390210 - AMIVA - Market Analysis and Agricultural Valuation

**Coordinating unit:** 390 - ESAB - Barcelona School of Agricultural Engineering  
**Teaching unit:** 745 - EAB - Department of Agri-Food Engineering and Biotechnology  
**Academic year:** 2018  
**Degree:**  
- BACHELOR'S DEGREE IN FOOD ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)  
- BACHELOR'S DEGREE IN AGRICULTURAL ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)  
- BACHELOR'S DEGREE IN AGRICULTURAL, ENVIRONMENTAL AND LANDSCAPE ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)  
- BACHELOR'S DEGREE IN FOOD ENGINEERING (Syllabus 2009). (Teaching unit Compulsory)  
**ECTS credits:** 6  
**Teaching languages:** Catalan, Spanish

### **Teaching staff**

- **Coordinator:** JOSE MARIA GIL ROIG  
- **Others:** OSCAR ALFRANCA  
  ZEIN KALLAS

### **Opening hours**

**Timetable:**  
- Chema Gil: Wednesday 10:00-13:00 and Thursday 9:00 - 12:00  
- Oscar Alfranca: Monday and Tuesday 9:00 - 12:00  
- Zein Kallas. Tuesday 13:30 - 14:30 i 16:00 - 18:00

### **Requirements**

It is advisable to have passed the topic Statistics from Q3.

### **Degree competences to which the subject contributes**

**Specific:**

1. Valuation of agricultural firms and commercialization.

### **Teaching methodology**

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**

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.

<table>
<thead>
<tr>
<th>Study load</th>
<th>Total learning time: 150h</th>
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<tbody>
<tr>
<td>Hours large group:</td>
<td>40h</td>
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<tr>
<td>Hours medium group:</td>
<td>0h</td>
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<tr>
<td>Hours small group:</td>
<td>20h</td>
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<tr>
<td>Guided activities:</td>
<td>0h</td>
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<tr>
<td>Self study:</td>
<td>90h</td>
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## Content

<table>
<thead>
<tr>
<th>INTRODUCTION TO FOOD MARKETS</th>
<th>Learning time: 14h</th>
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<tbody>
<tr>
<td></td>
<td>Theory classes: 4h</td>
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<td></td>
<td>Self study: 10h</td>
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**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: Exercise resolution (homework).
- Activity 4: Final project.

<table>
<thead>
<tr>
<th>THEORY OF AGROFOOD MARKETS</th>
<th>Learning time: 65h</th>
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<tbody>
<tr>
<td></td>
<td>Theory classes: 17h</td>
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<tr>
<td></td>
<td>Practical classes: 8h</td>
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<td></td>
<td>Self study: 40h</td>
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</tbody>
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**Description:**
Content:
- Introduction to Economics
- Supply and Demand of food products
- Types of markets: perfect competition, monopoly and oligopoly

**Related activities:**
- Activity 1: Theoretical lectures
- Activity 2: Individual assessment
- Activity 3: Exercise resolution (homework).
- Activity 4: Final project.
## 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: Exercise resolution (homework).
- Activity 4: Final project.

**Learning time:** 58h
- Theory classes: 15h
- Practical classes: 8h
- Self study: 35h

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## AGRICULTURAL VALUATION

**Description:**
- Content:
  - Introduction to agricultural valuation
  - Valorization of agricultural holdings

**Related activities:**
- Activity 1: Theoretical lectures
- Activity 2: Individual assessment
- Activity 3: Exercise resolution (homework).

**Learning time:** 13h
- Theory classes: 4h
- Practical classes: 4h
- Self study: 5h
### Planning of activities

| ACTIVITY 1: THEORETICAL LECTURES | Hours: 98h  
Theory classes: 38h  
Practical classes: 60h |
|----------------------------------|-----------------|

| ACTIVITY 2: INDIVIDUAL ASSESSMENT | Hours: 2h  
Theory classes: 2h |
|-----------------------------------|-----------------|

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

**Descriptions of the assignments due and their relation to the assessment:**  
Oral Exam resolution which will account for 50% of the final grade

| EXERCISE RESOLUTION (HOMEWORK) | Hours: 26h  
Laboratory classes: 16h  
Self study: 10h |
|---------------------------------|-----------------|

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

**Support materials:**  
Exercises available at ATENEA

**Descriptions of the assignments due and their relation to the assessment:**  
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

| ACTIVITY 4: PROJECT | Hours: 24h  
Laboratory classes: 4h  
Self study: 20h |
|---------------------|-----------------|

**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

**Support materials:**  
Databases from the Departament d'Agricultura, Alimentació y Pesca (DARP) (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) and international: EU (www.eurostat.eu) and FAO (www.fao.org).

**Descriptions of the assignments due and their relation to the assessment:**  
It will be delivered through ATENEA and will represent 35% of the final grade
The final grade ($N_{\text{final}}$) will be a weighted average of four components:

$N_1$: Written exams.

$N_2$: Exercises resolution (homework)

$N_3$: Final projects

CG: Generic Skills

$N_{\text{final}} = 0.5N_1 + 0.05N_2 + 0.35N_3 + 0.10CG$

### Bibliography

**Basic:**


**Complementary:**