

NUTRITIONAL EPIDEMIOLOGY

COURSE OUTLINE

Responsible: [Theodora Mouratidou](#)

1. GENERAL			
SCHOOL	School of Health Sciences		
ACADEMIC UNIT	Department of Nutrition and Dietetics Sciences		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	0809.6.005.0	SEMESTER	2nd
COURSE TITLE	Nutritional Epidemiology		
INDEPENDENT TEACHING ACTIVITIES if credits are awarded for separate components of the course	WEEKLY TEACHING HOURS	CREDITS	
	0	4	
Total	0	4	
COURSE TYPE general background, special background, specialised general knowledge, skills development	Ειδίκευσης		
PREREQUISITE COURSES	None		
LANGUAGE OF INSTRUCTION and EXAMINATIONS	English		
OFFERED TO ERASMUS STUDENTS	Yes (in English) — Spring Semester		
COURSE WEBSITE (URL)	https://eclass.hmu.gr/courses/NDS202/		
2. LEARNING OUTCOMES			
Learning outcomes			
The aim of the course is to introduce students to the fundamental concepts of epidemiology and nutritional epidemiology, and to provide them with knowledge of the design, appraisal, and interpretation of epidemiological studies, the sources and methods of dietary data collection, and the use of scientific evidence to inform dietary guidelines, public health interventions, and nutrition policies. Particular emphasis is placed on the role of nutrition in the primary and secondary prevention of non-communicable diseases and obesity, as well as on the epidemiology of the major diet-related chronic diseases. Upon successful completion of the course, students will be able to: • explain the role of diet and other environmental factors in the aetiology and prevention of non-communicable diseases; • describe the strengths and limitations of the major epidemiological study designs and evaluate their implications for the interpretation of findings in nutritional epidemiology; • recognise the influence of socioeconomic inequalities on dietary behaviours and population health; • explain the principles of evidence-based practice and their importance in the development of dietary recommendations and public health nutrition policies; and • describe the epidemiology of the major non-communicable diseases, including cancer, cardiovascular diseases, diabetes, and obesity, and interpret the role of nutrition in their prevention and management.			
General Competences			

The course contributes to the development of the following generic competences:

- Ability to search for, analyse, and synthesise data and information using appropriate technologies
- Adaptability to new situations
- Decision-making
- Ability to work independently and as part of a team
- Ability to work in an interdisciplinary environment
- Critical thinking and self-reflection

3. SYLLABUS

The course focuses on the applications of nutritional epidemiology in disease prevention and health promotion. Specifically, the course covers the following topics:

- Study design and research methodology in nutritional epidemiology
- Causality and dietary intake assessment
- Biochemical markers and physical activity indicators in nutrition research
- Evidence-based dietary recommendations
- Food insecurity
- Diet and cancer
- Diet and diabetes
- Diet and cardiovascular diseases
- Diet and obesity
- Nutrition policies

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY Face-to-face, Distance learning, etc.	Face-to-face (classroom-based)	
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY Use of ICT in teaching, laboratory education, communication with students	• Use of ICT in teaching • Use of ICT for communication with students via the University's e-learning platform	
TEACHING METHODS The manner and methods of teaching are described in detail.	Activity	Semester workload
	Course total	
STUDENT PERFORMANCE EVALUATION Description of the evaluation procedure	• Final oral examination (80%) • Individual or group assignments (20%)	

5. ATTACHED BIBLIOGRAPHY

- Willet W. Nutritional Epidemiology. 3rd Edition, Oxford, 2013.
- Gibney, J.M., Margetts, B.M., Kearney, J.M., Arab, L., Guerrero, S., Public Health Nutrition. Blackwell Science Ltd., Oxford, 2004.
- Lovegrove, JA, Hodson, L, Sharma, S. Nutrition research methodologies. Hoboken, NJ: Wiley Blackwell, 2015.

