

COURSE LAYOUT

1. GENERAL

SCHOOL	FOOD AND NUTRITIONAL SCIENCES		
ACADEMIC UNIT	FOOD SCIENCE AND HUMAN NUTRITION		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	3490	SEMESTER	9th
COURSE TITLE	SPORTS NUTRITION		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
<i>if credits are awarded for separate components of the course, e.g. lectures, laboratory exercises, etc. If the credits are awarded for the whole of the course, give the weekly teaching hours and the total credits</i>			
Lectures and Laboratory (3+1)	4	3	
<i>Add rows if necessary. The organisation of teaching and the teaching methods used are described in detail at (d).</i>			
COURSE TYPE	Special background		
<i>general background, special background, specialised general knowledge, skills development</i>			
PREREQUISITE COURSES:	NO		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	Greek		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES (English)		
COURSE WEBSITE (URL)	https://w1.aua.gr/etda/courses		

2. LEARNING OUTCOMES

Learning outcomes <i>The course learning outcomes, specific knowledge, skills and competences of an appropriate level, which the students will acquire with the successful completion of the course are described.</i> <i>Consult Appendix A</i> <i>Description of the level of learning outcomes for each qualifications cycle, according to the Qualifications Framework of the European Higher Education Area</i> <i>Descriptors for Levels 6, 7 & 8 of the European Qualifications Framework for Lifelong Learning and Appendix B</i> <i>Guidelines for writing Learning Outcomes</i>
The course constitutes the core introductory course in Sports Nutrition. The aim of the course is to provide students with an understanding of appropriate nutritional practices in relation to exercise and training, in order to promote health, energy availability, and physiological adaptations. The course content introduces students to the fundamental concepts of nutrition and exercise, with emphasis on: basic principles of nutrition; energy expenditure during resistance training and aerobic and anaerobic exercise; dietary practices during the preparation period; meal timing and meal composition before, during, and after competition, the use of ergogenic aids and dietary supplements; and the special nutritional needs of athletes.

In addition, the course presents introductory concepts related to the nutritional requirements of all age groups across the lifespan, before, during, and after physical activity.
Finally, the course aims to enable students to understand how dietary recommendations differ according to the type and duration of exercise.

Learning Outcomes

Upon successful completion of the course, the student will be able to:

Demonstrate knowledge and understanding of fundamental topics as well as recent developments in the field of nutrition and exercise

Comprehend complex concepts related to digestion and absorption of nutrients during exercise, as well as the body's nutritional requirements and the utilization of nutrients for energy

Explain, using scientific evidence, the basic principles of sports nutrition in relation to different types and intensities of exercise

Design feasible nutritional strategies before, during, and after exercise

Understand body composition in relation to athletic performance and the principles underlying different types of exercise

Critically evaluate the use of dietary supplements and ergogenic aids based on scientific evidence

Identify and interpret nutritional disorders and special dietary needs of athletes

General Competences

Taking into consideration the general competences that the degree-holder must acquire (as these appear in the Diploma Supplement and appear below), at which of the following does the course aim?

Search for, analysis and synthesis of data and information, with the use of the necessary technology

Adapting to new situations

Decision-making

Working independently

Teamwork

Working in an international environment

Working in an interdisciplinary environment

Production of new research ideas

Project planning and management

Respect for difference and multiculturalism

Respect for the natural environment

Showing social, professional and ethical responsibility and sensitivity to gender issues

Criticism and self-criticism

Production of free, creative and inductive thinking

... ..

Others...

The course aims to develop the following general competences:

Search for, analysis, and synthesis of data and information, using appropriate technologies

Independent work

Teamwork (in lab)

Working in an interdisciplinary environment

Professional and ethical responsibility

Showing social, professional and ethical responsibility and sensitivity to gender issues

Promotion of free, creative, and inductive thinking

3. SYLLABUS

THEORY

1. Macronutrients

2. Micronutrients and water

3. Digestion and absorption of nutrients

4. The role of nutrients in bioenergetics

5. Macronutrient metabolism in exercise and training
6. Energy measurement of foods during physical activity
7. Dietary guidelines for the person exercising
8. Dietary criteria for intense training and competition
9. Making wise choices for foods; evaluation of body composition and special needs
11. Exercise, thermic regulation, water balance and rehydration
12. Evaluation of pharmaceutical and chemical ergogenic aids; evaluation of dietary ergogenics
13. Energy balance, exercise, and body composition; Nutritional disorders

LABORATORY

Basic principles of sports nutrition

Build your plate: nutrition strategies at home and away

Appropriate nutrition and hydration levels in athletes

The role of protein in supporting exercise-induced muscle hypertrophy

Dietary supplements with ergogenic effects

Athlete nutrition in relation to training timing across different sports

Nutritional recovery of athletes following injury

Ergometric evaluation

Evaluation and critical analysis of case studies

4. TEACHING and LEARNING METHODS - EVALUATION

DELIVERY <i>Face-to-face, Distance learning, etc.</i>	Face-to-face (theory – laboratory)												
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY <i>Use of ICT in teaching, laboratory education, communication with students</i>	Lecture presentations provided in digital format Support of the learning process through the e-class electronic learning platform Provision of educational material and relevant bibliography												
TEACHING METHODS <i>The manner and methods of teaching are described in detail.</i> <i>Lectures, seminars, laboratory practice, fieldwork, study and analysis of bibliography, tutorials, placements, clinical practice, art workshop, interactive teaching, educational visits, project, essay writing, artistic creativity, etc.</i> <i>The student's study hours for each learning activity are given as well as the hours of non-directed study according to the principles of the ECTS</i>	<table border="1"> <thead> <tr> <th>Activity</th><th>Semester workload</th></tr> </thead> <tbody> <tr> <td>Lectures</td><td>35</td></tr> <tr> <td>Laboratory exercises</td><td>5</td></tr> <tr> <td>Preparation of individual and/or group assignments</td><td>20</td></tr> <tr> <td>Independent Study</td><td>15</td></tr> <tr> <td>Course total</td><td>75</td></tr> </tbody> </table>	Activity	Semester workload	Lectures	35	Laboratory exercises	5	Preparation of individual and/or group assignments	20	Independent Study	15	Course total	75
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STUDENT PERFORMANCE EVALUATION <i>Description of the evaluation procedure</i> <i>Language of evaluation, methods of evaluation, summative or conclusive, multiple-choice questionnaires, short-answer questions, open-ended</i>	Theory: Written final examination (100%), which includes multiple-choice questions Laboratory:												

questions, problem solving, written work, essay/report, oral examination, public presentation, laboratory work, clinical examination of patient, art interpretation, other <i>Specifically defined evaluation criteria are given, and if and where they are accessible to students.</i>	i) Written final theoretical examination (75%), which includes: Multiple-choice questions Short-answer questions Problems or exercises ii) Individual or group assignments (25%)
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5. ATTACHED BIBLIOGRAPHY

- Suggested bibliography:

McArdle WD. Διατροφή στην Άσκηση και τη σωματική δραστηριότητα. Broken Hill Publishers LTD, 2017, Λευκωσία (Κωδικός συγγράμματος στο Εύδοξος 68373291)

- Related academic journals:

Journal of the International Society of Sports Nutrition; Sports Medicine; Medicine & Science in Sports & Exercise (official journal of the American College of Sports Medicine (ACSM); European Journal of Sport Science; Internal Journal of Sport Nutrition and Exercise Metabolism; Journal of Sport Sciences