysis and interpretation of the results, and the correct use of the mathematical techniques required to find solutions.

The questions concerning theoretical concepts and models will be worth at least 30% of each test grade (and problem-solving questions will be worth up to 70%).

In the final mark of the continuous assessment (100%) the two tests and its weight will be taken into account. To pass the subject, the student's final grade must be equal to or greater than 5.

Global Test

The students who do not pass the subject by continuous assessment or who would like to improve their grades, will have the right to take the Global Test set in the academic calendar, prevailing, in any case, the best of both grades (the final mark of the continuous assessment or the final mark of the Global Test). This global test will have a 100% weight in the final grade and will consist of a written test similar to the continuous assessment written tests described above. To pass the subject, the student's final grade must be equal to or greater than 5.

#### SECOND CALL

Global Test

The students who do not pass the subject in the first call may take the Global Test set in the academic calendar for the second call. This Global Test will consist of of a written test similar to the continuous assessment written tests described above. To pass the subject, the student's final grade must be equal to or greater than 5.

#### Assessment Criteria

Regarding the assessment criteria, the register and style of writing will be assessed, as well as the correctness and precision of the results and reasoning carried out.

## 4. Methodology, learning tasks, syllabus and resources

### 4.1. Methodological overview

If this teaching could not be done in person for health reasons, it would be done telematically.

We have mainly adopted a teacher-centred approach to learning due to several reasons. The first one has to do with the classroom demographic: we have more than 150 students, who have some particular characteristics (strong limitations to organize their time disposal, many compulsory activities, and so on). The second one is related to the subject area: we have to present the basics of Microeconomics and Strategic Competition, which requires the use of traditional lectures and direct instruction. Finally, in our institution, it is extremely important to measure student learning through objectively scored tests and assessments.

Nevertheless, we will try to follow a student-centred approach to learning as much as possible. In particular, we will encourage students to play an active role in the learning process. There will be a lot of practical sessions and students will be required to spend much time in problem-solving tasks.

Learning activities focus on lectures, combined with practical sessions and classroom discussion. These activities will be supported by using remote platforms (such as Moodle) where teachers will provide support materials, problem sets, question lists, self-tests, etc.

The classes will be the combination of explanation and development of theoretical content, resolution of problem sets, and discussion of study cases and readings.

The learning methodology is organized according to the following methods:

- Lectures
- Problem-based learning
- Practical sessions
- Tutorials
- Study Cases

## 4.2. Learning tasks

The course includes the following learning tasks:

1. Traditional lectures in which the theoretical foundations of the main contents and the most important methods for solving numerical problems are presented. In these sessions, the student participation will be encouraged.
2. Practical sessions in which we will solve problem sets, discuss theoretical and applied questions and analyze study cases. As far as possible, we will require students to expose their work in public.
3. One-to-one tutorials where students will share their doubts and questions with teachers and these ones will monitor their progress.
4. Group tutorials aimed to ensure that all of the students have the same level of learning. In these tutorials, we will focus on solving problems and discussing applied questions, although the methodologies behind the models and methods will also be reviewed.
5. Reading List. A recommended reading list of publications will be compiled by teachers. This list will include academic papers, economic press articles, and study cases on firm competition, strategic behaviour, market price dynamics, and related issues. The documents in this list will be written in English preferably. The objectives pursued with this activity are to promote meditation and critical thinking, to familiarize students with academic terminology and methodology and to improve their English language skills.
6. Evaluation activities include the preparation and realization of the tests described in section 3 above.

See also sub-section 1.2 above.

## 4.3. Syllabus

This subject analyses the different market conditions in which firms operate, their aims, functioning and strategic commitments. To do this, the module studies the economic behaviour of consumers and entrepreneurs, and its implications for the analysis of the firm, including its horizontal and vertical limits. The concepts of perfect competition, monopolistic competition, monopoly and oligopoly are studied, along with their repercussions within a competitive business framework. The module finishes with the analysis of strategic behaviour with product differentiation and competition on prices and quality, and its extension to a dynamic framework.

The course will address the following topics:

- 1. Economic Behavior and Consumers' Demand.
- 2. Basic Elements of Supply: Profit and Cost Functions.
- 3. Competitive Markets.
- 4. Strategic Behavior and Imperfect Competition.

## 4.4. Course planning and calendar

The calendar of learning activities and the dates of the evaluation tests will be published on the website of the center <http://cud.unizar.es/calendarios>. They will also be available through Moodle (<https://moodle2.unizar.es/add/>).

In order to achieve the learning outcomes, the following in-class and home activities will be developed:

The classroom activities will be the following:

- ? Lectures.
- ? Problem and case solving.
- ? Evaluation Activities: Theoretical-practical tests and final exam.

The home activities will be the following:

- ? Study and review of the recommended bibliography.
- ? Problem and case solving.
- ? Tutoring and/or reinforcement classes in groups.

? Evaluation Activities: Specific preparation of the evaluation tests.

Tutoring:

The individual resolution of practical exercises and cases, as well as the observation and direct contact with the student, will serve to guide and direct the proper progress of the same.

The key dates of the activities and evaluation tests will be published on the website of the center <http://tud.unizar.es/calendarios>. They will also be announced through Moodle (<https://moodle2.unizar.es/add/>).

#### **4.5. Bibliography and recommended resources**

See <http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=30173>