**COURSE LAYOUT**

1. **GENERAL**

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| **SCHOOL** | SCHOOL OF FOOD AND NUTRITIONAL SCIENCES | | | | |
| **DEPARTMENT** | FOOD SCIENCE AND HUMAN NUTRITION | | | | |
| **STUDY LEVEL** | Undergraduate | | | | |
| **COURSE CODE** | **3490** | **SEMESTER** | | 7ο | |
| **COURSE TITLE** | SPORTS NUTRITION | | | | |
| **INDEPENDENT TEACHING ACTIVITIES** | | | **WEEKLY TEACHING HOURS** | | **ECTS** |
| Theory and Laboratory (3+1) | | | 4 | | 4 |
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| **COURSE TYPE**  *Foundation course, General knowledge, Scientific area, Developing skills* | Scientific area | | | | |
| **PREREQUISITES:** | NO | | | | |
| **LANGUAGE:** | Greek | | | | |
| **IS THE COURSE OFFERED TO ERASMUS STUDENTS?** | YES (in English) | | | | |
| **COURSE WEBPAGE (URL)** |  | | | | |

1. **LEARNING OUTCOMES**

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| **Learning Outcomes** | |
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| **This is the basic introductory course to** Sports Nutrition. **The goal of this course is to develop an understanding** of the necessary nutrition practices related to exercise or training in order to achieve health, energy, and adaptations. **The course material aims at introducing student in the basic concepts** of sports nutrition placing an emphasis on the basic nutrition principles, energy consumption during weight bearing exercise and aerobic and anaerobic exercise, on the diet at the time of preparation, the time of meal consumption and the meals’ composition for prior, during, and after the exercise event, on use of ergogenics and nutrition supplements and on special needs of athletes. **It also describes the introductory concepts** of the nutritional needs of all age groups in all stages of life before, during, and after exercise.  **Finally, the aim of this course is the students’ understanding** of the way by which the dietary recommendations are modified based on the type and duration of exercise.  **By the successful completion of this course the student will be in a position to:**   * **Have knowledge and understanding of the basic sports and nutrition concepts but also of the newest developments** of sports nutrition. * Have acquired the **ability to perceive complex concepts** related to absorption and digestion of nutrients during exercise, body needs and uses of nutrients for energy. * Will be able to **comprehend** body composition for sports performance and the principles of different types of exercise * Will be able to **comprehend and evaluate** the use of nutrition supplements * Will acquire **the ability to perceive** eating disorders | |
| **General Competences** |
| * Data search, data analysis and synthesis, information mining * Adaptation to new situations * Autonomous work * Teamwork * Decision making * Respect to physical environment * Development of social, professional and moral responsibility and sensitivity to gender issues * Make criticism and self-criticism * Promotion of creative and inductive thinking | |

1. **COURSE CONTENT**

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| **THEORY**   1. Macronutrients 2. Micronutrients and water 3. Absorption and digestion of nutrients 4. The role of nutrients on bioenergetics 5. Metabolism of macronutrients in exercise and training 6. Calculation of food energy during physical activity 7. Nutrition recommendations for physical activity and exercise 8. Nutritional criteria for intense training and sports event Υ 9. Making wise choices in foods 10. Exercise, thermoregulation, liquid balance and re-hydration 11. Evaluation of nutritional ergogenics 12. Evaluation of body composition and special athletic observations 13. Energy balance, exercise and body weight control and eating disorders   **LABORATORY**   1. Basic principles of sports nutrition 2. How to organize your plate for sports events in and out of your town 3. The proper nutrition and hydration levels in athletes 4. The role of proteins in supporting exercise induced muscular hypertrophy 5. Nutritional supplements with ergogenic action 6. The diet of an athlete related to the time of training in different sports 7. Nutritional recovery of athletes after injury 8. Ergometer evaluation 9. Evaluation and critical analysis of case studies |

1. **TEACHING AND LEARNING METHODS - EVALUATION**

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| **TEACHING METHOD** | Face to face (theory-laboratory) and remote support via *email* and remote education using technological platforms (Microsoft Teams, Zoom, Webex meetings, etc) where required |
| **USE OF INFORMATICS AND COMMUNICATION TECHNOLOGIES** | * Use of power-point for lectures and videos * Support of teaching procedures with use of e-class electronic platform * Support of students with use of email/e-class |
| **TEACHING ORGANIZATION**  **(Lectures, individual or group assignments, field trips, individual**  **study et.c.)** | |  |  | | --- | --- | | ***Δραστηριότητα*** | ***Φόρτος Εργασίας Εξαμήνου*** | | Lectures | 50 | | Laboratory practices | 10 | | Individual assignments | 10 | | Individual study | 30 | | ***Total contact hours and training*** | **100** | |
| **STUDENTS EVALUATION** | **THEORY**  Written final exam (100%) that includes: Multiple choice questions  **LABORATORY**  Written final exam (100%) that includes: Multiple choice questions |

1. **LITERATURE**

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| All lectures are available at *e-class* as *power-point* presentations  **Book:**  McArdle WD. Διατροφή στην Άσκηση και τη σωματική δραστηριότητα. Broken Hill Publishers LTD, 2017, Λευκωσία (Κωδικός συγγράμματος στο Εύδοξος 68373291) |