



Course Code NUTR-518	Course Title Nutritional Strategies for Specific Energy Systems and Specific Sports	ECTS Credits 7.5
Prerequisites None	Department Life & Health Sciences	Semester 2 nd
Type of Course Required	Field Dietetics/Nutrition	Language of Instruction Greek /English
Level of Course 2 nd Cycle	Lecturer(s) Dr Foteini Arvaniti	Year of Study 1 st
Mode of Delivery Face to face	Work Placement N/A	Co-requisites None

Objectives of the Course:

The main objectives of the course are to:

- Understand and use a comprehensive guide to nutrition for athletes and coaches and the health professionals who work with them.
- Help athletes become healthier and help them understand what it takes to complete at the highest levels.
- Achieve a health state and completing at a top level are considered by many to be impossible. Athletes who have learned how to stay healthy while competing at a top level are nearly always able to have longer athletic careers, consistently improve in their Sports, and reduce risks for chronic disease. Doing the right things nutritionally can make the difference for staying healthy while pushing the body as hard as it can go.
- Eliminate misinformation that exists on the strategies for achieving peak athletic performance and health. Even a casual observer doesn't have to look too far to find "nutritional" products that are marketed with the idea that consuming them enhances performance. These products typically lack the research to back their claims, and the Sports medicine literature is filled with cases of athletes who have used some of these products with disastrous, or even fatal, results.
- Investigate into commonly marketed ergogenic aids have discovered that these products frequently include banned substances that can put both the health and eligibility of athletes at risk. Compounding the potential for problems is the tendency for many beginning athletes to try to improve their athletic capabilities too quickly with training programs and dietary supplements that are intended to emulate the regimens of highly trained professionals. This is a formula for disaster that can result in overtraining injuries, malnutrition, and psychological stress-all of which have the potential to take talented young athletes out a Sports.
- Explain and implement nutrition intervention for Anaerobic metabolism for high-intensity bursts and power
- Explain and implement nutrition intervention for Aerobic metabolism for endurance.

Learning Outcomes:

After completion of the course students are expected to be able to:

1. Nutritional sources for athletes
2. Nutritional aspects of optimal performance
3. Factors affecting nutritional needs
4. Nutritional strategies for specific energy systems
5. Nutritional plans for specific Sports

Course Contents:

1. Energy nutrients
2. Vitamins and minerals
3. Fluids and electrolytes
4. Ergogenic aids
5. Digestions and absorption
6. Timing of energy and fluid intake
7. Efficient delivery of oxygen
8. Inhibitors of fuel and nutrient utilization
9. Travel
10. High altitude
11. Gender and age
12. Body composition and weight
13. Anaerobic metabolism for high-intensity bursts and power
14. Aerobic metabolism for endurance
15. Metabolic needs for both power and endurance
16. Sports requiring power and speed
17. Sports requiring endurance
18. Sports requiring combined power and endurance

Learning Activities and Teaching Methods:

Lectures, class discussion, assignments, presentations from students

Assessment Methods:

Midterm Exam, Project, Final Examination

Required Textbooks / Reading:

Title	Author(s)	Publisher	Year	ISBN
Advanced Sports Nutrition	Dan Benardot	Human Kinetics	2012	ISBN-13: 9781450401616

Recommended Textbooks / Reading:

Title	Author(s)	Publisher	Year	ISBN
Υγιεινή Διατροφή για άσκηση και αθλητισμό	Eleni Andreou, Christiana Philippou	LNK Global Print	2008	ISBN: 978-9963-8446-1-6
Advanced Sports Nutrition	Dan Benardot	Human Kinetics	2006	ISBN-13: 978-0-7360-5941-5