

## Course guide

### 390210 - AMIVA - Market Analysis and Agricultural Valuation

**Last modified:** 06/06/2023

**Unit in charge:** Barcelona School of Agri-Food and Biosystems Engineering  
**Teaching unit:** 745 - DEAB - Department of Agri-Food Engineering and Biotechnology.

**Degree:** BACHELOR'S DEGREE IN AGRICULTURAL ENGINEERING (Syllabus 2009). (Compulsory subject).  
BACHELOR'S DEGREE IN AGRICULTURAL, ENVIRONMENTAL AND LANDSCAPE ENGINEERING (Syllabus 2009). (Compulsory subject).  
BACHELOR'S DEGREE IN FOOD ENGINEERING (Syllabus 2009). (Compulsory subject).  
BACHELOR'S DEGREE IN AGRONOMIC SCIENCE ENGINEERING (Syllabus 2018). (Compulsory subject).

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

#### LECTURER

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**Coordinating lecturer:** JOSE MARIA GIL ROIG

**Others:** OSCAR ALFRANCA  
ZEIN KALLAS

#### REQUIREMENTS

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It is advisable to have passed the topic Statistics from Q3

#### DEGREE COMPETENCES TO WHICH THE SUBJECT CONTRIBUTES

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**Specific:**

1. Valuation of agricultural firms and commercialization.

#### TEACHING METHODOLOGY

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The teaching methodology combines different learning tools addressed to facilitate the student's comprehension of the content of this topic as well as to enhance their ability to apply the learned knowledge of day-to-day case studies. On one hand, there will be a series of theoretical concepts that the Professor will transmit in traditional lectures, combined with practical exercises aimed at the application of the acquired knowledge. Practical exercise will cover a wide range of activities from the review of scientific papers, public defense of small case studies and resolution of economic problems. In all cases, the teaching methodology will use learning cooperative tools to facilitate student's participation. Finally, in all cases, lectures would benefit from the use of upgraded ICT tools.

#### LEARNING OBJECTIVES OF THE SUBJECT

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At the end of the course, students should be able to understand the concept of Agro-food Markets and the complexity of the existing interrelationships among market agents (from farm to fork), as well as the role of the public sector. Furthermore, students should be able to critical use the economic models (understood as a simple representation of reality), and to be aware about their limitations. In the same context, students should be able to explain the current situation of a specific food sector taking into account also its growing globalization. Finally, students should be able to economically value agricultural assets: trees, agricultural land, agricultural holdings, future harvests and machinery.



## STUDY LOAD

Type	Hours	Percentage
Self study	90,0	60.00
Hours large group	40,0	26.67
Hours small group	20,0	13.33

**Total learning time:** 150 h

## CONTENTS

### INTRODUCTION TO FOOD MARKETS

**Description:**

Content:

Concept, classification and functioning of food markets.

Classification of food markets taking into account the level of competition

**Related activities:**

Activity 1: Theoretical lectures

Activity 2: Individual assessment

Activity 3: Exxercise resolution (homework).

Activity 4: Final project.

**Full-or-part-time:** 14h

Theory classes: 4h

Self study : 10h

### THEORY OF AGROFOOD MARKETS

**Description:**

Content:

Introduction to Economics

Supply and Demand of food roducts

Types of markets: perfect competition, monopoly and oligopoly

**Related activities:**

Activity 1: Theoretical lectures

Activity 2: Individual assessment

Activity 3: Exxercise resolution (homework).

Activity 4: Final project.

**Full-or-part-time:** 65h

Theory classes: 17h

Practical classes: 8h

Self study : 40h

## EMPIRICAL ANALYSIS OF AGROFOOD MARKETS

### Description:

Content:

price analysis: time series tools

Regression analysis

Empirical analysis of supply and demand

### Related activities:

Activity 1: Theoretical lectures

Activity 2: Individual assessment

Activity 3: Exxercise resolution (homework).

Activity 4: Final project.

### Full-or-part-time: 58h

Theory classes: 15h

Practical classes: 8h

Self study : 35h

## AGRICULTURAL VALUATION

### Description:

Content:

Introduction to agricultural valuation

Valorization of agricultural holdings

### Related activities:

Activity 1: Theoretical lectures

Activity 2: Individual assessment

Activity 3: Exxercise resolution (homework).

### Full-or-part-time: 13h

Theory classes: 4h

Practical classes: 4h

Self study : 5h

## ACTIVITIES

### ACTIVITY 1: THEORETICAL LECTURES

### Full-or-part-time: 98h

Theory classes: 38h

Practical classes: 60h

## ACTIVITY 2: INDIVIDUAL ASSESSMENT

**Description:**

Students should pass a written exam about the theoretical concepts in sections 1, 2, 3 and 4

**Delivery:**

Oral Exam resolution which will account for 50% of the final grade

**Full-or-part-time:** 2h

Theory classes: 2h

## EXERCISE RESOLUTION (HOMEWORK)

**Description:**

We will solve practical exercises that students should have prepared before at home

**Material:**

Exercises available at ATENEA

**Delivery:**

Students should deliver the assigned tasks, either individually or in couples, depending on the specific task. The lecturer should provide feedback to students about the outcome

**Full-or-part-time:** 26h

Laboratory classes: 16h

Self study: 10h

## ACTIVITY 4: PROJECT

**Description:**

Students should deliver a final project, individually or in a group of two. The project will be addressed to the analysis of an agrofood sector and will consist of 3 stages:

1. descriptive analysis of the subsector as well as its recent evolution
2. Quantitative analysis of the demand and prices of a food product using the analytical tools showed during the course
3. Some concluding remarks and proposition of solutions

**Material:**

databases from the Departament d'Agricultura, Alimentació y Pesca (DARP) ([www.gencat.cat/darp](http://www.gencat.cat/darp)) of the Generalitat de Catalunya, as well as the databases from Ministerio de Agricultura, Alimentación, Pesca y Medioambiente (MAPAMA) ([www.marm.es](http://www.marm.es)) and international: EU ([www.eurostat.eu](http://www.eurostat.eu)) and FAO ([www.fao.org](http://www.fao.org)).

**Delivery:**

It will be delivered through ATENEA and will represent 35% of the final grade

**Full-or-part-time:** 24h

Laboratory classes: 4h

Self study: 20h

## GRADING SYSTEM

The final grade ( $N_{final}$ ) will be a weighted average of four components:

N1: 3 Written exams. Introduction to food markets + empirical analysis 45%, theory of markets 40%, agriucultural valuation 15%

N3: 2 projects

$N_{final} = 0,55N1 + 0,45N2$

## EXAMINATION RULES.

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## BIBLIOGRAPHY

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### Basic:

- Mochón Morcillo, Francisco. Economía : teoría y política [on line]. 6ª ed. Madrid [etc.]: McGraw-Hill, 2009 [Consultation: 26/07/2022]. Available on: [https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB\\_BooksVis?cod\\_primaria=1000187&codigo\\_libro=4580](https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=4580). ISBN 9788448170844.
- Gujarati, Damodar N. Econometría [on line]. 4ª ed. México, D.F.: McGraw-Hill, 2004 [Consultation: 26/07/2022]. Available on: [https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB\\_BooksVis?cod\\_primaria=1000187&codigo\\_libro=5867](https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=5867). ISBN 9701039718.
- Jordán Galduf, Josep M.; Antuñano Maruri, Isidro. Economía de la Unión Europea. 6a ed. Madrid: Civitas, 2008. ISBN 9788447030491.
- Caballer, Vicente. Valoración agraria [Recurs electrònic] : teoría y práctica [on line]. 5a. ed. Madrid: Mundi-Prensa, 2008 [Consultation: 15/07/2022]. Available on: <https://ebookcentral-proquest-com.recursos.biblioteca.upc.edu/lib/upcatalunya-ebooks/detail.action?pg-origsite=primo&docID=3176515>. ISBN 9788484763451.

### Complementary:

- Caldentey Albert, Pedro; Gómez Muñoz, Ana Cristina. Economía de los mercados agrarios. Madrid: Mundi-Prensa, 1993. ISBN 8471144271.
- Kotler, Philip; Armstrong, Gary. Fundamentos de marketing [on line]. 8a ed. México: Pearson Educación, 2008 [Consultation: 26/07/2022]. Available on: [https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB\\_BooksVis?cod\\_primaria=1000187&codigo\\_libro=6678](https://www-ingebook-com.recursos.biblioteca.upc.edu/ib/NPcd/IB_BooksVis?cod_primaria=1000187&codigo_libro=6678). ISBN 9789702611868.
- Uriel Jiménez, Ezequiel. Análisis de datos : series temporales y análisis multivariante. Madrid: Editorial AC, 1995. ISBN 8472881377.