

SYLLABUS

1. COURSE DESCRIPTION

Degree:	Human Nutrition and Dietetics
Course:	Organic Food
Module:	Food science
Department:	Molecular Biology and Biochemical Engineering
Academic Year:	2017-18
Term:	Second
ECTS credits:	6
Year:	4°
Type:	Optional
Language:	Spanish

Course Model:	B1	
a. Basic Learning (EB):		60%
b. Practical Learning (EPD):		40%
c. Guided Academic Activities (AD):		

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2. LECTURERS

Coordinator	
Name:	Marisa Buide del Real
School:	School of Experimental Sciences
Department:	Molecular Biology and Biochemical Engineering
Area:	Botanics
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3. TOPICS

BASIC LEARNING (EB):

1. Environmental aspects of organic foods.

Unit 1. Ecological, biological or organic food: what they are and how they are produced.

Organic farming: concepts, principles and challenges.

Unit 2. Ecosystems and biodiversity.

Unit 3. Genetically modified organisms.

Unit 4. Agricultural land: physical, chemical and biological aspects. Problems with the use of fertilizers and agricultural pesticides. Compost.

Unit 5. Management techniques in ecological production: Rotation of crops and intercropping. Green fertilizers. Weeds control. Pest control in organic crops.

2. Economic aspects of organic foods.

Unit 6. European and regional legislation for organic food.

Unit 7. Organic farming: transition and certification.

Unit 8. Importance of organic production. Surface and ecological operators in Andalusia.

Unit 9. Prices and marketing strategies in organic food. Consumer profile of organic products.

3. Social and nutritional aspects of organic foods.

Unit 10. Can ecologic agriculture feed the world? Indicators of agricultural sustainability.

Unit 11. Social aspects of organic foods.

Unit 12. Nutritional characteristics of organic foods.

PRACTICAL LEARNING (EPD):

The practices (18 hours) will be distributed as follows:

- 8 hours of practices in the greenhouses of the botanics area and in the ecological orchards of UPO, for the sowing of seeds, transplant and monitoring of germination, growth and production of fruits of local varieties of cultivation used in ecological agriculture. An experiment was conducted comparing the effect of the substrate (compost versus controls and soil previously seeded with nitrogen-fixing legumes).

- 1 practice of 2 hours in the laboratory to weigh the production of the different varieties in the different substrates.

- 1 practice of 2 hours in the computer lab for the statistical analysis of the obtained data.

- Visit to organic production farm (6 h).