



NUTRITION AND PUBLIC HEALTH COURSE OUTLINE

GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
DEPARTMENT	FOOD SCIENCE AND NUTRITION		
LEVEL OF STUDIES	UNDERGRADUATE		
COURSE CODE	ME716	SEMESTER	7th
COURSE TITLE	PUBLIC HEALTH NUTRITION COURSE COORDINATOR: Eirini (Renata) Micha		
INDEPENDENT TEACHING ACTIVITIES		WEEKLY TEACHING HOURS	CREDITS (ECTS)
Lectures		3	6
Laboratory/ Tutorial Exercises		3	
COURSE TYPE	SCIENTIFIC AREA SKILLS DEVELOPMENT		
PREREQUISITE COURSES:	-		
LANGUAGE OF INSTRUCTION AND EXAMINATIONS:	GREEK		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES (IN ENGLISH)		
COURSE WEBSITE (URL)	-		

LEARNING OUTCOMES

Learning outcomes
The course introduces core concepts of public health with an emphasis on nutrition: the role of diet in the aetiology of modern chronic diseases; dietary assessment and surveillance at the individual and population level; evidence-based dietary guidelines and recommendations; food safety and consumer protection; and policies to change dietary habits at the individual, community and population level, together with the development and evaluation of nutrition policy at national and international level. Upon successful completion of the course, students will be able to: • Explain the role of diet in the aetiology and burden of the main chronic non-communicable diseases (obesity, diabetes mellitus, cardiovascular disease) and the basic principles of public health. • Interpret evidence-based dietary guidelines and recommendations and describe the role of the dietitian/nutritionist and of the food scientist in public health promotion. • Critically evaluate issues linking food technology with public health: functional foods, food supplements, food safety, nutrition labelling and claims. • Describe the Mediterranean diet as a dietary pattern and the consequences of the westernisation/urbanisation of lifestyles. • Know the methods of nutrition surveillance, national nutrition surveys and the role of national and international organisations. • Compare intervention strategies and policies at the individual, community and population level and apply basic principles of designing and evaluating health promotion programmes.
General competences
• Independent work • Group discussion • Promotion of free, creative and inductive thinking • Respect for diversity and multiculturalism • Interdisciplinary collaboration in solving public health nutrition problems



COURSE CONTENT

The course runs over 13 teaching weeks. It covers the role of diet in the aetiology of modern chronic diseases and the principles of public health; the main diet-related chronic diseases (obesity, diabetes, cardiovascular disease); evidence-based dietary guidelines; nutrition and food technology, functional foods, food supplements, food safety and labelling; the Mediterranean diet; nutrition surveillance; and the design, implementation and evaluation of nutrition policies and intervention programmes at the individual, community and population level.

More specifically, the course is structured as follows:

1st Week

- The role of diet in the aetiology of modern chronic diseases | Principles of public health

2nd Week

- Main diet-related chronic diseases: Obesity

3rd Week

- Main diet-related chronic diseases: Diabetes

4th Week

- Main diet-related chronic diseases: Cardiovascular disease

5th Week

- Evidence-based dietary guidelines and recommendations | The role of the dietitian/nutritionist in public health promotion

6th Week

- Nutrition and technology | Functional foods | Food hygiene and safety and consumer protection | Nutrition labels and labelling

7th Week

- The role of food supplements in the diet and health of the population

8th Week

- The Mediterranean diet and the westernisation/urbanisation of lifestyles

9th Week

- Nutrition monitoring and surveillance: Assessing the diet and health of the population | National nutrition surveys | National and international organisations

10th Week

- Nutrition and nutrition policies for individual-level intervention | Review of strategies in high-income countries

11th Week

- Nutrition policies for community- and population-level intervention | Review of public health nutrition strategies in high-income countries

12th Week

- Evaluation and effectiveness of public health promotion intervention programmes | Nutrition, health systems and public health priorities | New research directions

13th Week

- Review and synthesis

TEACHING AND LEARNING METHODS - EVALUATION

DELIVERY	FACE-TO-FACE	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	LECTURES PRESENTED WITH POWERPOINT USE OF A COMPUTER BY THE INSTRUCTOR DURING LECTURES LEARNING SUPPORT THROUGH E-CLASS	
TEACHING METHODS	Activity	Semester workload (hours)
	Lectures	39 (13 weeks × 3 hours)
	Tutorial exercises and presentations of individual assignments	39 (13 weeks × 3 hours)



	Individual assignment (written report and oral presentation)	45
	Independent study and preparation for the written examination	27
	Course total (25 workload hours per credit)	150 (6 ECTS)
STUDENT PERFORMANCE EVALUATION	The final course grade consists of the written examination (60%) and the laboratory/tutorial component (40%). • Written examination (60%): multiple-choice, critical-thinking and short-answer questions on the lecture material. • Laboratory/tutorial component (40%): individual written assignment (20%) and oral presentation and discussion of the individual assignment (20%). Compulsory attendance of the tutorial exercises (prerequisite). A passing grade ($\geq 5/10$) is required in both the written examination and the laboratory/tutorial component.	

RECOMMENDED BIBLIOGRAPHY

- Spark A, Dinour LM, Obenchain J. Nutrition in Public Health: Principles, Policies, and Practice. 2nd Edition. CRC Press, 2021.
- Ross AC, Caballero B, Cousins RJ, Tucker KL, Ziegler TR (eds). Modern Nutrition in Health and Disease. 11th Edition. Lippincott Williams & Wilkins, 2014.

Selected scientific articles from the international literature; indicative journals: Public Health Nutrition, American Journal of Clinical Nutrition, Lancet, BMJ, New England Journal of Medicine, Circulation, PLOS Medicine, Diabetes Care.

