# 1. BASIC INFORMATION

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|---|---|
| **Course** | Athlete nutrition |
| **Degree program** | Bachelor's Degree in Physical Activity and Sports Science |
| **School** | Physical Activity and Sport Sciences and Physiotherapy |
| **Year** | 4º |
| **ECTS** | 6 |
| **Credit type** | Elective |
| **Language(s)** | Spanish and English |
| **Delivery mode** | On-campus attendance |
| **Semester** | S7/S8 |
| **Academic year** | 2027-2028 |
| **Coordinating professor** | Itziar Pagola Aldazabal |

# 2. PRESENTATION

The importance of proper nutrition in maintaining health is a reality today, so this Subject will give a general and Core overview of nutrition, especially in relation to physical Activity. The nutrition of a high performance athlete is Core for his performance as well as for his health, in general. Adequate intake should vary according to sport, gender, age and other individual factors.

The Subject "Athlete Nutrition" is taught in the fourth year of the Bachelor's Degree in Physical Activity and Sport Sciences. It has a value of 6 ECTS and is an elective subject, being part of the Sports Training itinerary. It is taught in Spanish and English. Taking into account the training profile that the student is expected to achieve, it provides the student with a Core and specific Training on nutrients, ergogenic aids and the main bases of sports nutrition.

# 3. LEARNING OUTCOMES

**Skills**

HAB1. Examines the anatomy, functions of the different systems or apparatuses, and pathophysiology that influence responses to physical exercise.

- Analyzes the basis of nutrients and bioenergetics.
- Analyzes the main ergogenic aids in sports.
- Analyzes the basis of nutrition as a pillar of the athlete's health.
- Assessment of basal and active energy demands
- Assesses the calculation of basal and active energy demands in different athletes.
- Creates nutrition program for high performance sports

**Competences**

COMP5. Orient, design, apply and technically-scientifically assess physical exercise and physical condition at an advanced level, based on scientific evidence, in different environments, contexts and types of activities for the entire population and with emphasis on special populations such as: the elderly, schoolchildren, people with disabilities and people with pathologies, health problems or similar (diagnosed and/or prescribed by a doctor), taking into account gender and diversity.

COMP6. Identify, communicate and apply scientific anatomical-physiological and biomechanical criteria at an advanced level of skills in the design, development and technical-scientific assessment of procedures, strategies, actions, activities and appropriate guidance; to prevent, minimize and / or avoid a health risk in the practice of physical activity and sport in all types of population.

COMP7. Design and apply with fluency, naturalness, consciously and continuously adequate, efficient, systematic, varied physical exercise and physical condition, based on scientific evidence, for the development of the processes of adaptation and improvement or readaptation of certain capabilities of each person in relation to human movement and its optimization; in order to solve unstructured problems, of increasing complexity and unpredictable and with emphasis on populations of special character.

COMP37. Strategic Communication: Transmit messages (ideas, concepts, feelings, arguments), both orally and in writing, strategically aligning the interests of the different agents involved in communication in the academic and professional environment.

COMP40. Teamwork: Cooperate with others in the pursuit of a shared academic or professional goal, participating actively, empathetically, and exercising active listening and respect for all members.

COMP41. Critical analysis. Integrate analysis with critical thinking in a process of evaluating different professional ideas or possibilities and their potential for error, based on objective evidence and data leading to effective and valid decision making.

## 4. CONTENTS

- Topic 1. Nutrients and bioenergetics
- Topic 2. Nutritional Assessment of the Athlete
- Topic 3. Calculation of basal and activity energy demands.
- Topic 4. Ergogenic aids
- Topic 5. Nutrition in high performance sports
- Topic 6. Nutrition as a pillar of athlete's health

## 5. TEACHING-LEARNING METHODS

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

- Masterclass
- Case study method
- Project-based learning
- Cooperative learning

## 6. LEARNING ACTIVITIES

The following are the types of Learning activities that will be carried out and the student's dedication in hours to each of them:

**Campus-based mode:**

| Learning activity | Number of hours |
|---|---|
| Masterclass | 12 |
| Practical application classes | 18 |
| Self-study work | 56 |
| Debates and discussions | 8 |
| Tutorials | 12 |
| Knowledge tests | 2 |
| Oral presentations of problems | 8 |
| Writing reports and papers | 14 |
| Research and projects | 20 |
| **TOTAL** | **150** |

## 7. ASSESSMENT

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

**On-campus delivery:**

| Assessment systems | Weight |
|---|---|
| In-person evaluation test | 40-50% |
| Research/projects | 25-40% |
| Oral presentations | 5-10% |
| Written reports | 10-20% |

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

## 7.1. Ordinary Exam period

To pass the course in Ordinary Exam period it is necessary to obtain a final grade equal or higher than 5.0 that will result from the sum of the grades obtained in the different Assessable activities. Both in the tests and in the Learning activities, a score of 5.0 must be obtained.

## 7.2. Extraordinary exam period

To pass the course in the Extraordinary exam period it is necessary to obtain a final grade equal to or higher than 5.0, which will result from the sum of the grades obtained in the different Assessable activities. Both in the tests and in the Learning activities, a score of 5.0 must be obtained. Activities not passed in the Ordinary Exam period must be handed in, after having received the corresponding corrections from the professor, or those that were not handed in.

# 8. SCHEDULE

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

| Assessable Activities | Date |
|---|---|
| Activity 1. Elaboration of nutrients | Week 2 |
| Activity 2. Differentiation of metabolic pathways by sport | Week 4 |
| Activity 3. Case resolution. Energy expenditure | Week 6 |
| Activity 4. Case resolution. Dietary analysis | Week 12 |

This Timeline may be subject to modifications due to logistical reasons of the activities. Any modification will be notified to the student in due time and form.

# 9. BIBLIOGRAPHY


- Advanced Sports Nutrition. Dan Benardot. 2nd Edition. Editorial Tutor, 2013.
- Nutrition and Enhhanced Sports Performance. Muscle Building, Endurance, and Strength Debasis
- Bagchi, Sreejayan Nair, Chandaan K. Sen. ElSevier, 2013.
- Sports and Exercise Nutrition. William D. McArdle, Frank I Katch, Victor L. Katch. 4th Edition.
- Lippincott Williams Wilkins, 2013.
- American College of Sports Medicine Joint Position Statement. Nutrition and Athletic
- Performance. Thomas DT, Erdman KA, Burke LM (2016). Med Sci Sports Exerc 48:543-568.
- American College of Sports Medicine position stand. Exercise and fluid replacement. Sawka MN,
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- Nutriguia. Manual of clinical nutrition in primary care. Ana M. Requejo, Rosa M. Ortega.
- Editorial Complutense, 2003


## 10. EDUCATIONAL GUIDANCE AND DIVERSITY UNIT

From the Educational Guidance and Diversity Unit (ODI) we offer support to our students throughout their university life to help them achieve their academic achievements. Other pillars of our action are the inclusion of students with specific educational support needs, universal accessibility in the different campuses of the university and equal opportunities.

This Unit offers students:

1. Accompaniment and follow-up through counseling and personalized plans for students who need to improve their academic performance.
2. In the subject of attention to diversity, non-significant curricular adjustments are made, that is, in terms of Methodological and Assessment, for those students with specific educational support needs, thus pursuing equal opportunities for all students.
3. We offer students different extracurricular training resources to develop diverse Competencies that will enrich their personal and professional development.
4. Vocational guidance through the provision of tools and counseling 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

## 11. ON LINE SURVEYS

Your opinion matters!

Universidad Europea encourages you to participate in the Satisfaction Surveys to detect strengths and areas for improvement about the faculty, the Qualification and the teaching-learning process.

The surveys will be available in the survey area of your online campus or through your email.

Your assessment is needed to improve the quality of the Degree.

Thank you very much for your participation.