

DEGREE CURRICULUM BUSINESS ECONOMICS

Coordination: JUAREZ RUBIO, MARIA ISABEL

Academic year 2023-24

Subject's general information

Subject name	BUSINESS ECONOMICS						
Code	102522						
Semester	1st Q(SEMESTER) CONTINUED EVALUATION						
Typology	Degree		Course	Character		Modality	
	Bachelor's De Agricultural a Engineering	2	CON	COMMON/CORE Attendance-based			
Course number of credits (ECTS)	6						
Type of activity, credits, and groups	Activity type	PRAULA			TEC	PRIA	
	Number of credits	1.8			4.2		
	Number of groups	2		1			
Coordination	JUAREZ RUBIO, MARIA ISABEL						
Department	ECONOMICS AND BUSINESS						
Important information on data processing	Consult this link for more information.						

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
JUAREZ RUBIO, MARIA ISABEL	mariaisabel.juarez@udl.cat	4,8	
SÁNCHEZ ARCE, GERMÁN	german.sanchez@udl.cat	3	

Learning objectives

Academic objectives of the subject

The student, upon passing the subject, must be able to:

- Know the basis of the theory of production and costs.
- Perform and interpret a balance sheet and an income statement.
- Evaluate financial investment projects.
- Know the techniques of production planning.
- To propose and solve elementary models of planning of agro-industrial production in the short and long term.
- Design a business plan.

Competences

BACHELOR'S DEGREE IN AGRICULTURAL AND FOOD ENGINEERING

Competencies

Basic Competencies

- CB1. That students have demonstrated to possess and understand knowledge in an area of study that starts from the base of general secondary education, and is usually found at a level that, although supported by advanced textbooks, also includes some aspects that imply knowledge from the forefront of your field of study.
- CB2. That students know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.
- CB3. That students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant issues of a social, scientific or ethical nature.
- CB4. That students can transmit information, ideas, problems and solutions to both specialized and non-specialized audiences.
- CB5. That students have developed those learning skills necessary to undertake further studies with a high degree of autonomy.

General Competencies

CG6. Ability to direct and manage all kinds of agrifood industries, agricultural and livestock farms, urban and / or rural green spaces, and public or private sports areas, with knowledge of new technologies, quality processes, traceability and certification and the marketing and commercialization techniques for food products and cultivated plants.

CG7. Knowledge of basic, scientific and technological subjects that allow continuous learning, as well as an ability

to adapt to new situations or changing environments.

CG8. Ability to solve problems with creativity, initiative, methodology and critical reasoning.

CG13. Correction in oral and written expression.

Specific Competencies

CEFB7. Adequate knowledge of the business concept, institutional and legal framework of the company. Organization and management of companies.

BACHELOR'S DEGREE IN FOOD SCIENCE AND TECHNOLOGY

Specific Competencies

- CE49. Design a Business Plan and a Business Organization Scheme.
- CE50. Evaluate economically an investment.

Basic Competencies

- CB1. Possess and understand knowledge from the base of general secondary education 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. Know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.
- CB3. Ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant issues of a social, scientific or ethical nature.
- CB4. Ability to transmit information, ideas, problems and solutions to both specialized and non-specialized audiences.
- CB5. Development of those learning skills necessary to undertake further studies with a high degree of autonomy.

General Competencies

- CG1. Analyze specific situations, define problems, make decisions and implement action plans in search of solutions.
- CG2. Interpret studies, reports, data and analyze them numerically.
- CG3. Select and manage the available written and computerized sources of information related to the professional activity.
- CG4. Work alone and in a multidisciplinary team.
- CG5. Understand and express themselves with the appropriate terminology.
- CG6. Discuss and argue in various forums.
- CG7. Recycle in new technological advances through continuous learning.
- CG8. Value whole training, personal motivation and mobility.
- CG9. Analyze and assess the social and ethical implications of professional activity.

- CG10. Have a critical and innovative spirit.
- CG11. Analyze and assess the environmental implications in professional activity.

Transversal Competencies

- CT1. Correctly present information in oral and written form.
- CT3. Use existing IT and communication tools as support for the development of their professional activity.
- CT4. Respect the fundamental rights of equality between men and women, the promotion of Human Rights and the values of a culture of peace and democratic values.

Subject contents

DEGREE IN AGRICULTURAL AND FOOD ENGINEERING

Program

- 1.- COMPANY AND BUSINESSMAN
- 1. Concept of company. 2. Types of business. 3. The businessman. 4. The businessman in the small and medium business. 5. Big company: risk and decision businessman. 6. The agrarian company. 7. The production process in the agrarian company. 8. The legal forms of companies in the agricultural sector.

Introduction to Finances

- 2.- INTRODUCTION TO ACCOUNTING AND FINANCE
- 1. The statement of financial position. 2. Assets and claims of the business. 3. Book inventory.
- 3.- THE BALANCE SHEET AND THE INCOME STATEMENT
- 1. The balance sheet. Curent and non-current assets. Current and non-current liabilities. Equity. 2. The income statement. 3. The statement of cash flows.
- 4.- ANALYSING FINANCIAL STATEMENTS AND MANAGEMENT ACCOUNTING
- 1. Financial ratios. 2. Income statement layout.
- 5. THE FINANCIAL ASSESSMENT OF INVESTMENT PROJECTS
- 1. Parameters that define an investment. 2. The influence of time on the value of money. 3. Investment assessment criteria. 4. Sensitivity analysis.

Theory of production and costs

- 6.- THE PRODUCTION IN THE COMPANY
- 1. Factors of production. 2. The simple production function. Productivities, technical maximum and technical optimal. 3. The production function with two variable factors. Optimal combination of factors. 4. Homothetical and non-homothetical production.
- 7.- THE COSTS OF PRODUCTION
- 1. Fixed and variable costs. Opportunity costs. 2. Break-even point concept. 3. Average costs and marginal costs.
- 4. Cost curves. 5. The economic optimum. 6. Concepts: Profit, Gross margin and Cash flows.

Decision Making Models

- 8. PROGRAMMING THEORY
- 1. Approach to the programs and search for solutions in linear programming. 2. Types of optimum. 3. Types of variables. 4. Duality.

9. APPLICATIONS OF THE PRODUCTION PLANNING

1. Planning of agricultural production. 2. Formulation of composite feed. 3. Models of mixtures. 4. Other applications.

10. SHORT TERM: MODELS OF TRANSPORTATION AND COMMERCIAL DISTRIBUTION

1. Hitchcock transport model. 2. Imbalance between supply and demand. 3. Maximization of benefits. 4. Commercial distribution models. 5. Assignment problems.

11. LONG TERM: MODELS OF LOCATION AND FIXED ASSETS RENEWAL

1. Location models. 2. Capacity and dimension. 3. Renewal of fixed assets.

12. TEMPORARY PLANNING OF PROJECTS

1. PERT method. 2. GANTT graphics. 3. Critical path.

DEGREE IN SCIENCE AND FOOD TECHNOLOGY

Program

- 1. GENERAL CONCEPTS OF THE AGRICULTURAL COMPANY
- 1. Business economics. 2. Business concept. Company and businessman. 3. Types of companies. 4. Design of a business plan.

INTRODUCTION TO FINANCIAL DECISIONS

2.- INTRODUCTION TO ACCOUNTING AND FINANCE

1. The statement of financial position. 2. Assets and claims of the business. 3. Book inventory.

3.- THE BALANCE SHEET AND THE INCOME STATEMENT

1. The balance sheet. Curent and non-current assets. Current and non-current liabilities. Equity. 2. The income statement. 3. The statement of cash flows.

4.- ANALYSING FINANCIAL STATEMENTS AND MANAGEMENT ACCOUNTING

1. Financial ratios. 2. Income statement layout.

5. THE FINANCIAL ASSESSMENT OF INVESTMENT PROJECTS

1. Parameters that define an investment 2. The influence of time on the value of money 3. Investment evaluation criteria. 4. Sensitivity analysis.

THEORY OF PRODUCTION AND COSTS. THE INDUSTRIAL ORGANIZATION

6. PRODUCTION, TECHNOLOGY AND COSTS

1. The short-term production function: average product and marginal product. 2. Long-term technology: scale performances. 3. The revenue function. 4. Short-term and long-term costs. 5. Maximizing profits in the company.

7. THE MARKET

1. Demand. 2. Supply. 3. The market balance. 4. Types of markets and the behavior of the company.

DECISION-MAKING MODELS IN THE AGRICULTURAL INDUSTRY

8. THEORY OF THE PROGRAMMING

1. Approach to the programs and search for solutions in linear programming. 2. Types of optimum. 3. Types of variables. 4. Duality.

9. APPLICATIONS OF THE PLANNING OF PRODUCTION

- 1. Planning of agro-industrial production. 2. Formulation of composite feed. 3. Models of mixtures. 4. Other agroindustrial applications.
- 10. SHORT TERM: MODELS OF TRANSPORTATION AND COMMERCIAL DISTRIBUTION
- 1. Hitchcock transport model. 2. Imbalance between supply and demand. 3. Maximization of benefits. 4. Commercial distribution models. 5. Assignment problems.
- 11. LONG TERM: MODELS OF LOCATION AND RENEWAL OF FIXED ASSETS
- 1. Location models. 2. Capacity and dimension. 3. Renewal of fixed assets.
- 12. TEMPORARY PLANNING OF PROJECTS
- 1. PERT method. 2. GANTT graphics. 3. Critical path.

Methodology

Type of activity	Description	Classroom activity student		Non-contact activity student		Assessment *	Total time / ECTS
		Objectives	Hours	Treball alumne	Hours	Hours	Hours
Master class	Master class (Classroom. Larg grup)	Explanation of the main concepts	30	Study: understanding and synthesizing knowledge	45	4	79h/3.16 ECTS
Problems and cases	Participatory class (Classroom. Small group)	Resolution of problems and cases	7	Learn to solve problems and cases	10	2	19h/0.76 ECTS
Seminar	Participatory class (Classroom. Small group)	Conducting discussion or application activities	10	Solve problems and cases. To argue.	15	0.5	27h/1.08 ECTS
Laboratory	Pràctica de Laboratori (Grup mitjà)	Execució de la pràctica: comprendre fenòmens, mesura					
Computer room	Computer classroom practice (Small group)	Execution of the practice: understanding phenomena, measuring	8	Study and assimilate			8h/0.32 ECTS
Field practices	Pràctica de camp (Grup mitjà)	Execució de la pràctica: comprendre fenòmens, mesura					

Visits	Visita a explotacions o industries	Realització de la visita					
Directed activities	Student work (individual or group)	Orient the student at work (during tutorials)	5	Do a bibliographical, practical work, etc	12		17h/0.68 ECTS
Others							
Totals			60		82	8	150h/6ECTS

Development plan

Please find the temporary programming at the Virtual Campus of the subject.

Evaluation

Continuous assessment

The subject grade consists in two exams (75%), practices (15%) and class participation (10%). The recovery exam is for the whole subject.

Alternative evaluation

In the event that a student accredits documentary (work contract and summary of the working life issued by the Treasury of the Social Security) that they are working full-time during the teaching year and therefore cannot meet the established requirements For the continuous evaluation, you can choose to carry out a unique test of validation of competencies and knowledge that will be carried out in the weeks indicated for this purpose in the calendar of evaluation of the degree. The request for this evaluation modality must be made before February 26 with documentary accreditation and, once made, cannot be modified.

According to art. 3.1 of the UdL evaluation regulations, the student may not use, in any case, during the realization of the evaluation tests, unauthorized means or fraudulent mechanisms. The student who uses any fraudulent means related to the test and / or carries electronic devices not allowed, must abandon the exam or test, and will be subject to the consequences provided in these regulations or in any other regulations of the internal regime of the UdL

Bibliography

Basic Bibliography

Alonso, R.; Serrano, A. (2008). Economía de la Empresa Agroalimentaria. Mundi-Prensa, Madrid.

Ballestero, E (1992). Principios de Economía de la Empresa. Alianza Universidad Textos, Madrid.

Clop, M.M.; Juárez, F. (2003). **Programació lineal per a l'enginyeria agrària. Casos pràctics**. Edicions de la Universitat de Lleida. Hillier, F.S.;

Hillier, M.S. (2008). **Métodos cuantitativos para administración**. McGraw-Hill, Mèxic.

Juliá Igual, J.F.; Server Izquierdo, R.J. (1996). **Dirección Contable y Financiera de Empresas Agroalimentarias**. Ediciones Pirámide S.A., Madrid.

Krugman, P.; Wells, R. (2006). Introducción a la Economía. Microeconomía. Editorial Reverté, Barcelona.

Omeñaca García, J. (2008). **Contabilidad General** (11ª edición). Ediciones Deusto, Barcelona.Romero, C. (1990) Normas prácticas para la evaluación financiera de proyectos de inversión enel sector agrario. Banco de Crédito

Agrícola. Madrid.

Romero, C. (2000). **Técnicas de Programación y Control de Proyectos**. Ediciones Pirámide.Madrid.