



**CLINICAL NUTRITION**  
**COURSE OUTLINE**

**GENERAL**

|  |   |                                       |             |
|--|---|---------------------------------------|-------------|
| <b>SCHOOL</b>                                    | AGRICULTURAL SCIENCES                   |                                       |             |
| <b>DEPARTMENT</b>                                | FOOD SCIENCE AND NUTRITION              |                                       |             |
| <b>COURSE LEVEL</b>                              | UNDERGRADUATE                           |                                       |             |
| <b>COURSE CODE</b>                               | MK-714                                  | <b>SEMESTER</b>                       | Z'          |
| <b>COURSE TITLE</b>                              | CLINICAL NUTRITION                      |                                       |             |
| <b>INDEPENDENT TEACHING ACTIVITIES</b>           |   | <b>WEEKLY TEACHING HOURS</b>          | <b>ECTS</b> |
|  |   | <b>Lectures</b>                       | 3           |
|  |   | <b>Laboratory/ Tutorial Exercises</b> | 2           |
| <b>COURSE TYPE</b>                               | SCIENTIFIC AREA   DEVELOPMENT OF SKILLS |                                       |             |
| <b>PREREQUISITES:</b>                            | -                                       |                                       |             |
| <b>LANGUAGE OF TEACHING AND EXAMINATIONS:</b>    | GREEK                                   |                                       |             |
| <b>THE COURSE IS OFFERED TO ERASMUS STUDENTS</b> | ENGLISH                                 |                                       |             |
| <b>URL</b>                                       | -                                       |                                       |             |

**TEACHING RESULTS**

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| <b>Teaching Results</b>   |
| <p>This course introduces basic knowledge in the field of dietary management of acute and chronic diseases. It aims to help students understand the diet therapy required to manage patients and to design appropriate dietary interventions at both an individual and a population level.</p> <p>Upon successful completion of the course, the student will be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the main nutritional problems affecting individuals and populations.</li> <li>2. Recognize the importance of nutrition not only in the prevention but also in the treatment of clinical cases.</li> <li>3. Perceive the scientific significance and evolution of the academic field of Dietetics-Nutrition, through epidemiological and clinical studies.</li> <li>4. Evaluate recent scientific data in the field related to population groups that are at increased risk of developing diet-related diseases or who already have a diet-related disease.</li> </ol> |
| <b>General Skills</b>   |
| <ul style="list-style-type: none"> <li>• Independent work</li> <li>• Team work</li> <li>• Promotion of free, creative, and inductive thinking</li> <li>• Search, analysis, and synthesis of data and information, using the necessary technologies.</li> <li>• Respect for diversity and multiculturalism</li> </ul>  |

**CONTENT**



The content of the course puts emphasis on nutritional assessment, diagnosis, intervention, and monitoring of individuals suffering from: dyspepsia, anemia, obesity, metabolic syndrome, dyslipidemias, hypertension, diabetes mellitus, cardiovascular diseases, cancer, celiac disease, and irritable bowel syndrome.

Clinical case studies: a detailed diet care plan is developed for cases of dyspepsia, anemia, obesity, metabolic syndrome, dyslipidemias, hypertension, diabetes mellitus, cardiovascular disease, cancer, celiac disease, and irritable bowel syndrome.

**1st Week**

- Clinical case studies: approach and concepts.

**2nd Week**

- Clinical Case 1: Dyspepsia.

**3rd Week**

- Clinical Case 2: Anemia.

**4th Week**

- Clinical Case 3: Obesity.

**5th Week**

- Clinical Case 4: Metabolic Syndrome.

**6th Week**

- Clinical Case 5: Dyslipidemia.

**7th Week**

- Clinical Case 6: Hypertension.

**8th Week**

- Clinical Case 7: Type 1 Diabetes Mellitus.

**9th Week**

- Clinical Case 8: Type 2 Diabetes Mellitus.

**10th Week**

- Clinical Case 9: Cardiovascular Disease.

**11th Week**

- Clinical Case 10: Cancer

**12th Week**

- Clinical Case 11: Celiac Disease

**13th Week**

- Clinical Case 12: Irritable Bowel Syndrome

**TEACHING AND LEARNING METHODS - EVALUATION**

|  |  |                 |
|--|--|-----------------|
| <b>TEACHING METHOD.</b>                                  | FACE TO FACE   |                 |
| <b>USE OF INFORMATION AND COMMUNICATION TECHNOLOGIES</b> | PRESENTATION OF LECTURES THROUGH PPT (PowerPoint)<br>USE OF COMPUTER DURING LECTURES BY THE TEACHER<br>SUPPORT OF THE LEARNING PROCESS THROUGH E-CLASS |                 |
| <b>TEACHING STRUCTURE</b>                                | <b>Activity Semester</b>   | <b>Workload</b> |
|  | LECTURES   | 39              |
|  | STUDY OF CLINICAL CASES - DISCUSSION   | 26              |
|  | INDEPENDENT STUDY OF CLINICAL CASES - WRITTEN DOCUMENTATION  | 25              |
|  | INDEPENDENT STUDY  | 10              |
|  | <b>TOTAL COURSE</b>  | <b>100</b>      |



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|---|---|
| <p><b>EVALUATION OF STUDENTS</b></p>  | <p><b>1. WRITTEN EXAM (60%)</b><br/> -- Questions related to the course material (30% of the grade), development topics and/or multiple-choice questions<br/> -- Description of a nutritional care plan for a clinical case (30% of the grade)</p> <p><b>LAB GRADE (40%)</b><br/> -- Participation and performance during the study of a clinical case<br/> -- Written report of clinical case results<br/> -- Oral examination of the written reports</p> <p>A prerequisite for the final written exam is the successful attendance of the laboratory part of the course. For the recognition of the course, students must secure a passing grade in both individual grades.</p> |
| <p><b>BIBLIOGRAPHY</b></p> <ul style="list-style-type: none"> <li>• Raymond JL, Morrow K. Krause and Mahan's Food &amp; the Nutrition Care Process. 16<sup>th</sup> Edition. Saunders, 2022.</li> </ul> <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> |   |



**PUBLIC HEALTH NUTRITION**  
**ΠΕΡΙΓΡΑΜΜΑ ΜΑΘΗΜΑΤΟΣ**

**ΓΕΝΙΚΑ**

|  |   |                           |    |
|--|---|---------------------------|----|
| <b>ΣΧΟΛΗ</b>                                     | AGRICULTURAL STUDIES                    |                           |    |
| <b>ΤΜΗΜΑ</b>                                     | FOOD SCIENCE AND NUTRITION              |                           |    |
| <b>ΕΠΙΠΕΔΟ ΣΠΟΥΔΩΝ</b>                           | UNDERGRADUATE                           |                           |    |
| <b>ΚΩΔΙΚΟΣ ΜΑΘΗΜΑΤΟΣ</b>                         | ΜΚ-706                                  | <b>ΕΞΑΜΗΝΟ ΣΠΟΥΔΩΝ</b>    | Ζ' |
| <b>ΤΙΤΛΟΣ ΜΑΘΗΜΑΤΟΣ</b>                          | PUBLIC HEALTH NUTRITION                 |                           |    |
| <b>ΑΥΤΟΤΕΛΕΙΣ ΔΙΔΑΚΤΙΚΕΣ ΔΡΑΣΤΗΡΙΟΤΗΤΕΣ</b>      | <b>ΕΒΔΟΜΑΔΙΑΙΕΣ ΩΡΕΣ ΔΙΔΑΣΚΑΛΙΑΣ</b>    | <b>ΠΙΣΤΩΤΙΚΕΣ ΜΟΝΑΔΕΣ</b> |    |
| Lectures   | 3                                       | 4                         |    |
| Laboratory/ Tutorial Exercises                   | 2                                       |                           |    |
| <b>ΤΥΠΟΣ ΜΑΘΗΜΑΤΟΣ</b>                           | SCIENTIFIC AREA   DEVELOPMENT OF SKILLS |                           |    |
| <b>ΠΡΟΑΠΑΙΤΟΥΜΕΝΑ ΜΑΘΗΜΑΤΑ:</b>                  | -                                       |                           |    |
| <b>ΓΛΩΣΣΑ ΔΙΔΑΣΚΑΛΙΑΣ και ΕΞΕΤΑΣΕΩΝ:</b>         | GREEK                                   |                           |    |
| <b>ΤΟ ΜΑΘΗΜΑ ΠΡΟΣΦΕΡΕΤΑΙ ΣΕ ΦΟΙΤΗΤΕΣ ERASMUS</b> | ENGLISH                                 |                           |    |
| <b>ΗΛΕΚΤΡΟΝΙΚΗ ΣΕΛΙΔΑ ΜΑΘΗΜΑΤΟΣ (URL)</b>        | -                                       |                           |    |

**ΜΑΘΗΣΙΑΚΑ ΑΠΟΤΕΛΕΣΜΑΤΑ**

**Μαθησιακά Αποτελέσματα**

This course introduces basic concepts related to: public health, with an emphasis on public health nutrition, nutritional assessment at the individual and population level, dietary recommendations, policies for changing dietary habits at the individual, community, and population level, the role of the state in public health, setting priorities and nutritional goals at a global (global nutrition targets, Sustainable Development Goals) and national level, food safety, and the formulation of nutrition policy.

Upon successful completion of the course, students will be able to understand the role of nutrition in the etiology of contemporary chronic diseases and effective strategies/policies to address them.

The ultimate objectives of the course are:

- Familiarizing students with the basic principles governing public health, and how changes in dietary habits are achieved at the individual, community, and population level to promote good health or prevent poor health.
- Introducing students to methods of nutritional assessment and dietary recommendations.
- Familiarizing students with the role of the state, and how the formulation of nutrition policy is achieved with the aim of protecting and promoting public health.

**Γενικές Ικανότητες**

- Independent work
- Team discussion
- Promotion of free, creative, and inductive thinking
- Respect for diversity and multiculturalism
- Interdisciplinary collaboration in solving nutritional matters of public health significance



## ΠΕΡΙΕΧΟΜΕΝΟ ΜΑΘΗΜΑΤΟΣ

### 1st Week

- Role of nutrition in the etiology of modern chronic diseases | Principles of public health

### 2nd Week

- Major chronic diseases related to nutrition: Obesity

### 3rd Week

- Major chronic diseases related to nutrition: Diabetes

### 4th Week

- Major chronic diseases related to nutrition: Cardiovascular diseases

### 5th Week

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

### 6th Week

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

### 7th Week

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

### 8th Week

- Mediterranean diet and the westernization/urbanization of people's lifestyle

### 9th Week

- Nutritional oversight and supervision: Assessment of diet and health of the population | National dietary studies | National and International Agencies

### 10th Week

- Nutrition and Nutritional policies for individual intervention | Review of strategies in developed countries

### 11th Week

- Nutritional policies for community and population intervention | Review of public health and nutrition strategies in developed countries

### 12th Week

- Evaluation and effectiveness of intervention programs for promoting public health

### 13th Week

- Nutrition, health systems, and public health priorities | New research directions
- στρατηγικών στις ανεπτυγμένες χώρες

## ΔΙΔΑΚΤΙΚΕΣ και ΜΑΘΗΣΙΑΚΕΣ ΜΕΘΟΔΟΙ - ΑΞΙΟΛΟΓΗΣΗ

|  |  |                                 |
|--|--|---------------------------------|
| <b>ΤΡΟΠΟΣ ΠΑΡΑΔΟΣΗΣ</b>  | FACE TO FACE   |                                 |
| <b>ΧΡΗΣΗ ΤΕΧΝΟΛΟΓΙΩΝ ΠΛΗΡΟΦΟΡΙΑΣ ΚΑΙ ΕΠΙΚΟΙΝΩΝΙΩΝ</b><br><i>Χρήση Τ.Π.Ε. στη Διδασκαλία, στην Εργαστηριακή Εκπαίδευση, στην Επικοινωνία με τους φοιτητές</i> | PRESENTATION OF LECTURES THROUGH PPT (PowerPoint)<br>USE OF COMPUTER DURING LECTURES BY THE TEACHER<br>SUPPORT OF THE LEARNING PROCESS THROUGH E-CLASS |                                 |
| <b>ΟΡΓΑΝΩΣΗ ΔΙΔΑΣΚΑΛΙΑΣ</b>  | <b>Δραστηριότητα</b>   | <b>Φόρτος Εργασίας Εξαμήνου</b> |
|  | LECTURES   | 39                              |
|  | DISCUSSION AND PRESENTATION OF INDIVIDUAL ASSIGNMENTS  | 26                              |
|  | INDEPENDENT STUDY – WRITTEN DOCUMENTATION & ORAL PRESENTATION OF INDIVIDUAL ASSIGNMENTS (PPT)  | 25                              |



|                            |  |            |
|----------------------------|--|------------|
|                            | INDEPENDENT STUDY  | 10         |
|                            | <b>TOTAL COURSE</b>  | <b>100</b> |
| <b>ΑΞΙΟΛΟΓΗΣΗ ΦΟΙΤΗΤΩΝ</b> | <p><b>1. WRITTEN EXAM (60%)</b><br/>-- Multiple-choice questions<br/>-- Critical thinking and short development questions</p> <p><b>2. LAB GRADE (40%)</b><br/>-- Participation and performance during the discussion and oral presentation of individual assignments.<br/>-- Written documentation of individual work.</p> <p>For course recognition, students must secure a passing grade in both individual gradings.</p> |            |

**ΣΥΝΙΣΤΩΜΕΝΗ-ΒΙΒΛΙΟΓΡΑΦΙΑ**

- Spark A, Dinour LM, Obenchain J. Nutrition in Public Health: Principles, Policies, and Practice. 2<sup>nd</sup> Edition. CRC press, 2021.
- A. Catherine Ross. Modern Nutrition in Health and Disease. 11<sup>th</sup> Edition. Lippincott Williams and Wilkins

Accredited scientific articles from the international bibliography, indicative scientific journals: Public Health Nutrition, Lancet, New England Journal of Medicine, Circulation, Plos Medicine, Diabetes Care

