



Universitat de Lleida

DEGREE CURRICULUM **APPLIED NUTRITION**

Coordination: OMS OLIU, GEMMA

Academic year 2023-24

Subject's general information

Subject name	APPLIED NUTRITION				
Code	102233				
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION				
Typology	Degree	Course	Character	Modality	
	Bachelor's Degree in Food Science and Technology	3	COMPULSORY	Attendance-based	
Course number of credits (ECTS)	6				
Type of activity, credits, and groups	Activity type	PRALAB	PRAULA		TEORIA
	Number of credits	0.8	0.6	0.4	4.2
	Number of groups	4	1	2	1
Coordination	OMS OLIU, GEMMA				
Department	FOOD TECHNOLOGY, ENGINEERING AND SCIENCE				
Teaching load distribution between lectures and independent student work	Class hours: 60 No class hours: 90				
Important information on data processing	Consult this link for more information.				
Language	Catalan				

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
ODRIOZOLA SERRANO, ISABEL ANDREA	isabel.odrizola@udl.cat	1,8	
OMS OLIU, GEMMA	gemma.oms@udl.cat	7	

Subject's extra information

The Nutrition II course is a compulsory subject included in the Bachelor of Science and Technology belonging to Food Nutrition and Health module taught in the second half of the third grade level. The growing information currently available about the relation between diet and health status make increase the interest in food and nutrition. This course aims to promote the study and knowledge of applied nutrition at various physiological and/or pathology states. After the program, students must understand the interaction of nutrients to the body and its relationship to human health, and also acquire the ability to know how to assess the nutritional human status in different physiological situations.

Learning objectives

1. Knowing the nutritional needs of human beings at different stages of life, at physiological and pathological processes associated with nutrition
2. Knowing the different situations of nutritional imbalance, both malnutrition and overnutrition. Learn to identify the possible etiology of nutritional deficiencies and determine knowledge of risk for developing malnutrition.
3. Being able to identify nutrition-related diseases and give specific diets with foods and food adapted products.
4. Acquire practical skills to perform nutritional assessments and know how to use the obtained results

Competences

Specific Competences

CE3. Identify and apply the fundamentals of Biology and Human Physiology necessary for the development of other disciplines and the activities of the profession.

CE6. Posing and solving problems by correctly applying the concepts acquired to specific situations.

CE8. Recognize the basic concepts related to energy expenditure, energy calculations and recommended energy requirements in the different stages of life.

CE11. Define nutritional needs throughout the different stages of life.

CE12. To develop the most recommended nutritional intervention mechanisms-diet modifications for different pathologies.

Basic Competences

CB1. That students have demonstrated to possess and understand knowledge from the base of general secondary education at a level that, while supported by advanced textbooks, also includes some aspects that involve knowledge from the forefront of their field of study.

CB2. That students know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the elaboration and defense of arguments and the resolution of problems within their area of study.

CB4. That students can transmit information, ideas, problems and solutions to both specialized and non-

specialized audiences.

General Competences

CG1. Analyze specific situations, define problems, make decisions and implement action plans in search of solutions.

CG3. Select and manage the available written and computerized sources of information related to the professional activity.

CG4. Work alone and in a multidisciplinary team.

CG10. Have a critical and innovative spirit.

Transversal Competences

CT1. Correctly present information in oral and written form.

CT2. Communicate and master a foreign language.

CT3. Use existing IT and communication tools as support for the development of their professional activity.

CT5. Apply the gender perspective to the functions of the professional field.

Subject contents

Contents

Tema 1.- Introduction. Concepts of recommended intake, nutritional advice. Balanced diet. Food composition and nutritional tables. Food guides. Dietary Surveys methods and Nutritional Epidemiology.

Tema 2.- Nutricional assessment

Tema 3.-Nutrition at different stages of life: infancy, school children and adolescents

Tema 4.- Nutrition in pregnancy, lactation and menopause

Tema 5.- Aging and Elderly Nutrition

Tema 6.- Sports Nutrition

Tema 7.- Plant-based diets

Tema 8.- Food allergies and intolerances

Tema 9.- Nutrition and alcohol

Tema 10.- Nutrition in pathological situations

Practical activities

Practical activities of this course will be related to assess and evaluate the nutritional status of a person:

1. Physical and anthropometric assessment, and body composition
2. Determination of biochemical parameters
3. Calculation of nutritional needs and energy
4. Assessment of dietary intake and nutritional habits and lifestyle

It is MANDATORY that students carry in the course of teaching practices:

- UdL white labcoat

It can be purchased at the ÚDELS Store of the UdL

Centre de Cultures i Cooperació Transfronterera – Campus Capponet

Carrer de Jaume II, 67 baixos

Methodology

Activity	Description	Class activity	No class activity		Evaluation		Time	
		Objectives	Hours	Student work	Hours	Hours	Hours	ECTS
Lecture	Lectures (large group)	Explanation of the main concepts	42	Study: Know, understand and knowledge synthesis	50	4	96	3,84
Practices	Class participation (little class group)	Understanding phenomena, mesuring,..	8	Solving cases. Discussing	12		20	0,64
Seminars	Laboratory practice (large class group)	Carrying out activities for discussion and application	4	Studying and making reports	8		12	0,64
Computer lab	Practices in computer room (large class group)	Understanding phenomena, mesuring,..	2	Studying and making reports	4		6	0,24
Directed activities	Student's written work (individually or in groups)	Helping the student to make the work (in tutorials hours)	4	Making a bibliographical work, practical, and so on.	12		16	0,64
Totals			60		86	4	150	6

Evaluation

BLOCK 1: EXAM (50%). There will be 2 written tests of the theoretical part, with test-type and short-answer questions.

If the test is not passed with a 5, the failed exam (<5) must be retaken in the second call. On the other hand, approved students will have the option to raise their grade in the second call.

This type of assessment will account for 50% of the final grade and must be passed to be averaged with the rest of the activities and work.

BLOCK 2: Activities proposed and developed in class (15%)

Activities and resolution of practical cases. The grade will be calculated based on the arithmetic average obtained from the grades obtained by the student in the different proposed activities.

BLOCK 3: Practices (15%)

They will be carried out in groups. Active participation in the sessions and the delivery of a small individual report will be valued.

BLOCK 4: Group work (20%)

A group work will be done. The guidelines and the topic will be provided by the teacher during the development of the course.

If someone takes the alternative assessment, this will consist of a global exam on the date established by the center for the subject exam, which will weigh 80% of the overall qualification of the subject as well as the delivery of the course work, which will weigh 20% of the overall qualification of the subject.

Bibliography

Basic bibliography

Cervera, P., Clapés, J., Rigolfas, R. *Alimentación y Dietoterapia (Nutrición Aplicada en la salud y la enfermedad)*. E. McGraw-Hill-Interamericana de España. 2004

Mataix, J. *Nutrición y alimentación humana. I. Nutrientes y Alimentos*. Ed. Ergon, Madrid, 2002

Mataix, J. *Nutrición y alimentación humana. II. Situaciones fisiológicas y patológicas*. Ed. Ergon, Madrid. 2002.

Salas-Salvadó, J. i al. *Nutrición y dietética clínica*. Ed. Elsevier España S.L. 2008.

Requejo, A. M.; Ortega, R. M. Nutriguía. Manual de nutrición clínica en atención primaria. E. Complutense, Madrid. 2000.

Complementary bibliography

De Girolami, D.H. Fundamentos de valoración nutricional y composición corporal. Ed. El Ateneo. 2004.

Farran, A.; Zamora, R.; Cervera, P. Tablas de composición de alimentos del CESNID. Ed. McGrawHill. 2004

Souci, S.W.; Fachmann, W.; Kraut, H.; Scherz, H.; Senser, F. Food composition and nutrition tables. 4th Edition, Ed. CRC Press Inc., Boca Raton, FL. 1989.

<http://www.gencat.net/salut/acsa>

<http://www.nutricion.org>

<http://www.seennutricion.org>

<http://www.nal.usda.gov/fnic>

<http://www.seedo.es>

<http://www.fesnad.org>

<http://www.sennutricion.org>

<http://www.aedn.es>

<http://www.naos.aesan.mspsi.es/>

<http://www.nutricioncomunitaria.org>