

## 28922 - Agricultural economics

### Información del Plan Docente

Academic Year	2016/17
Academic center	201 - Escuela Politécnica Superior
Degree	437 - Degree in Rural and Agri-Food Engineering
ECTS	6.0
Course	3
Period	First semester
Subject Type	Compulsory
Module	---

### 1. Basic info

#### 1.1. Recommendations to take this course

#### 1.2. Activities and key dates for the course

### 2. Initiation

#### 2.1. Learning outcomes that define the subject

#### 2.2. Introduction

### 3. Context and competences

#### 3.1. Goals

#### 3.2. Context and meaning of the subject in the degree

#### 3.3. Competences

#### 3.4. Importance of learning outcomes

### 4. Evaluation

### 5. Activities and resources

#### 5.1. General methodological presentation

The aim of this subject is to provide the students with the economic analysis principles and methods to get some competences in: agricultural valuation and determination of cultivation, plantations, cattle and food and agriculture industries costs. So as the economic-financial of investments analysis, and they know the mechanism that rule the food and agriculture products market from an applicative point of view.

#### 5.2. Learning activities

Lecture/presentation, question and answers, practical sessions (hands-on practice)

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### 5.3.Program

#### Syllabus

This subject consists of three different blocks with a total of 9 units - economy of agri-food companies, agricultural assessment and marketing of agri-food products. The units have been designed thinking of the professional needs of the future graduated in Food and Agricultural Engineering.

#### PRESENTATION OF THE SUBJECT

Concept and characteristics of agricultural economy. Need and importance of agricultural economy in the curriculum of the degrees in agricultural engineering.

#### FIRST BLOCK: ECONOMY OF THE AGRI-FOOD COMPANY

##### UNIT 1: COSTS IN PRODUCTION PROCESSES

Concept of production cost. Difference between cost, expense and payment. Fix and variable costs. Direct and indirect costs (allocation of costs). Objective and estimated costs (depreciation cost and opportunity cost). Performance of costs in the short and in the long term (economies of scale and replacement yield). Capitalization and updating. Cost of production of fix assets. Quantification of economic achievement - gross margin, net margin, available margin, corporate profit, added value. Deadlock or low level of profitability.

##### UNIT 2: ANALYSIS OF AGRI-FOOD INVESTMENTS

Concept of investment. Parameters characterizing an investment project. Determining revenues and payments. Objectives of the investment analysis. Investment assessment criteria - net present value, pay-back period and internal rate of return. Simplifying assumptions for the calculation of investments. When cash flows are not annual. Sensitivity analysis. Introduction to the risk in investment decisions. The effect of inflation in investment decisions.

#### SECOND BLOCK: AGRICULTURAL ASSESSMENT

##### UNIT 1: INTRODUCTION AND VALUATION CRITERIA

Definition and purpose of agricultural valuation. Sciences related to valuation. Valuation of farms and its peculiarities. Valuation report. The evidence of experts seen by the judge.

##### UNIT 2: SYNTHETIC AND STATISTICAL METHODS OF AGRICULTURAL VALUATION

Classification or direct estimation synthetic methods. Correction synthetic method. Typical value method. Temporal comparison synthetic method. Modern synthetic methods - barycentric criterion, ratio comparison criterion, extreme data criterion, origin criterion. Cases when statistical valuation is indicated. Regression. Beta method or the method of the two Beta distributions. Variant of the two triangles.

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### UNIT 3: ANALYTICAL AND SUBJECTIVE AGRICULTURAL VALUATION METHOD

Classical analytical method. General approach. Rental tax and calculated rent. Corrected analytical methods - separation of capital and profit and its difficulties. Choice of the type of updating through statistical and synthetic methods. Performance variations, capital and gains. The type of updating in practice. Obligatory expropriation. Subjective value in case of a farming estate or company. Subjective value in case of alternative investments.

### UNIT 4: ASSESSMENT OF DAMAGE AND OTHER AGRICULTURAL ASSETS

Basic concepts. Agricultural insurance and General Rules for Expertise Reporting. The process of expertise reporting of agricultural damages. General characteristics of the Agricultural Insurance Plan. Examples of lines of insurance and Specific Rules of Expertise Reporting in different crops. Easements. Assessment of pending crops. Assessment of fields. Assessment of irrigation water. Reparcelling.

### THIRD BLOCK: MARKETING OF AGRI-FOOD PRODUCTS

#### UNIT 1. SUPPLY AND DEMAND. TYPES OF MARKET

Supply and demand of agricultural and agri-food products. Characteristics of the elasticity of the supply and demand of agricultural products. Types of market - perfect competition. Monopolistic competition, oligopoly and monopoly.

#### UNIT 2. MARKETING OF AGRICULTURAL PRODUCTS

The commercial management of agricultural companies. The cost of marketing. Usefulness, functions and agents of marketing. Markets and contracting centres. Wholesale and retail trade. Definition and importance of distributing process. General characteristics of agricultural products trade. Growing dynamic of distribution margin. Factors which favour the increase of demand of distribution services. Rationalization of distributing process.

#### UNIT 3. AGRI-FOOD MARKETING

Concept of agri-food marketing. Segmentation of markets. Marketing variables and strategies. Marketing planning.

### PRACTICAL SESSIONS

Resolution of problems and practical cases:

- Calculation of costs, economic results and levels of profitability in crops, fields, flocks and agri-food companies - design of spreadsheets
- Analysis of investments in agricultural and agri-food companies
- Financial analysis of agricultural and agri-food companies
- Agricultural valuation

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### 5.4.Planning and scheduling

### 5.5.Bibliography and recomended resources

- BB** Ballestero, Enrique. Economía de la empresa agraria y alimentaria : producción , costos, mercadotecnia agroalimentaria, inversiones, financiación, valoración agraria / Enrique Ballestero . 2a ed., rev. y ampl. Madrid [etc.] : Mundi-Prensa, 2000
- BB** Caballer Mellado, Vicente. Valoración agraria : teoría y práctica / Vicente Caballer Mellado . 5a. ed. rev. y amp. Madrid, [etc.] : Mundi-Prensa, 2008
- BB** Caldentey Albert, Pedro. Comercialización de productos agrarios / Pedro Caldentey Albert . 5a. ed. Madrid : Editorial Agrícola Española : Mundi-Prensa, 2004
- BB** Colom Gorgues, Antonio. Evaluación de la rentabilidad de proyectos de inversión : aplicación de los sectores agrario y agroalimentario / Antonio Colom Gorgues . Lleida : Edicions de la Universitat de Lleida, D.L. 2009
- BC** Alonso Sebastián, Ramón. Economía de la empresa agroalimentaria / Ramón Alonso Sebastián, Arturo Serrano Bermejo . 3ª ed. Madrid [etc.] : Mundi-Prensa, 2008
- BC** Alonso Sebastian, Ramón. Los costes en los procesos de producción agraria : metodología y aplicaciones / Ramón Alonso Sebastián, Arturo Serrano Bermejo . Madrid : Mundi-Prensa, 1991
- BC** Alonso Sebastián, Ramón. Valoración agraria : casos prácticos de valoración de fincas / Ramón Alonso Sebastián, Arturo Serrano Bermejo . Madrid : Editorial Agrícola Española, D.L.1998
- BC** Alonso Sebastián, Ramón. Valoración de empresas : Teoría y casos prácticos : Aplicaciones al sector agroalimentario / Ramón Alonso Sebastián , Aurelio Villa Pérez . [1a. ed.] Madrid : Mundi Prensa, 2007
- BC** Ballestero, Enrique. Contabilidad agraria / por Enrique Ballestero . 5a ed. rev. y ampl. Madrid : Mundi-Prensa, 1996
- BC** Blanco, Adolfo. Formulación y evaluación de proyectos / Adolfo Blanco R. . 2ª ed. rev., act. y ampl. Madrid : Edisofer, 2005
- BC** Caldentey Albert, Pedro. Economía de los mercados agrarios / Pedro Caldentey Albert, Ana Cristina Gómez Muñoz . Madrid : Mundi-Prensa, 1993

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- BC** Dirección contable y financiera de empresas agroalimentarias / dirección y coordinación, Juan Francisco Juliá Igual, Ricardo J. Server Izquierdo . [1ª ed.] Madrid : Pirámide, [1996]
- BC** Guadalajara, Natividad. Valoración agraria : casos prácticos / N. Guadalajara ; prólogo de Enrique Ballesteros . 2ª ed., rev. y amp. Madrid : Mundi-Prensa, 1996
- BC** Houck, James P.. Comercio exterior agrario : fundamentos y análisis / James P. Houck, Julián Briz . 2ª ed. Madrid [etc.] : Mundi-Prensa, 2000
- BC** La Reforma de la Política Agraria Común : preguntas y respuestas en torno al futuro de la agricultura / José María García Álvarez-Coque (coordinador) . Madrid : Ministerio de Agricultura, Pesca y Alimentación ; Eumedia, D.L. 2006
- BC** Munuera Alemán, José Luis. Estrategias de marketing para un crecimiento rentable : casos prácticos / José Luis Munuera Alemán, Ana Isabel Rodríguez Escudero . Madrid : ESIC, 2000
- BC** Romero, Carlos. Evaluación financiera de inversiones agrarias / Carlos Romero . Madrid [etc.] : Mundi Prensa, 1998