

29205 - Food Microbiology

Información del Plan Docente

Academic Year	2016/17
Academic center	229 - Facultad de Ciencias de la Salud y del Deporte
Degree	441 - Degree in Human Nutrition and Dietetics
ECTS	6.0
Course	1
Period	Second semester
Subject Type	Compulsory
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

5.2. Learning activities

5.3. Program

Theoretical program.

The microbial world. Brief History of Microbiology.

29205 - Food Microbiology

Microbial growth. Requirements. Growth phases.

Microbial ecology.

Control of microorganisms in food. Physical and chemical methods. Antimicrobial agents.

Foodborne pathogens. Pathogenicity determinants. *Salmonella* . *Shigella* . *Escherichia* . *Yersinia* . *Campylobacter* . *Staphylococcus* . *Clostridium* . *Listeria* . *Bacillus* . *Brucella* . *Mycobacterium* .

Toxicogenic fungi: *Aspergillus* , *Fusarium* , *Penicillium* .

Virus. Enterovirus. Norwalk virus. Rotavirus.

Prions and transmission to human food.

Food-borne parasites.

Food spoilage, microbial growth and alteration of fresh meat, fish and vegetable products.

Practical program

Preparation of culture media.

Staining and observation of microorganisms.

Identification of microorganisms. Biochemical tests.

5.4.Planning and scheduling

5.5.Bibliography and recommended resources