

1. OVERVIEW

Subject Area	Public Health and Epidemiology
Degree	Bachelor's Degree in Human Nutrition and Dietetics
School/Faculty	School of Biomedical and Health Sciences
Year	Third-party
ECTS	6 ECTS
Type	Compulsory
Language(s)	Spanish
Delivery Mode	On-campus and blended
Semester	Semester 6
Coordinating professor	Dr Sara Sanz Rojo

2. INTRODUCTION

Compulsory subject area within Module 4 'Nutrition, Dietetics and Health Sciences', delivered over one semester in the third year. The subject area of Public Health is worth 6 ECTS credits. Public health is the discipline responsible for the protection of the population's health, and therefore seeks to improve the health of communities through the promotion of healthy lifestyles, awareness and prevention campaigns, education and research. Public health is concerned with promoting and implementing comprehensive policies and specific activities to promote and protect health, reduce the risk of disease arising, minimise disease progression and prolong life by encouraging physical and mental wellbeing. It is an integrated social practice that studies the health of human populations.

Epidemiology is a scientific discipline in the field of medicine that studies the distribution, frequency and determinants of existing diseases in specific human populations. Both subjects are combined together to support disease surveillance and control, to create health promotion and education programmes and to support healthcare management.

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 and 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):

- CG20: Learn about and contribute towards the design, performance and validation of nutritional/epidemiological studies, as well as the planning, analysis and evaluation of food/nutrition intervention programmes in different settings.
- 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.

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

- CT2: Leadership: ability to offer ideas, approaches and interpretations through strategies which offer solutions to real-life problems.
- 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):

- CE142: Be familiar with the determinants of health.
- CE143: Know the major national and international bodies and policies that deal with public health.
- CE145: Be familiar with different types of epidemiological studies: descriptive and analytical observational studies, experimental studies and their use in nutrition studies.
- CE146: Assess intervention measures

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

- RA1: Analyse existing food policies.
- RA2: Take part in projects aimed at promotion, prevention and protection with a focus on public health.
- RA3: Know the basics of designing a public health programme, including how to create and implement them, as well as how to evaluate them.
- RA4: Know the principles and applications of epidemiology, developing an interest in research.
- RA5: Know how to interpret the results of epidemiological studies.
- RA6: Take part in the planning, intervention and evaluation of epidemiological studies.

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, CG20, CT8, CT9, CE143, CE146	RA1: Analyse existing food policies.
CB2, CB3, CB5, CG20, CG21, CT2, CT7, CT8, CT9, CE142, CE145, CE146	RA2: Take part in projects aimed at promotion, prevention and protection with a focus on public health.
CB2, CB3, CG20, CG21, CT7, CT8, CT9	RA3: Know the basics of designing a public health programme, including how to create and implement them, as well as how to evaluate them.

CB3, CB5, CG20, CT2, CT9, CE145	RA4: Know the principles and applications of epidemiology, developing an interest in research.
CB4, CB5, CG21, CT7, CT8, CE146	RA5: Know how to interpret the results of epidemiological studies.
CB2, CB4, CB5, CG21, CT2, CT7, CT8, CE145, CE146	RA6: Take part in the planning, intervention and evaluation of epidemiological studies.

4. CONTENTS

The subject area is divided into the following topics:

UNIT 1: Introduction to Public Health.

TOPIC 1: Health and social development. Areas of action in public health.

TOPIC 2: Health law and policy.

UNIT 2: Planning, Management and Evaluation in Healthcare.

TOPIC 3: Healthcare system models. Healthcare planning.

TOPIC 4: Indicators of health (part 1).

TOPIC 5: Indicators of health: demographics and health (part 2).

UNIT 3: Methods of Health Promotion and Education. Environmental Risks in Public Health **TOPIC 6:**

Health promotion and health education.

TOPIC 7: Health promotion and prevention initiatives for children, teenagers and adults.

TOPIC 8: Introduction to public health surveillance.

TOPIC 9: Disease reporting, surveillance and control. The basic system of the epidemiological surveillance network.

UNIT 4: Epidemiology and Types of Studies

TOPIC 10: Epidemiology and the epidemiological method. Causality.

TOPIC 11: Measures of frequency in epidemiology. Association and impact measures.

UNIT 5:

TOPIC 12: Descriptive observational studies. Analytical observational studies.

TOPIC 13: Experimental studies. Bias.

UNIT 6: Nutritional Epidemiology

TOPIC 14: Nutritional epidemiology (part 1).

TOPIC 15: Nutritional epidemiology (part 2).

5. TEACHING/LEARNING METHODS

The types of teaching/learning methods are as follows:

- Lecture
- Problem-solving
- Collaborative learning
- Project-based learning

- Simulated environments

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
Written reports and essays	10 h
Design of strategies, procedures and intervention plans	8 h
Lecture	36 h
Independent working	50 h
Tutorials	4.6 h
Problem-solving	20 h
Critical analysis of texts	8 h
Spoken presentations by students	8 h
Knowledge test	5.3 h
TOTAL	150 h

Blended learning

Learning activity	Number of hours
Reading of content	18
Online seminars	18
Independent working	50
Problem-solving	20
Spoken presentations by students	8
Written reports and essays	10
Design of strategies, procedures and intervention plans	8
Critical analysis of texts	8
Online tutorials	5
Knowledge test	5
TOTAL	150

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/problems	20%
Performance observation	10%
Spoken presentation	10%
Participation in debates	10%
Knowledge test	50%

Blended:

Assessment method	Weighting
Submission of reports/problems	20%
Performance observation	10%
Spoken presentation	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

The recommended bibliography is indicated below:

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Otra bibliografía de interés:

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