

<b>MODULE</b>	<b>CONTENT</b>	<b>YEAR</b>	<b>TERM</b>	<b>CREDITS</b>	<b>TYPE</b>				
Nutrition and Health	Nutrition	3 <sup>a</sup>	1	6.0					
<b>LECTURER(S)</b>		<b>Postal address, telephone nº, e-mail address</b>							
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<b>DEGREE WITHIN WHICH THE SUBJECT IS TAUGHT</b>									
Food Science and Technology									
<b>PREREQUISITES and/or RECOMMENDATIONS (if necessary)</b>									
Having studied the subjects of Biology, Biochemistry, Physiology									
<b>BRIEF ACCOUNT OF THE SUBJECT PROGRAMME (ACCORDING TO THE DEGREE )</b>									
• Functions and metabolic utilization of nutrients • Dietary recommendations, dietary goals and dietary guidelines • Assessment of the nutritional status od individuals and communities									
<b>GENERAL AND PARTICULAR ABILITIES</b>									
<b>OBJECTIVES (EXPRESSED IN TERMS OF EXPECTED RESULTS OF THE TEACHING PROGRAMME)</b>									
• Know the basic principles in nutrition with special attention to nutrients and their functions and									



- utilization in the body as well as the most important food sources
- Use and interpret tables of recommended intakes, nutritional objectives and guidelines of the power as a basis for the assessment of diets
  - Learn to determine and interpret the nutritional status of an individual through the use of dietary surveys, anthropometric data, biochemical and clinical parameters

## **DETAILED SUBJECT SYLLABUS**

### Theoretical program

1. Food and Nutrition. Concepts and relationships. Historical evolution. Current situation and prospects. Concept of food and nutrient. Bioactive compounds in food.
2. Digestion. General aspects of the process. Regulation
3. Energy requirements of the human organism. Components of energy metabolism: basal metabolism, thermogenesis and physical activity. Methods and measurement
4. Nutritional requirements and recommendations. Dietary goals and food guides
5. Food: supply of energy, nutrients and other bioactive components. Energy value of nutrients. Tables and food composition databases
6. Proteins. Classification and functions. Essential amino acids. Evaluation of protein quality. Nutritional recommendations. Dietary sources.
7. Carbohydrates: classification and functions. Nutritional recommendations. Dietary sources.
8. Dietary fiber. Classification and Functions. Nutritional recommendations. Dietary sources
9. Lipids. Classification. Essential fatty acids. Quality of fat. Nutritional recommendations. Dietary sources.
10. Water soluble vitamins: Functions. Use. Nutritional recommendations. Dietary sources
11. Fat soluble vitamins. Functions. Use. Nutritional recommendations Dietary sources
12. Minerals: macro and microelement. Functions. Use. Nutritional recommendations. Dietary sources
13. Body water and electrolyte balance. Nutritional value of water
14. Nutritional status assessment. Anthropometric parameters and body composition. Immunological and biochemical indicators of nutritional status
15. Measuring of intake
16. Nutrition and chronic diseases

## **READING**

- Gibney MJ, Kok Frans J, Voster Hester H (2005). Introducción a la nutrición humana. Ed. Acribia, Madrid.
- Gil A. (2017). Tratado de Nutrición (5 tomos). Ed. Panamericana, Madrid.
- Mahan LK, Raymond JL. Krause. Dietoterapia, 14<sup>a</sup> Ed. Elsevier España. SLU. 2017, Barcelona.
- Mataix J. (2009). Nutrición y alimentación humana. Ed. Ergon, Madrid.
- Thompson JL, Manore MM, Vaughan LA (2008). Nutrición. Ed. Pearson Educación. Madrid
- Martínez JA (2004). Fundamentos teórico-prácticos de nutrición y dietética. Ed. Interamericana McGraw-Hill, Madrid.
- Salas-Salvado, J. Nutrición y Dietética Clínica. Ed. Elsevier Masson. 2014, Barcelona



- Soriano del Castillo JM (2006). Nutrición básica humana. Ed. Universidad de Valencia

