# **Principles of Human Nutrition [7]**

#### **COURSE OUTLINE**

### (1) GENERAL

SCHOOL	ANIMAL BIOSCIENCES					
ACADEMIC UNIT	DEPARTMENT OF ANIMAL SCIENCE					
LEVEL OF STUDIES	UNDERGRADUATE – ELECTIVE					
COURSE CODE	7	SEMES	SEMESTER 7 <sup>th</sup>			
COURSE TITLE	PRINCIPLES OF HUMAN NUTRITION					
INDEPENDENT TEACHING ACTIVITIES			WEE	KLY TEACHING HOURS	CREDITS	
	Theory Lectures			3	3	
TOTAL				3	3	
COURSE TYPE	Field of Science					
PREREQUISITE COURSES:	Biochemistry, Nutritional Physiology					
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek					
IS THE COURSE OFFERED TO ERASMUS STUDENTS:	NO					
COURSE WEBSITE (URL):	https://oeclass.aua.gr/eclass/courses/EZPY204/					
TEACHING STAFF:	K. Mountzouris, I. Politis, G. Christodoulopoulos					

#### (2) LEARNING OUTCOMES

## **Learning outcomes**

Upon successful completion of the course, students will be able (according to Bloom) to:

- Explain the important role of nutrition for maintaining good human health (Knowledge / Comprehension).
- Describe how human requirements for energy and nutrients are formed across all stages of life (Knowledge / Comprehension).
- Analyze how the nutritional value of different food groups relates to current dietary recommendations and food-level guidelines, particularly within the context of the Mediterranean diet (**Analysis / Comprehension / Application**).
- Explain the role of food processing in ensuring food safety and its impact on nutritional value (Knowledge / Comprehension / Application).
- Evaluate and analyze an individual's diet, and propose evidence-based changes and improvements to align it with current dietary recommendations (Analysis / Evaluation / Application).
- Search, retrieve, and critically evaluate scientific information using appropriate methods and course-related resources to support dietary assessments (**Application / Analysis / Evaluation**).

#### **General Competences**

- $\bullet$  Search, analysis and synthesis of data and information, using the necessary technologies
- Decision making
- Autonomous work
- Teamwork
- Demonstration of social, professional, and ethical responsibility
- Work in an interdisciplinary environment

### (3) SYLLABUS

Relationship between nutrition and human health

- Nutrients, digestion metabolism
- Nutritional value of food groups
- Energy requirements
- Protein requirements
- Carbohydrates requirements
- Fat requirements

- Nutritional value of milk and milk products
- Effect of processing on the nutritional value of foods
- Nutrition in human life stages (pregnancy, lactation, infancy, school age, adolescence, adulthood and old age) Contemporary societal trends and their effects on human nutrition
- Examples of diet analysis composition

#### (4) TEACHING and LEARNING METHODS - EVALUATION

DELIVERY	In the classroom and remotely through specialized video conferencing tools (e.g. OpeneClass & MS teams)				
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of Computers and internet PowerPoint presentations, specialized diet analysis software.  Learning process support through the open e-class electronic platform.				
TEACHING METHODS	Activity	Semester workload			
	Lectures in theory	39			
	Literature study	22			
	Individual study of students on diet formulation	14			
	Course total (25 h of workload per ECTS)	<i>7</i> 5			
STUDENT PERFORMANCE EVALUATION	Theoretical part: Optional attendance of Lectures by students (work in progress, etc.) Final written exam (100%) including: Development and multiple choice and true/false questions.				
	<ul><li>III. The evaluation language is Greek.</li><li>IV. The evaluation criteria are communicated to the students.</li><li>V. The final grade results from the scores in the theory (100%)</li></ul>				

#### (5) ATTACHED BIBLIOGRAPHY

#### Suggested Bibliography:

## (A) Printed Related Scientific Journals – Publications

- Eastwood M (1997). Principles of Human Nutrition. Chapman & Hall
- Frayn KN (1996). Frontiers in metabolism Metabolic regulation. A human perspective. Portland Press
- Garrow JS, James WPT and Ralph A (2000). Human nutrition and dietetics, 10th edition. Edinburgh: Churchill Livingstone
- Gibney MJ, Vorster HH & Kok FJ (2002). Introduction to human nutrition. The Nutrition Society: Blackwell science
- Ζαμπέλας Α (2004) Διατροφή στα στάδια της ζωής, Ιατρικές Εκδόσεις Πασχαλίδη, GREEK
- Ζερφυρίδης ΓΚ (1998) Διατροφή του Ανθρώπου, Εκδόσεις Βιβλίων Γιαχούδη, GREEK

# (B) Relevant Scientific Journals

- Journal of Nutrition
- Nutrition Journal
- British Journal of Nutrition
- European Journal of Nutrition
- The American journal of clinical nutrition

### (C) Digital Educational Material (open e-class)

https://oeclass.aua.gr/eclass/modules/document/?course=EZPY204

- Μουντζούρης Κ 2020 Διατροφή Ενηλίκων\_new20.pdf GREEK
- Μουντζούρης Κ 2020 Διατροφή στα στάδια της Ζωής 2020.pdf GREEK
- Μουντζούρης Κ 2020 Εισαγωγή στη Διατροφή του Ανθρώπου\_new20.pdf GREEK
- Μουντζούρης Κ 2020 Θρεπτική αξία των τροφίμων Ομάδες τροφίμων.pdf GREEK
- Πολίτης Ι Η Μοναδικότητα του Γάλακτος και των Γαλακτοκομικών Προϊόντων στη Διατροφή του Ανθρώπου GREEK

## (D) Recommended Textbooks (EUDOXOS):

• Ζερφυρίδης ΓΚ (1998) Διατροφή του Ανθρώπου, Εκδόσεις Βιβλίων Γιαχούδη - GREEK