

## 1. OVERVIEW

<b>Subject Area</b>	Food Hygiene and Safety: HACCP
<b>Degree</b>	Bachelor's Degree in Human Nutrition and Dietetics
<b>School/Faculty</b>	School of Biomedical and Health Sciences
<b>Year</b>	Third-party
<b>ECTS</b>	3 ECTS
<b>Type</b>	Compulsory
<b>Language(s)</b>	Spanish
<b>Delivery Mode</b>	On-campus and blended
<b>Semester</b>	Semester 5
<b>Coordinating professor</b>	Dr Sara Sanz Rojo

## 2. INTRODUCTION

Food Hygiene and Safety: HACCP is a compulsory subject area within the overall subject of Food Safety (Module 3). This subject area, worth 3 ECTS credits, is delivered in the first semester of the third year of the Bachelor's Degree in Human Nutrition and Dietetics.

The overall objective of this subject area is to learn about good hygiene practices, food safety and hazard control systems. The subject area also focuses on learning about quality systems in food businesses based on hazard analysis and critical control points; how to develop and implement self-regulation systems in the food industry; and to know how to create an action manual in the event of a food crisis.

## 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.

- CB5: Students have developed the learning skills necessary to undertake further study in a much more independent manner.

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

- CG21: Be able to take part in activities that promote health and aim to prevent disorders and diseases related to nutrition and lifestyle, specifically by educating the population about food and nutrition. Know how risk analysis is carried out.
- CG22: Contribute towards the planning and development of food, nutrition and food safety policies based on the needs of the population and the protection of health.
- CG24: Interpret reports and administrative files about a food product and ingredients.

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

- CT7: Decision making: ability to choose between different options or methods to effectively solve different problems or situations.
- CT8: Planning and organization: ability to set objectives and choose the right means to fulfil them through the efficient use of time and resources.
- 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):**

- CE80: Know the general concepts of food hygiene. Chemical, biological and physical hazards of food. Know how risk analysis is carried out.
- CE81: Know about quality control and quality assurance systems: the Hazard Analysis and Critical Control Point (HACCP) system and general guidelines and principles.

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

- RA1: Learn about good hygiene practices, food safety and hazard control systems.
- RA2: Know about quality systems in food businesses that are based on hazard analysis and critical control points.
- RA3: Know how to develop and implement self-regulation systems in the food industry.
- RA4: Know how to create an action manual in the event of a food crisis.

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

Skills	Learning outcomes
CB2, CB3, CB4, CG21, CG22, CT7, CT8, CT9, CE80	RA1: Learn about good hygiene practices, food safety and hazard control systems.
CB2, CB3, CB4, CG21, CG22, CT7, CT8, CT9, CE80	RA2: Know about quality systems in food businesses that are based on hazard analysis and critical control points.
CB2, CB3, CB5, CG21, CG22, CG24, CT7, CT8, CT9, CE81	RA3: Know how to develop and implement self-regulation systems in the food industry.
CB2, CB4, CB5, CG21, CG22, CG24, CT7, CT8, CT9, CE81	RA4: Know how to create an action manual in the event of a food crisis.

## 4. CONTENTS

### Unit 1. General Concepts of Food Hygiene

- Topic 1. Introduction to food hygiene and safety
- Topic 2. Competent bodies and related fields

### Unit 2. Chemical, Biological, Physical and Other Hazards in Food

- Topic 3. Chemical hazards in food
- Topic 4. Biological hazards in food
- Topic 5. Physical and other hazards in food

### Unit 3. Food Crises and Control Systems

- Topic 6. Food crises: definitions, types and action protocols
- Topic 7. HACCP general guidelines and principles

## 5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Lecture
- Case studies
- Collaborative learning
- Problem-based and project-based learning
- Simulated environments
- Spoken presentations by students

## 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	40
Independent working	25
Case studies	5
Debates and discussions	2.5
Spoken presentations by students	5
Report writing	7.5
Design of intervention procedures and plans	5
Excursions	2.5

Tutorials	15
Knowledge tests	5
<b>TOTAL</b>	<b>75</b>

### Blended learning

Learning activity	Number of hours
Reading of content	15
Online class	25
Independent working	25
Case studies	5
Debates and discussions	2.5
Spoken presentations by students	5
Report writing	7.5
Design of intervention procedures and plans	5
Excursions	2.5
Online tutorials	15
Knowledge tests	5
<b>TOTAL</b>	<b>75</b>

## 7. ASSESSMENT

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

### On campus:

Assessment method	Weighting
Submission of reports	20%
Spoken presentation	10%
Participation in debates	10%
Performance observation	10%
Knowledge test	50%

### Blended:

Assessment method	Weighting
Submission of reports	20%
Spoken presentation	10%
Participation in debates	10%
Performance observation	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

The recommended bibliography is indicated below:

- AEMPM (2001). Guía de Aplicación de Sistemas APPCC en el Sector Mayorista de Productos de la Pesca de Mercamadrid. Mercamadrid, S.A., Madrid.
- AENOR (2001). Guías de Orientación para la Aplicación de las Normas ISO 9000: 2000. AENOR, Madrid. AENOR:
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Webs de consulta recomendadas:

- Web AESAN: <http://www.aesan.msc.es/>
- Web EFSA: <http://www.efsa.europa.eu/>
- Web FAO: <http://www.fao.org/> Web OMS: <https://www.who.int/es>
- Web CE: [https://ec.europa.eu/info/index\\_es](https://ec.europa.eu/info/index_es)
- Libro Blanco de SA: <https://eur-lex.europa.eu/legal-content/ES/ALL/?uri=celex:51999DC0719> Web AENOR: <http://www.aenor.es/aenor/inicio/home/home.asp#.UUiP8xfEKSo>