



INTRODUCTION TO HUMAN NUTRITION
COURSE OUTLINE

GENERAL

SCHOOL	AGRICULTURAL SCIENCES		
DEPARTMENT	FOOD SCIENCE AND NUTRITION		
COURSE LEVEL	UNDERGRADUATE		
COURSE CODE	MK-215	SEMESTER	B'
COURSE TITLE	INTRODUCTION TO HUMAN NUTRITION		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS		ECTS
	Lectures	3	5
	Laboratory/ Tutorial Exercises	2	
COURSE TYPE	SCIENTIFIC AREA DEVELOPMENT OF SKILLS		
	-		
PREREQUISITES:	GREEK		
LANGUAGE OF TEACHING AND EXAMINATIONS:	ENGLISH		
THE COURSE IS OFFERED TO ERASMUS STUDENTS	-		
URL			

TEACHING RESULTS

TEACHING RESULTS
<p>This course is the basic introductory course in nutrition science. The aim of the course is to introduce students to the basic concepts and fundamental principles of nutrition science. Specifically, it aims to introduce the concepts of food sources and nutritional components, dietary intake, and nutritional status. It examines the relationship between dietary intake (foods, nutrients) and nutritional status. Additionally, the course aims to understand the concept of nutritional needs, the assessment of the nutritional value of foods, and the principles upon which population-level dietary recommendations are based. Finally, the course aims to familiarize students with the basic methodologies of nutrition science and dietetics.</p> <p>Upon successful completion of the course, the student will be able to:</p> <ol style="list-style-type: none"> 1. Describe the components of a healthy diet 2. Understand nutritional needs and how they are met through food intake, and by extension, the development of a diet 3. Understand the biological role of essential nutrients and their dietary sources 4. Understand the relationship between dietary intake and nutritional status 5. Understand the scientific basis for the dietary recommendations provided at the population level 6. Use food composition tables for assessing food composition and dietary intake
General Skills



- • Independent work
- • Promotion of free, creative, and inductive thinking
- • Search, analysis, and synthesis of data and information, using the necessary technologies.

CONTENT

1st Week

- Basic concepts and definitions: History of nutrition and the evolution of the science of nutrition | Distinguishing between dietary intake and nutritional status | Nutrients (macro and micro)

2nd Week

- Energy needs: Energy requirements - calorie balance - and factors that determine them | Methods of estimating energy needs and body composition

3rd Week

- Carbohydrates: Origin, dietary needs, recommendations, and biological roles | Plant fibers | Added sugars | Glycemic index

4th Week

- Proteins: Origin, dietary needs, recommendations, and biological roles | Biological value | Essential amino acids | Nitrogen balance

5th Week

- Lipids (Fats): Origin, dietary needs, recommendations, and biological roles | Classes of lipids

6th Week

- Fat-soluble vitamins: Origin, dietary needs, recommendations, and biological roles | Effects of deficiency and overload

7th Week

- Water-soluble vitamins: Origin, dietary needs, recommendations, and biological roles | Effects of deficiency and overload

8th Week

- Trace elements (or Microminerals): Origin, dietary needs, recommendations, and biological roles | Effects of deficiency and overload

9th Week

- Recommended dietary intake: Definitions and basic principles

10th Week

- Population dietary recommendations: Approaches and basic principles | How they began and how they have evolved

11th Week

- Food composition tables: Understanding and use

12th Week

- Diet planning (or diet registry): Methodology for creating a diet and the use of new technologies

13th Week

- Healthy eating: How it is defined and what it includes | Mediterranean diet

TEACHING AND LEARNING METHODS - EVALUATION

TEACHING METHOD.	FACE TO FACE	
USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES	PRESENTATION OF LECTURES THROUGH PPT (PowerPoint) USE OF COMPUTER DURING LECTURES BY THE TEACHER SUPPORT OF THE LEARNING PROCESS THROUGH E-CLASS	
TEACHING STRUCTURE	Activity Semester	Workload
	LECTURES	39
	TUTORIAL EXERCISES	26



	INDIVIDUAL REPORTS WITHIN THE FRAMEWORK OF TUTORIAL EXERCISES	30
	INDEPENDENT STUDY	30
	Total Course	125
EVALUATION OF STUDENTS	<p>1. WRITTEN EXAM (70%) -- Multiple-choice questions -- Critical thinking and short development questions – - Solving computational problems</p> <p>2. LAB GRADE (30%) -- Participation and performance during tutorial exercises -- Written report of tutorial exercise results -- Oral examination of written reports</p> <p>For course recognition, students must secure a passing grade in both individual gradings.</p>	
<p>BIBLIOGRAPHY</p> <ul style="list-style-type: none"> • Byrd-Bredbenner C, Berning J, Kelley D, Abbot J. Wardlaw's Perspectives in Nutrition. 12th Edition. McGraw-Hill Companies, 2022 • Whitney E & Rolfes SR. Understanding Nutrition. 16th Edition. Cengage Learning, 2022 • Gibney MJ, Vorster HH, Kok FJ. Εισαγωγή στη Διατροφή του Ανθρώπου (Επιμ. Μετάφρασης: Α-Λ Ματάλα και Μ. Γιαννακούλια). Αθήνα, Εκδ. Παρισιανού, 2015. <p>Accredited scientific articles from the international bibliography, indicative scientific journals: American Journal of Clinical Nutrition, European Journal of Clinical Nutrition, Lancet, New England Journal of Medicine, Circulation, Plos Medicine, Diabetes Care</p>		

