



1. General information

Course: HUMAN NUTRITION

Type: CORE COURSE

Degree: 383 - UNDERGRADUATE DEGREE PROGRAMME IN FOOD SCIENCE AND TECHNOLOGY

Center: 1 - FACULTY OF SCIENCE AND CHEMICAL TECHNOLOGY

Year: 3

Main language: Spanish

Use of additional languages:

Web site:

Code: 58324

ECTS credits: 6

Academic year: 2023-24

Group(s): 22

Duration: First semester

Second language:

English Friendly: Y

Bilingual: N

Lecturer: GIUSEPPE FREGAPANE QUADRI - Group(s): 22

Building/Office	Department	Phone number	Email	Office hours
Marie Curie, 1a planta	Q. ANALÍTICA Y TGIA. ALIMENTOS	3439	giuseppe.fregapane@uclm.es	

Lecturer: MANUELA VANESSA MANCEBO CAMPOS - Group(s): 22

Building/Office	Department	Phone number	Email	Office hours
MARIE CURIE/PLANTA PILOTO	Q. ANALÍTICA Y TGIA. ALIMENTOS	+34 926 29 52 59	MVanessa.Mancebo@uclm.es	

2. Pre-Requisites

The knowledge previously acquired in the subjects of the basic module Fundamentals of Physiology and Biochemistry and those of the module of Food Science and Structure and properties of the food components and of Bromatology are required..

3. Justification in the curriculum, relation to other subjects and to the profession

The subject of Human Nutrition and Dietetics of the Nutrition and Health module, integrated by the subjects of Human Nutrition and Dietetic and community nutrition has as general aims the acquisition of basic and specialized knowledge on the nutrients in relation with the human nutrition, as well as of the individual nutrition in the different stages of life and the nutrition of communities. Equally understands the study of the nutrition as preventive factor of multiple pathologies and the evaluation of the nutritional status of individuals and collectivities.

A marked interest exists at present for the human nutrition having had become clear its influence on both in the body maintenance and restoration of the health, the prevention of diseases, and in the attainment of the ideal physical and intellectual performance. This interest demands the professionals' preparation with a scientific confirmed and current formation.

4. Degree competences achieved in this course

Course competences

Code	Description
CB02	Apply their knowledge to their job or vocation in a professional manner and show that they have the competences to construct and justify arguments and solve problems within their subject area.
CB03	Be able to gather and process relevant information (usually within their subject area) to give opinions, including reflections on relevant social, scientific or ethical issues.
CB04	Transmit information, ideas, problems and solutions for both specialist and non-specialist audiences.
CB05	Have developed the necessary learning abilities to carry on studying autonomously
E05	To know the composition, phyco-chemical properties, nutritional value and sensory properties of foods
E11	To qualify to be able to evaluate the effects of processing on the components and properties of foods
E18	To acquire knowledge on food legislation and normalization. To counsel legally, scientifically and technocally the food industry and consumers.
E22	To perform formation of staff in the food sector
E24	To assure and improve the nutritional quality and the health properties of ingredients and foods
E25	To establish and calculate patterns of healthy nutrition, as well as to develop menu scheduling for communities
E26	To evaluate habits and food intake and the nutritional status at individual or community level
E27	To schedule and develop programs for nutritional education and promotion and prevention of health
G05	To understand and to use the English language, both written and spoken, applied to the area of the Food Science and Technology. (To be able to acquire this ability, a series of actions that will be specified in every module will be performed).
G06	To dominate the Technologies of the Information and the Communication (TIC) to user's level, which allows to work in virtual spaces, Internet, electronic databases, as well as with common software packages (e.g. Microsoft Office).
G07	To possess ability of organization and planning, initiative, entrepreneurship and aptitude to be employed in teamworks. To possess capacity of resolution of specific problems of the professional area and to develop the critical reasoning and decision making.
G09	To develop the motivation for quality, the capacity to adapt to new situations and the creativity.

5. Objectives or Learning Outcomes

Course learning outcomes

Description

In the area of the community nutrition and public health to achieve that the student is capable of: planning and developing programs of nutritional education and of promotion and of prevention in health; to establish and to calculate food healthy guidelines, as well as to develop the planning of menus for collectivities; to evaluate the habits and the food intake and the nutritional status of individual and collectivities and to develop epidemiological studies.

It is aimed that the student acquires the concepts and basic principles of the human nutrition, dietetics and community nutrition and to develop in the student the aptitude to propose and solve practical cases, as well as of interpreting the obtained results.

To achieve that the student is capable of seeking and selecting information in the area of these disciplines and that he is capable of interpreting it and to present it adequately both in oral as written forms, in Spanish and English languages.

To achieve that the student is capable of evaluating the nutritional value, the functional properties and the nutritional importance of the foods. Also it is aimed that the student knows the effects of the food processing on the components of nutritional interest and that he can assure and to improve the nutritional quality and the healthy properties of ingredients and foods.

6. Units / Contents

Unit 1: Fisiology of nutrition

Unit 2: Energy metabolism I: expenditure and demand of energy

Unit 3: Energy metabolism II: metabolic pathways and regulation

Unit 4: Carbohydrate and fiber

Unit 5: Lipids: body fat and dietary fat

Unit 6: Proteins

Unit 7: Liposoluble vitamins

Unit 8: Hidrosoluble vitamins

Unit 9: Macrominerals

Unit 10: Oligoelements

Unit 11: Water and electrolytes

Unit 12: Functional components. Antinutrients

Unit 13: Practical activities and problem solving

7. Activities, Units/Modules and Methodology

Training Activity	Methodology	Related Competences (only degrees before RD 822/2021)	ECTS	Hours	As	Com	Description
Class Attendance (theory) [ON-SITE]	Lectures		1.4	35	Y	N	
Laboratory practice or sessions [ON-SITE]	Practical or hands-on activities		0.4	10	Y	Y	
Group tutoring sessions [ON-SITE]	Group tutoring sessions		0.1	2.5	Y	N	
Study and Exam Preparation [OFF-SITE]	Self-study		0.8	20	Y	N	
Final test [ON-SITE]	Assessment tests		0.1	2.5	Y	N	
Workshops or seminars [ON-SITE]	Workshops and Seminars		0.4	10	Y	N	
Other off-site activity [OFF-SITE]	Combination of methods		2.8	70	Y	N	
Total:			6	150			
Total credits of in-class work: 2.4			Total class time hours: 60				
Total credits of out of class work: 3.6			Total hours of out of class work: 90				

As: Assessable training activity

Com: Training activity of compulsory overcoming (It will be essential to overcome both continuous and non-continuous assessment).

8. Evaluation criteria and Grading System

Evaluation System	Continuous assessment	Non-continuous evaluation*	Description
Test	40.00%	40.00%	Written examen on practical activities
Test	60.00%	60.00%	Written examen on theoretical knowledge
Total:	100.00%	100.00%	

According to art. 4 of the UCLM Student Evaluation Regulations, it must be provided to students who cannot regularly attend face-to-face training activities the passing of the subject, having the right (art. 12.2) to be globally graded, in 2 annual calls per subject, an ordinary and an extraordinary one (evaluating 100% of the competences).

Evaluation criteria for the final exam:

Continuous assessment:

Defined in Campus virtual.

Non-continuous evaluation:

Defined in Campus virtual.

Specifications for the resit/retake exam:

None

Specifications for the second resit / retake exam:

None

9. Assignments, course calendar and important dates

Not related to the syllabus/contents	
Hours	hours

10. Bibliography and Sources						
Author(s)	Title/Link	Publishing house	Citv	ISBN	Year	Description
Krause, Marie V. (1906-1994)	Nutrición y dietoterapia de Krause	McGraw-Hill Interamericana		970-10-3204-7	2005	
Brody, Tom	Nutritional biochemistry	Academic Press		0-12-134836-9	1999	
Martínez, J. Alfredo	Fundamentos teórico-prácticos de nutrición y dietética	McGraw-Hill Interamericana		84-486-0207-2	2000	