

Course guide

320101 - EGEM - Economics and Business Administration

Last modified: 19/04/2023

Unit in charge: Terrassa School of Industrial, Aerospace and Audiovisual Engineering
Teaching unit: 732 - OE - Department of Management.

Degree: BACHELOR'S DEGREE IN AUDIOVISUAL SYSTEMS ENGINEERING (Syllabus 2009). (Compulsory subject).

Academic year: 2023 **ECTS Credits:** 6.0 **Languages:** Catalan, Spanish

LECTURER

Coordinating lecturer: CARMEN ESPOT PIÑOL

Others: Espot Piñol, Carmen

DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

Specific:

CE05-ESAUD. Adequate knowledge of the concept of a company, institutional and legal framework of the company. Organization and management of companies. (Basic training module)

Generical:

CG03-ESAUD. Knowledge of basic subjects and technologies, which enables learning of new methods and technologies, as well as providing great versatility to adapt to new situations.

CG08-ESAUD. Knowledge and application of basic elements of economics and human resource management, project organization and planning, as well as legislation, regulation, and standardization in telecommunications.

Transversal:

CT01 N1. Entrepreneurship and innovation - Level 1. Showing enterprise, acquiring basic knowledge about organizations and becoming familiar with the tools and techniques for generating ideas and managing organizations that make it possible to solve known problems and create opportunities.

Basic:

CB1. That students have demonstrated possession and understanding of knowledge in a field of study that is based on general secondary education, and is typically found at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study.

CB2. That students can apply their knowledge to their work or vocation in a professional manner and possess the competencies typically demonstrated through the development and defense of arguments and problem-solving within their field of study.

TEACHING METHODOLOGY

- Sessions of exposure of contents.
- Sessions of practical work.
- Autonomous work of study and realization of exercises.
- Preparation and realization of evaluable activities in group.

Into the sessions of exposure of contents the teacher will introduce the theoretical bases of the subject, concepts, methods illustrating them with examples to facilitate understanding.

The presencials sessions of practical work in the classroom will be from three types:

Type A: The teacher will guide the students, with concepts and theoretical results, in the analysis of the information and in the resolution of problems applying methods.

Type B: Presentation of the works carried out in group on the part of the students.

Type C: Sessions of evaluation.

The students, will have to work and to study to solve the proposed exercises individually and in autonomous way, with the goal to assimilate the concepts.

The students will elaborate works in group, with a number of members to determine. Each of them will set forth, in public sessions, the obtained results. Those media that in each case are more suitable will be used to facilitate the understanding of the listeners about the presented subject.

LEARNING OBJECTIVES OF THE SUBJECT

The subject is structured in two parts. In the first part the goal is to introduce to the student in the knowledge of the principles and basic foundations of the economy. It is intended to be able to understand the mechanisms that scroll the different economical models and the implications and the influence that these have in the administration of a company. In the second part, in the one that the student already knows the rules of the game of the economical environment, the goal focuses on the knowledge of the management and the administration of the company. The concepts and foundations of the company, its structure, dynamic activity and purpose, as well as the role of the entrepreneurial one are studied. Aspects are approached like: the commercial one, the productive activity, the entrepreneurial and financial management, the management of the human resources, the subsystem of administration where the government of the company is studied in its several points of view and from different optics.

STUDY LOAD

Type	Hours	Percentage
Hours medium group	15,0	10.00
Self study	90,0	60.00
Hours large group	45,0	30.00

Total learning time: 150 h

CONTENTS

TOPIC 1: ECONOMICS: CONCEPTS AND PROBLEMS

Description:

- 1.1. The concept of economics.
- 1.2. Scarcity, choice and opportunity cost.
- 1.3. Factors and production.
- 1.4. Consumption, savings and wealth.
- 1.5. The choices available in a society.
- 1.6. Market functioning.
- 1.7. State intervention and market failures.
- 1.8. Demand, supply and market equilibrium.

Specific objectives:

For students to:

- Acquire basic knowledge of what economics is and the problems it entails.
- Acquire a good command of the concepts of scarcity, choice and opportunity cost.
- Understand the concept of production and its limitations in a society.
- Understand the mechanisms by which the market functions, in addition to market failures.
- Manipulate supply and demand functions and the main variables that influence them.
- Understand the various cases of market disequilibrium.

Related activities:

Test on concepts covered.

Full-or-part-time: 10h

Theory classes: 3h

Practical classes: 1h

Self study : 6h

TOPIC 2: CONSUMER BEHAVIOUR AND DEMAND

Description:

- 2.1. Constraints on consumers.
- 2.2. Budgets and budget constraints.
- 2.3. Consumer preferences and indifference curves.
- 2.4. Consumer choice and the constraints on choice.

Specific objectives:

For students to:

- Understand the principles that govern the behaviour of economic agents and the constraints that limit this behaviour.
- Understand the concept of a budget set and its relationship to changes in prices and income.
- Understand the principles of consumer preference and consumer choice leading to utility maximisation.
- Be able to separate the income and substitution effects of a price change.

Related activities:

Test on concepts covered.

Full-or-part-time: 10h

Theory classes: 3h

Practical classes: 1h

Self study : 6h

TOPIC 3: THE COMPANY AS A UNIT OF PRODUCTION. THE PERFECTLY COMPETITIVE MARKET

Description:

- 3.1. Production and analysis of production in the short and long term.
- 3.2. Productivity, costs and the relationship between the two.
- 3.3. Company income and profit.
- 3.4. Markets, according to their characteristics.
- 3.5. The income of a competitive company.
- 3.6. The amount produced in perfect competition in the short and long term.
- 3.7. A company's profit: extraordinary, normal or loss.

Specific objectives:

For students to:

- Understand the concept of rationality in decision-making by companies.
- Understand the concepts of short and long term in the theory of production.
- Distinguish between technical efficiency and economic efficiency.
- Relate the concepts of production and costs.
- Distinguish between the concepts of economic profit and accounting profit.
- Understand the characteristics of perfectly competitive markets and the process of maximising profit.
- Understand the long-term equilibrium of a competitive market and the dynamics that exist until this equilibrium is achieved.

Related activities:

Test on concepts covered.

Full-or-part-time: 10h

Theory classes: 3h

Practical classes: 1h

Self study : 6h

TOPIC 4: NON-COMPETITIVE MARKETS

Description:

- 4.1. Monopolies. Profit maximisation and production equilibrium.
- 4.2. Comparison of monopoly and perfect competition.
- 4.3. Reasons for the existence of monopolies: barriers to entry and natural monopolies.
- 4.4. Monopolistic competition.
- 4.5. Oligopolies: characteristics and models

Specific objectives:

For students to:

- Clearly distinguish between perfectly competitive markets and non-competitive markets.
- Understand monopoly equilibrium in comparison with an equivalent perfectly competitive market.
- Understand the benefits of competitive and non-competitive markets from the perspective of social welfare.
- Understand the basic characteristics of oligopolistic markets.

Related activities:

Test on concepts covered.

Full-or-part-time: 10h

Theory classes: 3h

Practical classes: 1h

Self study : 6h



TOPIC 5: MARKETS OF PRODUCTION FACTORS

Description:

- 5.1. Market of production factors vs. market of goods.
- 5.2. The hiring of labour in perfect competition.
- 5.3. Supply and demand in the labour market.
- 5.4. Labour market equilibrium.
- 5.5. Unemployment.

Specific objectives:

For students to:

- Understand factor markets and how they differ from goods markets.
- Understand demand decisions by competitive companies in the process of maximising profit.
- Understand the characteristics that make the labour market different from other markets.
- Understand why labour markets always have some unemployment.

Related activities:

Test on concepts covered.

Full-or-part-time: 5h

Theory classes: 1h 30m

Practical classes: 0h 30m

Self study : 3h

TOPIC 6: MACROECONOMIC CONCEPTS AND VARIABLES

Description:

- 6.1. Gross domestic product and economic activity.
- 6.2. Relative magnitudes as factors that drive unemployment.
- 6.3. Consumer price index.
- 6.4. Inflation rate.
- 6.5. Balance of payments.
- 6.6. Economic growth.

Specific objectives:

- Understand the main macroeconomic-related magnitudes of production and unemployment rates.
- Understand the meaning of the general price level and its growth rate, better known as the inflation rate.
- Understand the balance of payments as a text that provides key information on a country's foreign transactions.

Related activities:

Test on concepts covered.

Practical exercise covering Part 1.

Full-or-part-time: 15h

Theory classes: 4h 30m

Practical classes: 1h 30m

Self study : 9h



TOPIC 7: COMPANIES

Description:

- 7.1. Companies and entrepreneurs. Concepts and basics.
- 7.2. The activity of a company: system, business and strategy.
- 7.3. The company as an organisation.
- 7.4. Companies on the new global stage.

Specific objectives:

For students to:

- Understand the concept and function of a company.
- Understand the various types of companies from different perspectives.
- Understand the role of entrepreneurs in economic and social development. Understand the main attributes and essential abilities of entrepreneurs.
- Understand companies from a systems perspective, in which decision-making based on a comprehensive understanding of the system is feasible.
- Understand the importance of strategic planning in managing uncertainty in companies.
- Understand that a company is not only a system but also an organisation, and that as such it has a particular structure and set of principles.
- Understand and identify the various parts of a company.
- Understand the three aspects that characterise the structure and development of companies on the global stage: knowledge, innovation and values.

Related activities:

Test on concepts covered.

Full-or-part-time: 15h

Theory classes: 4h 30m

Practical classes: 1h 30m

Self study : 9h

TOPIC 8: COMMERCIAL SUBSYSTEM

Description:

- 8.1. Marketing management in a company.
- 8.2. Product concept.
- 8.3. The nature and importance of price.
- 8.4. Distribution.
- 8.5. Communication.
- 8.6. Marketing plan.

Specific objectives:

For students to:

- Understand the market-oriented business management approach.
- Understand marketing as an organisational function and a set of processes aimed at creating, communicating and delivering value to customers.
- Manage customer relationships in a way that benefits the organisation and other stakeholders.
- Understand the main variables and the various approaches to marketing management.
- Understand the concept, structure and process of creating a marketing plan.

Related activities:

Test on concepts covered.

Full-or-part-time: 15h

Theory classes: 4h 30m

Practical classes: 1h 30m

Self study : 9h



TOPIC 9: OPERATIONS SUBSYSTEM

Description:

- 9.1. Operations management: strategic and tactical decisions.
- 9.2. Important aspects of production: objectives, costs and productivity.
- 9.3. Strategic aspects of the production subsystem.
- 9.4. Production planning and scheduling

Specific objectives:

For students to:

- Generally understand the production subsystem. A later subject (Organisation of Operations) will cover all aspects of this topic in depth.
- Understand production as the series of processes, procedures, methods and techniques used by a company to create goods and services.
- Understand and distinguish between the various types of decisions that operations managers must make in order to anticipate the problems that may arise in pursuit of their final objective.

Related activities:

Test on concepts covered.
Practical exercise.

Full-or-part-time: 10h

Theory classes: 3h
Practical classes: 1h
Self study : 6h

TOPIC 10: FINANCIAL SUBSYSTEM

Description:

- 10.1. The financial function of a company.
- 10.2. Financial equilibrium: balance sheet, working capital, liquidity and solvency.
- 10.3. The performance of a company: profit, profitability and performance.
- 10.4. Elements and operation of a financial system.
- 10.5. Financial markets.
- 10.6. The decision to invest.
- 10.7. Fundamental variables of investment.
- 10.8. Selection of investments: static and dynamic methods.
- 10.9. Sources of financing for companies.

Specific objectives:

For students to:

- Understand a company's financial subsystem as representing the human body's circulatory system.
- Understand the principles underpinning a company's finances.
- Understand the financial environment in which a company operates.
- Interpret balance sheets and income statements and use them as tools for decision-making.
- Understand that the life of a company consists of a series of investments aimed at maintaining and increasing the company's productivity and profitability.
- Distinguish between different types of investment and understand the main methods for selecting the investments that are most favourable to a company's objectives.
- Understand the main sources of internal and external financing, as well as other, non-traditional financial instruments.

Related activities:

Test on concepts covered.
Practical exercise.

Full-or-part-time: 20h

Theory classes: 6h
Practical classes: 2h
Self study : 12h

TOPIC 11: HUMAN RESOURCES SUBSYSTEM

Description:

- 11.1. Human resource management.
- 11.2. Planning personnel needs.
- 11.3. The recruitment and selection process.
- 11.4. Staff training.
- 11.5. Employee remuneration.
- 11.6. Remuneration policies.
- 11.7. Conflict and cooperation in a company.
- 11.8. Negotiation in a company.

Specific objectives:

For students to:

- Understand the purpose of personnel management.
- Analyse human resource planning and address the most important aspects of new employees' involvement in the company, in particular their recruitment, selection and integration.
- Understand company reward systems and disciplinary action.
- Understand the basis for this system: the assessment of positions and effectiveness.
- Understand the various salary and remuneration systems and their goals, as well as the most important aspects of disciplinary actions.
- Understand the nature of negotiations, including the main characteristics of negotiators that can have an effect on the process.
- Understand key strategic and tactical principles.

Related activities:

Test on concepts covered.

Full-or-part-time: 15h

Theory classes: 4h 30m

Practical classes: 1h 30m

Self study : 9h

TOPIC 12: ADMINISTRATION SUBSYSTEM

Description:

- 12.1. Business administration as a process.
- 12.2. The concept of the manager and his/her role in the company
- 12.3. Taxonomy of managers: behaviour and management styles.
- 12.4. The decision-making process.
- 12.5. Corporate culture and values.

Specific objectives:

For students to:

- Understand the importance of guiding and directing the decisions and actions that take place in a company.
- Understand that management is an essential and central part of the administrative process.
- Understand the importance of communication in making a company work properly, and be capable of achieving this sort of communication.
- Understand the various organisational structures.
- Understand the importance of establishing a culture and ethics as values to strengthen and characterise a company.

Related activities:

Test on concepts covered.

Practical exercise.

Full-or-part-time: 15h

Theory classes: 4h 30m

Practical classes: 1h 30m

Self study : 9h

ACTIVITIES

ACTIVITY 1: EVALUATION TESTS

Description:

At the end of each topic students will do a test (multiple choices)

Specific objectives:

To verify and evaluate the level of knowledge achieved by the student.

Material:

ATENEA and papers.

Delivery:

Evaluable

Full-or-part-time: 0h 30m

Theory classes: 0h 30m

(ENG) TÍTOL DE L'ACTIVITAT 2: EXERCICI D'APLICACIÓ PRÀCTICA

Full-or-part-time: 0h 45m

Theory classes: 0h 45m

GRADING SYSTEM

Continued evaluation:

- All the activities proposed at individual level and in group will be evaluated.
- 35% of the final qualification will be generated as a result of valuing the activity continued developed during the course.
- 50% it will be generated from the qualifications obtained along the several tests carried out in the course of the first (25%) and second evaluation (25%).
- The remaining 15% of the final mark will be based on the formal aspects, attendance and participation of the activities performed through the year.

For those students who meet the requirements and submit to the reevaluation examination, the grade of the reevaluation exam will replace the grades of all the on-site written evaluation acts (tests, midterm and final exams) and the grades obtained during the course for lab practices, works, projects and presentations will be kept.

If the final grade after reevaluation is lower than 5.0, it will replace the initial one only if it is higher. If the final grade after reevaluation is greater or equal to 5.0, the final grade of the subject will be pass 5.0.

BIBLIOGRAPHY

Basic:

- Blanco Sánchez, Juan Manuel. Economía: teoría y práctica [on line]. 6ª ed. Madrid: McGraw-Hill, 2014 [Consultation: 08/03/2023]. Available on : https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=8463. ISBN 9788448192815.
- González Domínguez, Francisco José; Ganaza Vargas, Juan D. Principios y fundamentos de gestión de empresas. 2ª ed. Madrid: Pirámide, 2008. ISBN 9788436821871.
- Castro Abancéns, I.; Rufino Rus, J.I. Creación de empresas para emprendedores. 2ª ed. Barcelona: Pirámide, 2015. ISBN 9788436834109.

Complementary:

- Brio González, J. Ángel del; Junquera Cimadevilla, B.; Fernández Sánchez, E. Iniciación a los negocios para ingenieros: aspectos funcionales. Madrid: Paraninfo, 2008. ISBN 9788497326810.



- Koontz, Harold; Weilrich, Heinz; Cannice, Mark. Administración: una perspectiva global, empresarial y de innovación [on line]. 15ª ed. México: McGraw-Hill, 2017 [Consultation: 28/10/2021]. Available on: https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=8101. ISBN 9786071513915.
- Díez de Castro, J. [et al.]. Administración de empresas: dirigir en la sociedad del conocimiento. Madrid: Pirámide, 2002. ISBN 9788436816785.