

# **SYLLABUS**

## 1. COURSE DESCRIPTION

Degree:	Nutrition and Dietetics
Course:	Nutritional Foundations and Cancer
Module:	Nutrition and Health Science
Department:	Molecular Biology and Biochemical Engineering
Academic Year:	2017-18
Term:	Second
ECTS credits:	4.5
Year:	3 <sup>rd</sup> year
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

## 2.1. Coordinator: José Luis Pereira Cunill

2.2. Lecturers:		
Name:	José Luis Pereira Cunill	
School:	School of Experimental Sciences	
Department:	Molecular Biology and Biochemical Engineering	
Area:	Nutrition and Bromatology	
Office Hours:	Tuesdays and Thursdays: 14.00-16.00 (please, make a previous appointment through e-mail)	
Office:	Fausto Elhúyar building, second floor ('profesores asociados', associate professors office)	
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#### 3. TOPICS

#### BASIC LEARNING (EB):

#### 1. INTRODUCTION

- **Unit 1.** Biological bases of cancer. Concepts. Evolution of the tumor development. Theories of carcinogenesis: chemical, physical and biological. Bases molecular effects of cancer.
- **Unit 2.** Epidemiology of cancer. Distribution by age and gender. Geographical distribution.
- **Unit 3.** Control and prevention of cancer: primary, secondary and tertiary.

#### 2. NUTRITIONAL ASPECTS AND CARCINOGENESIS

- **Unit 4.** Potential carcinogens in the diet which come from processed food and its preservation processes.
- Unit 5. Relevant nutrients in cancer prevention.
- Unit 6. Alcoholic and non-alcoholic drinks and the risk of cancer.
- Unit 7. Obesity and the risk of cancer.
- **Unit 8.** Current Evidence on the relation between food and nutrients and the most frequent types of cancer: Oral Cavity Cancer, Pharynx, larynx, Esophagus Cancer, Lung Cancer, Stomach Cancer, Cancer Pancreas, Liver Cancer, Colon and Rectum Cancer, Cervical Cancer, Prostate Cancer, Urinary Tract Tumors.
- Unit 9. Role of the Mediterranean diet in the prevention of cancer.
- Unit 10. Role of physical exercise in the prevention of cancer.

### PRACTICAL LEARNING (EPD):

Practices will be related to scientific information research and analysis and also to the development of analytical activities based on the basic learning units.

- 1. Search of scientific information and resources on the Internet.
- 2. Use of Meta-analysis in the epidemiology of cancer
- 3. Studies of dietary intervention in the prevention of cancer.
- 4. Presentation of a scientific review in poster format of a subject related to theoretical units of the course.