

## 1. BASIC INFORMATION

<b>Course</b>	Module 6: Sports nutrition III. Ergogenic aids, nutrition for recovery and new dietary trends and special populations applied to sport
<b>Degree program</b>	Master's Degree in Sports Training and Nutrition
<b>School</b>	Escuela Universitaria Real Madrid – Universidad Europea / Faculty of Medicine, Health and Sports
<b>Year</b>	Second
<b>ECTS</b>	6
<b>Credit type</b>	Compulsory
<b>Language(s)</b>	English
<b>Delivery mode</b>	Face
<b>Semester</b>	Annual
<b>Academic year</b>	2025-2026
<b>Coordinating professor</b>	Mr. Guillermo Muñoz Andradás / Mrs. Krizia Radesca Fabiano / Mrs. Rebeca Benítez Valero / Mr Martín Alejandro Festino

## 2. PRESENTATION

The module 'Sports Nutrition III. Ergogenic aids, nutrition for recovery and new dietary trends and special populations applied to sport' aims to provide critical capacity, based on scientific knowledge, on the use of nutritional ergogenic aids in sport for the improvement of sports performance and acceleration of recovery. It also addresses new dietary trends and adaptations needed for special populations.

The qualification of this module is composed of practices in the laboratory, group work, oral presentations and test type exams.

## 3. COMPETENCIES AND LEARNING OUTCOMES

### Core competencies:

- CB1. Possess and understand knowledge that provides a basis or opportunity to be original in the development and/or application of ideas, often in a research context.
- CB5. That students possess the learning skills that allow them to continue studying in a way that will be largely self-directed or autonomous

### Cross-curricular competencies:

- CT3. Digital competence. Use information and communication technologies for data search and analysis, research, communication, and learning.
- CT5. Teamwork. Cooperate with others in achieving a shared goal, participating actively, empathically and exercising active listening and respect for all members.
- CT6. Critical analysis. Integrate analysis with critical thinking in a process of evaluating different ideas or possibilities and their potential for error, based on evidence and objective data that leads to effective and valid decision making.

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### Specific competencies:

- CE1. Analyze, describe and evaluate the adaptations of the human organism exposed to different loads of physical activity in subjects of different ages, levels of performance, or belonging to special population groups.
- CE2. Analyze and apply physiological, biomechanical, psychological and social principles to the different fields of sport and nutrition, identifying inappropriate practices that pose a risk to health, in order to avoid and correct them in different types of population.
- CE3. Research and evaluate scientific documentation related to the areas of human performance and sports nutrition.
- CE9. Design training programs and nutritional advice applicable to different sports specialties and performance levels, diagnosing the level of physical condition, motor ability and nutritional status.

#### **Learning outcomes:**

- RA1: Prescribe different natural ergogenic aids and nutritional supplements aimed at improving the performance and recovery of the athlete.
- RA2: Detect the phenomena of dehydration in relation to sports practice.
- RA3: Recommend the appropriate hydro-electrolyte replacement measures during the practice of exercise in environmental conditions of extreme heat and humidity.
- RA4: Analyze new dietary trends applied to sport.
- RA5: Identify athletes suffering from eating disorders and implement their referral to other professionals (doctors, psychologists) and provide specialized help.

The following table shows the relationship between the competencies developed during the course and the learning outcomes pursued:

Competencies	Learning outcomes
CB1, CB5, CT3, CT6, EC2, EC3, EC9	RA1
CB1, CB5, CT6, EC1, EC2, EC3, EC9	RA2
CB1, CB5, CT3, CT6, EC1, EC2, EC3, EC9	RA3
CB1, CB5, CT3, CT5, CT6, EC3	RA4
CB1, CB5, CT5, CT6, EC2, EC3, EC9	RA5

#### **4. CONTENT**

- Natural ergogenic aids: mechanisms of action, biological effects and prescribing guidelines for nutritional supplements in sport
- Hydro-electrolytic replenishment: rehydration and thermoregulation in environmental conditions of extreme temperature and humidity
- New dietary trends applied to sport
- Nutrition in special populations: cardiovascular and metabolic pathology
- Eating disorders in athletes: anorexia, bulimia and vigorexia

### **5. TEACHING-LEARNING METHODOLOGIES**

The types of teaching-learning methodologies used are indicated below:

- Master class.
- Problem-based learning.
- Learning based on workshop teachings.
- Simulation environments.

## 6. LEARNING ACTIVITIES

Listed below are the types of learning activities and the number of hours the student will spend on each one:

**Campus-based mode:**

Learning activity	Number of hours
Master classes (face-to-face modality)	30
Problem solving (face-to-face modality)	5
Preparation of reports and writings (face-to-face modality)	25
Activities in workshops and/or laboratories	5
Design of strategies and intervention plans (face-to-face modality)	7
Autonomous work (face-to-face modality)	50
Debate and colloquia (face-to-face modality)	8
Tutoring (face-to-face modality)	18
Knowledge tests (face-to-face modality)	2
<b>TOTAL</b>	<b>150</b>

## 7. ASSESSMENT

Listed below are the assessment systems used and the weight each one carries towards the final course grade:

**Campus-based mode:**

Assessment system	Weight
Face-to-face knowledge tests (face-to-face modality)	60-60%
Reports and writings (face-to-face modality)	5-15%
Work on the design of strategies and intervention plans	5-15%
Case/problem (face-to-face mode)	5-15%
Notebook of laboratory practices (face-to-face modality)	5-15%

When you access the course on the *Campus Virtual*, you'll find a description of the assessment activities you must complete, as well as the delivery deadline and assessment procedure for each one.

## 7.1. First exam period

To pass the course in the first exam period, you must obtain a final course grade of at least 5 out of 10 (weighted average).

## 7.2. Second exam period

To pass the course in the second exam period, you must obtain a final grade of at least 5 out of 10 (weighted average).

The student must deliver the activities not successfully completed in the first exam period after having received the corresponding corrections from the professor, or those that were not delivered in the first place.

## 8. SCHEDULE

This table shows the delivery deadline for each assessable activity in the course:

Assessable activities	Deadline
Face-to-face knowledge tests	February
Reports and writings	October/November
Case/problem	October/November
Notebook of laboratory practices	February

This schedule may be subject to changes for logistical reasons relating to the activities. The student will be notified of any changes as and when appropriate.

## 9. BIBLIOGRAPHY

The bibliographic search is part of the autonomous work of the student on the theme of the seminar. The teacher will be able to guide the student in this search.

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## 10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit we offer support to our students throughout their university life to help them reach their academic achievements. Other main actions are the students'

inclusions with specific educational needs, universal accessibility on the different campuses of the university and equal opportunities.

From this unit we offer to our students:

1. Accompaniment and follow-up by mean of counselling and personalized plans for students who need to improve their academic performance.
2. In terms of attention to diversity, non-significant curricular adjustments are made in terms of methodology and assessment for those students with specific educational needs, pursuing an equal opportunity for all students.
3. We offer students different extracurricular resources to develop different competences that will encourage their personal and professional development.
4. Vocational guidance through the provision of tools and counselling to students with vocational doubts or who believe they have made a mistake in their choice of degree.

Students in need of educational support can write to us at:

[orientacioneducativa@universidadeuropea.es](mailto:orientacioneducativa@universidadeuropea.es)

## **11. ONLINE SURVEYS**

Your opinion matters!

The Universidad Europea encourages you to participate in several surveys which help identify the strengths and areas we need to improve regarding professors, degree programs, and the teaching-learning process.

The surveys will be made available in the “surveys” section in virtual campus or via e-mail.

Your assessment is necessary for us to improve.

Thank you very much for your participation.