

# DEGREE CURRICULUM APPLIED NUTRITION

Coordination: OMS OLIU, GEMMA

Academic year 2017-18

# Subject's general information

Subject name	APPLIED NUTRITION							
Code	102233							
Semester	2nd Q(SEMESTER) CONTINUED EVALUATION							
Typology	Degree Course Typology Modality							
	Bachelor's Degree in Food Science and Technology	3	COMPULSORY	Attendance- based				
ECTS credits	6							
Groups	1GG,4GP							
Theoretical credits	0							
Practical credits	0							
Coordination	OMS OLIU, GEMMA							
Department	TECNOLOGIA D'ALIMENTS							
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							
Office and hour of attention	Gemma Oms Oliu (coordinator) Center: ETSEA Department: Department of Food Technology Room: 2.1.09.1 Schedule consulting: to determine Telephon: 973702671  Isabel Odriozola Serrano Center: ETSEA Department: Department of Food Technology Room: 2.1.09.1 Schedule consulting: to determine Telèfon: 973702616							

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
ODRIOZOLA SERRANO, ISABEL ANDREA	iodriozola@tecal.udl.cat	5,04	
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## 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

#### General Skills

CG1: Comprehend the general knowledge acquired in secondary education including advanced cutting-edge knowledge in the field.

CG2: Apply knowledge into practice in a professional setting and have the necessary skills for argumentation, defence and problem solving within the field.

CG4: Convey comprehensive information, ideas, problems and solutions both to specialised and non-specialised audiences.

CG6: Analyse specific situations, identify problems, make decisions and implement action plans in search for solutions.

CG8: Select and manage available written and computerised sources of information related with the professional activity.

CG9: Utilize the existing ICT tools as support to develop the professional activity (strategic competence UdL))

CG10: Be able to work individually and in a multidisciplinary team.

CG12: Be able to present oral and written information in a correct fashion (strategic competence UdL)

CG14: Be able to communicate fluently in a foreign language (strategic competence UdL)

CG18: Have a critical and innovative mind.

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#### Specific skills

- CE8. Know the basic concepts related with energy expenditure, energetic calculations and basic recommended energetic requirements in the stages of life.
- CE10. Contextualize the basic concepts of human nutrition with other related sciences and disciplines, especially the processes of food manufacturing.
- CE11. Know the nutritional needs throughout the different stages of life.
- CE12. Know the mechanisms of the recommended nutritional intervention diet modifications for different pathologies.

## Subject 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.- Vitamin and mineral deficiencies

Tema 8.- Vegetarian nutrition

Tema 9.- Food allergies and intolerances

Tema 10.- Nutrition and alcohol

Tema 11.- 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

## Methodology

Activity	Description	Class activity		No class activity		Evaluation	Time	
7.0		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

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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

Activity	Evaluation activity		Evaluation weight
	Procedure	Number	
Lecture	Exams	2	30+30
Practices	Report	1	10
Seminars	Activities in class	1	15
Written work	Written work	1	15
Total			100

2 partial exams will be undertaken of the theoretical part, with 4 short answer questions (4 points) and 20 multiple choice test questions with four options (6 points).

This type of evaluation corresponds to 60% of the final grade.

The student must pass the theory part with a note of 5 out of 10, obtained as an average grade of the two partial exams.

The evaluation of the theoretical part corresponds to 60% of the final grade and will be recoverable conducting a written test that will cover the contents of the two exams.

## **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.

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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