1. OVERVIEW

Subject Area	Food Allergies and Intolerances. Food for Special Dietary Requirements
Degree	Bachelor's Degree in Human Nutrition and Dietetics
School/Faculty	School of Biomedical and Health Sciences
Year	Fourth
ECTS	6 ECTS
Type	Optional
Language(s)	Spanish
Delivery Mode	On campus and blended
Semester	Semester 7
Coordinating professor	Dr Elena Aguilar Aguilar

2. INTRODUCTION

The subject area 'Food Allergies and Intolerances. 'Food for Special Dietary Requirements' is an optional subject area within Module 4 (Nutrition, Dietetics and Health), is worth 6 ECTS credits and is delivered in the first semester of the fourth year of the Bachelor's Degree in Human Nutrition and Dietetics.

Knowledge of food and nutrition in a healthy population is required when examining patients with adverse reactions to food, as well as the energy and nutritional needs or requirements at different ages. This allows for the identification of nutritional problems or deficiencies. The objective is to develop, apply and make decisions regarding the dietary/nutritional treatment of food intolerances and allergies.

3. SKILLS AND LEARNING OUTCOMES

Key Skills (CB, by the acronym in Spanish):

- CB2: Students can apply their knowledge to their work professionally and possess the necessary skills, usually demonstrated by forming and defending opinions, as well as resolving problems within their study area.
- CB3: Students have the ability to gather and interpret relevant data (usually within their study area) to form opinions which include reflecting on relevant social, scientific or ethical matters.
- CB4: Students can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences.

General skills (CG, by the acronym in Spanish):

- CG1: Understand the core elements of the work of dietitians and nutritionists, including ethical principles, legal obligations and the exercise of the profession, and apply the principle of social justice to professional practice to demonstrate respect for people, their habits, beliefs and cultures.

- CG10: Create, read and manage food composition tables and databases.
- CG16: Interpret a nutritional diagnosis, assess the nutritional aspects of a patient's medical record and implement a diet plan.
- CG26: Create, manage and cooperate in the planning of menus and diets tailored to the characteristics of the target group.

Cross-curricular skills (CT, by the acronym in Spanish):

- CT1: Communication: ability to engage in active listening, ask questions and respond in a clear and concise way, as well as to effectively express ideas and concepts. This includes concise and clear written communication.
- CT3: Teamwork: ability to integrate and collaborate actively with other people, areas and/or organisations to reach common goals, evaluate and integrate contributions from the rest of the group members and create a good working environment.
- CT4: Adaptability: ability to detect, interpret and respond to a changing environment. Ability to equip themselves and work effectively in different situations and/or with different groups or individuals. This means adapting to change depending on circumstances or needs. It involves the confidence to take on crucial challenges on a personal or group level, maintaining good physical and mental health to allow effective work to be carried out.
- CT9: Ability to put knowledge into practice, using the skills acquired in the classroom to mock situations based on real life experiences that occur in the relevant profession.

Specific skills (CE, by the acronym in Spanish):

- CE130: Know about adverse reactions to food: food allergies and intolerances.
- CE131: Know the main foods linked to food intolerances and allergies.
- CE132: Be aware of and know how to diagnose the symptoms of an allergy/intolerance, as well as how to prevent and treat it.
- CE133: Know about the dietetic foods used in special diets and the law that applies.

Learning outcomes (RA, by the acronym in Spanish):

- RA1: Know the possible adverse reactions of food and be able to take action towards their prevention.
- RA2: Identify a patient's dietary/nutritional issues.
- RA3: Know how to create and implement dietary/nutritional transition plans.
- RA4: Identify food allergens on nutrition labels.
- RA5: Choose and recommend the appropriate use of special recipes for food allergies.
- RA6: Know the scientific evidence that supports the use of food sensitivity tests.

The following table shows how the skills developed in the subject area match up with the intended learning outcomes:

Skills	Learning outcomes
CB4, CG1, CT3, CE130, CE132	**RA1:** Know the possible adverse reactions of food and be able to take action towards their prevention.

CB3, CG16, CT4, CE131	**RA2:** Identify a patient's dietary/nutritional issues.
CB2, CG10, CG16, CT9, CE132	**RA3:** Know how to create and implement dietary/nutritional transition plans.
CB4, CG26, CT9, CE131, CE133	**RA4:** Identify food allergens on nutrition labels.
CB3, CG26, CT1, CE133	**RA5:** Choose and recommend the appropriate use of special recipes for food allergies.
CB3, CG1, CT1, CE132, CE133	**RA6:** Know the scientific evidence that supports the use of food sensitivity tests.

4. CONTENTS

Unit 1. Adverse reactions to food.

- Topic 1. General concepts. The immune system and immunoglobulin. Prevalence. Prevention. Evolution.
- Topic 2. Diagnosis, clinical manifestations and treatment of food allergy and problems with elimination diets.

Unit 2. Main foods that cause food allergies and intolerances

- Topic 3. Main foods that cause food allergies.
- Topic 4. Main foods that cause food intolerances.

Unit 3. Gluten intolerance and allergy

- Topic 5. Celiac disease
- Topic 6. Non-celiac gluten sensitivity.

Unit 4. Gut issues related to food sensitivity

- Topic 7. Eosinophilic oesophagitis.
- Topic 8. Food protein-induced enterocolitis syndrome (FPIES).
- Topic 9. Other common gut disorders.

Unit 5. Cooking and handling. Applicable law.

- Topic 10. Strategies for avoiding food allergens.
- Topic 11. Cross-contamination. Nutrition labels.

Unit 6. Food for special dietary requirements:

- Topic 12. Formulas used. Special diets.
- Topic 13. Current position on food intolerance testing.

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Lecture
- Collaborative learning

- Case studies
- Problem-based and project-based learning
- Learning based on workshops/labs

6. LEARNING ACTIVITIES

The types of learning activities, plus the amount of time spent on each activity, are as follows:

On campus:

Learning activity	Number of hours
Lecture	50
Independent working	42
Case studies	10
Group activities	7
Written reports and strategies	7
Workshops and/or lab work	12
Tutorials	19
Knowledge test	4
TOTAL	150

Blended learning

Learning activity	Number of hours
Reading of content	13
Online seminars	13
Independent working	65
Workshops and/or lab work	12
Group activities	7
Online tutorials	19
Knowledge test	4
Case studies	10
Written reports and strategies	7
TOTAL	**150**

7. ASSESSMENT

The assessment methods, together with their respective weighting towards the final grade for the subject, are as follows:

On-campus and blended learning:

Assessment method	Weighting
Workshops/lab work	20%
Learning portfolio	10%
Submission of reports and essays	10%
Participation in debates	10%
Knowledge test	50%

On the Virtual Campus, when you open the subject area, you can see all the details of your assessment activities, including the deadlines and assessment procedures for each activity.

8. BIBLIOGRAPHY

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Useful websites:

- AESAN: Agencia Española de Seguridad Alimentaria. http://www.aecosan.msssi.gob.es/AECOSAN/web/seguridad_alimentaria/detalle/etiquetado_informacion_alimentaria.htm
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- Asociación Española de Esofagitis Eosinofílica: www.aedeseo.es
- Asociación Española de Personas con Alergia a Alimentos y Látez (AEPNAA). http://www.aepnaa.org
- FARE: Food Allergy Research & Education. www.foodallergy.org
- Guías clínicas en www.fisterra.com
- SEICAP: Sociedad Española de Inmunología Clínica, Alergología y Asma Pediátrica. www.seicap.es
- Sociedad Española de alergología e inmunología clínica. www.seaic.org
- The Association of UK Dietitians. https://www.bda.uk.com/resource/food-allergy-intolerance-testing.html
- www.celiacos.org
- www.celiacosmadrid.org