

SYLLABUS

1. COURSE DESCRIPTION

Degree:	Nutrition and Dietetics
Course:	Food Microbiology
Module:	Food Science
Department:	Molecular Biology and Biochemical Engineering
Academic Year:	2017-18
Term:	First
ECTS credits:	6
Year:	2nd year
Type:	Compulsory
Language:	Spanish

Course Model:	B1	
a. Basic learning (EB):		60 %
b. Practical learning (EPD):		40 %

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2. LECTURERS

Coordinator	
Name:	Javier García Pereda
School:	School of Experimental Sciences
Department:	Molecular Biology and Biochemical Engineering
Area:	Microbiology
Office Hours:	Mondays and Wednesdays: 10.00-11.30 and 17.00-18.00 (please, previous appointment through e-mail)
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3. TOPICS

BASIC LEARNING (EB) (27 h)

1. MICROBIOLOGY: BASIC CONCEPTS (9 h)

UNIT 1. INTRODUCTION TO GENERAL MICROBIOLOGY AND FOOD MICROBIOLOGY

UNIT 2. BASIC TECHNIQUES IN MICROBIOLOGY

UNIT 3. MICROBIAL CELL BIOLOGY

UNIT 4. MICROBIAL CELL METABOLISM

UNIT 5. MICROBIAL GENETICS

2. MICROORGANISMS IN FOOD (18 h)

UNIT 6. MICROBIAL ALTERATIONS IN FOOD

UNIT 7. MICROBIAL DISEASES AND THEIR TRANSMISSION THROUGH FOOD

UNIT 8. FOOD POISONING

UNIT 9. DISEASES CAUSED BY PROTOZOA AND HELMINTHS AND THEIR TRANSMISSION THROUGH FOOD

UNIT 10. VIRUSES, PRIONS AND OTHER FOOD-BORNE BIOHAZARDS

UNIT 11. MICROBIAL ANALYSIS OF FOOD

UNIT 12. BENEFICIAL MICROORGANISMS IN FOOD

PRACTICAL LEARNING (EPD) (18 h)

- i. Basic microbiological techniques: microbial growth and microscopy. Relationship with EB topic 1.
- ii. Detection and identification of microorganisms in water samples by methods classic Relationship with EB topic 2.
- iii. Detection of Salmonella in mayonnaises by molecular methods. Relationship with EB topic 2.