

63017 - Advances in technology and quality control of dairy products

Información del Plan Docente

Academic Year	2016/17
Academic center	105 - Facultad de Veterinaria
Degree	566 - Master's in Food Quality, Safety and Technology
ECTS	3.0
Course	1
Period	Second semester
Subject Type	Optional
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 methodology to be used for this subject will be the following:

1. Lectures: the students will have available in the ADD the presentations that will be shown in the lecture. In the classrooms there will be Internet connection to have access to complementary material, such as videos and web pages.
2. Laboratory practicals: they will be organized in small groups and will be supervised by the lecturers. These sessions will allow the students to apply the basic knowledge acquired in the lectures.

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3. Practical work: it will consist in an oral presentation, in PowerPoint format, of a summary of the work carried out in small groups.

5.2.Learning activities

The learning activities of this subject include lectures, laboratory practicals and the presentation of a practical work.

The lectures will give the students the knowledge on the last advances in the technology and quality control of dairy products. This knowledge will be necessary so that the students understand the content of the laboratory practicals and to select and develop the subject of the practical work. The students will participate in the presentation with questions and observations on the works of their classmates.

5.3.Program

Lectures (16 hours):

Lesson 1. Composition and structure of milk. Functional properties of milk components (3 hours).

Lesson 2. Emerging technologies for preservation of milk products: microfiltration, high pressure, microwaves and electric pulses (2 hours).

Lesson 3. Dairy products: technological and functional applications (2 hours).

Lesson 4. Milk-derived functional products (2 hours).

Lesson 5. Low- fat dairy products (2 hours).

Lesson 6. Sensory analysis of dairy products (3 hours).

Lesson 7. New techniques for quality control of dairy products: structure and texture analysis (2 hours).

Laboratory practicals (5 hours):

Practical 1: Sensory evaluation of dairy products: yogurt, fresh and mature cheese (3 hours).

Practical 2: Evaluation of texture: yogurt, fresh and mature cheese (2 hours).

Seminars of practical works (5 hours):

The students will give an oral presentation in PowerPoint format of the practical work to the group.

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5.4.Planning and scheduling

5.5.Bibliography and recomended resources