

Academic Year/course: 2024/25

28946 - Fruit production II

Syllabus Information

Academic year: 2024/25

Subject: 28946 - Fruit production II

Faculty / School: 201 - Escuela Politécnica Superior

Degree: 583 - Degree in Rural and Agri-Food Engineering

ECTS: 6.0 **Year**: 4

Semester: First semester Subject type: Optional

Module:

1. General information

The subject and its expected results respond to the following approaches and objectives: Its overall objective is that the students know and understand the principles of the basics of Fruit Production II, so that they can use them in the development of their professional activity. Linked to these bases, they must also relate them to understand the systems of production at farm level, applying the most appropriate technologies of the production process.

Learning affects the SDGs: O2 Zero hunger (Target 2.3); O12 Sustainable consumption and products (Targets 12.2 and 12.4); O13 Combat Climate Change (Target 13.3).

2. Learning results

The learning outcomes acquired in this subject are relevant because they allow understanding the agronomic aspects of the production process and develop the student's ability to manage the influence of the ecological environment for the development and specific fruit production, as well as the planning of cultural practices necessary to obtain the quality appropriate to the production objectives set. Always linked to the aforementioned SDG objectives.

3. Syllabus

Theory Program

Module I. Fruit production

1. Fruit production and distribution. Organic production. Integrated Production.

Module II. Fruit species

- 1. Apple tree
- 2. Pear tree
- 3. Peach tree
- 4. Plum tree
- 5. Cherry tree
- 6. Almond tree
- 7. Apricot tree
- 8. Pistachio tree
- 9. Walnut tree
- 10. Granade tree

Module III. Viticulture

1. Grapevine

Module IV. Olive growing

1. Olive tree

Practice program:

Problem solving and cases

- Selection of cultivation areas using GIS
- 2. Strategic alternatives

Laboratory practices

- 1. Description and identification of fruit trees
- 2. Pruning of pome and stone fruit trees

- 3. Sexual and asexual multiplication
- 4. Monitoring ripening and harvesting

Special practical classes

Given the importance of direct contact with fruit growing for the learning of this subject, several external visits will be programmed in which farms with different production objectives will be visited.

4. Academic activities

Theoretical sessions. They will consist of expository and participative lessons. 30h

Practical problems and cases. These are demonstrative-active-interrogative activities in which students will learn various techniques and procedures. 11 a.m.

Greenhouse, field and laboratory practices. These are guided practical activities, the content is on applied aspects of the theoretical sessions. These activities will be carried out in the facilities of the Escuela Politécnica Superior, either in the greenhouse, laboratory or in the practice field. These are participatory-active-questioning activities. 10h Special practice. It will consist of visits to various companies where the student will be able to observe and analyze some of the contents and processes studied in the theoretical classes in order to test their capacity for observation, analysis and synthesis.

These are purely participatory-active-questioning activities. These are subject to the available budget for their implementation.

Tutorials, at the students' request, to solve any kind of doubts regarding the theoretical sessions as well as the practical sessions . In particular, they are highly recommended to focus the preparation of practices; in this case will consist of at least one scheduled tutorial. 6h

Non-presential activities. They consist of reading and understanding the theoretical knowledge material and solving the exercises proposed during the theory, practical and field sessions. These activities will be carried out with complete freedom time. 78h

Exam preparation and performance. Includes oral presentation of course work. 6h

5. Assessment system

The assessment system will be the same in all the calls proposed by the Center and will include the acquisition of knowledge, skills and attitudes of the subject.

Studentswho attend regularly and solve the questions and assignments that will be proposed in class will be able to pass the subject by means of continuous assessment. The assessment is made on the two course works that are elaborated and defended in class throughout the term. The final grade will be the average of the work presented, defended and participation in the classes.

On the other hand, students who wish to pass without attendance will take the exam on the work presented in class and on the content of theory and practice, which is described below:

- Multiple-choice questions, which will consist of several multiple-choice questions so that the maximum score in this section will be 3.2 points out of 10.
- Short questions to be developed in which the accuracy of the answer and the order in the writing will be valued. The maximum score in this section will be 5.6 points out of 10.
- Examination "de visu" of aspects related to the subject. This consists of recognizing the morphology of the species studied and the cultivation techniques applied. The maximum score in this section shall be 1.2 out of 10 points.

The success rates for the subject in the last three years are:2020/21: 100%; 2021/22: 100%; 2022/23: 100%;

6. Sustainable Development Goals

- 2 Zero Hunger
- 12 Responsible Production and Consumption
- 13 Climate Action