1. BASIC INFORMATION

Course	Module 4: Sports Training
Degree program	Master's Degree in Sports Training and Nutrition
School	Real Madrid Graduate School/School of Sports Sciences
Year	First
ECTS	11 ECTS
Credit type	Mandatory
Language(s)	English
Delivery Mode	Campus-Based
Semester	Annual
Academic Year	2020/2021
Coordinating professor	Dr. HELIOS PAREJA/GERMAN DÍAZ UREÑA

2. PRESENTATION

"Sports Training" is one of the four cornerstone modules of the master's degree, and is worth 11 ECTS. This module includes all the content relating to the components of physical fitness, planning in both individual and team sports, tracking, and training in extreme conditions of temperature, humidity or altitude.

Finally, this module also considers the importance of context in relation to different types of training, not only in terms of sports being either individual or team-based, professional or amateur, but also in terms of the importance of long-term development according to a sportsperson's age, performance level, and specific sporting discipline.

The grade for this module comprises lab practice, group work and a multiple-choice exam.

3. COMPETENCIES AND LEARNING OUTCOMES

Core competencies:

- *CB1. Students should possess and understand knowledge that provides a basis or opportunity to be innovative in the development and/or application of ideas, often in a research context.*
- *CB2. Students should be able to apply their acquired knowledge and problem-solving ability in new or little-known environments within broader (or multidisciplinary) contexts related to their area of study.*
- *CB3. Students should be able to integrate knowledge and tackle the complexity of formulating judgements based on information that, being incomplete or limited, includes reflections on social and ethical responsibilities related to the application of their knowledge and judgements.*
- *CB4. Students should be able to communicate their conclusions –and the ultimate reasons that support them– to specialized and non-specialized audiences in a clear and unambiguous way.*
- *CB5. Students should possess learning skills that allow them to continue studying in a largely self-directed or autonomous way.*

Cross-curricular competencies:

- *CT1. Self-learning skills:* being able to choose the most effective strategies and tools at the most appropriate time to learn and autonomously put our learning into practice.
- *CT3. Capacity to adapt to new situations:* being able to assess and understand different situations, adapting our own approach insofar as is necessary or appropriate.
- *CT4.* Analysis and synthesis skills: being able to break down complex situations into their constituent parts, as well as to assess other alternatives and approaches in order to find the best solutions. Synthesis seeks to reduce complexity in order to facilitate understanding and/or problem solving.
- *CT5. Capacity to apply knowledge: being able to use knowledge acquired in academic contexts in situations that resemble as closely as possible the reality of the chosen future profession.*
- *CT7.* Responsibility: being able to fulfill the commitments a person makes to themselves and to others when performing a task and trying to achieve a set of goals as part of the learning process. The ability of any individual to acknowledge and accept the consequences of their own actions.
- *CT9: Teamwork: being able* to participate and cooperate actively with other people, areas and/or organizations in order to achieve common goals.

- *CT10. Initiative and entrepreneurial spirit: being able* to decisively undertake difficult or risky actions. The ability to anticipate problems, suggest improvements and persevere in carrying them out. A preference for initiating activities and seeing them through to completion.

Specific competencies:

- CE1. Having in-depth knowledge of how the human organism adapts to different physical loads in individuals of different ages and performance levels, or that belong to special population groups.
- CE2. Analyzing and applying physiological, biomechanical, psychological and social principles to different sporting fields and nutrition, identifying unsuitable practices that represent a health risk, in order to avoid them and correct them in the different types of population.
- CE3: Understanding and knowing how to access scientific documentation related to the areas of human performance and sports nutrition.
- CE4: Interpreting research and applying new technologies in the field of training and sports nutrition.
- CE5: Knowing the methodology and procedures involved in scientific research in the field of training and sports nutrition applied to all ages and performance levels.
- CE6: Designing and carrying out research in the field of sports and nutrition, contributing new knowledge in a specific area of scientific and social interest, respecting ethical limits and values.
- CE7: Exchanging knowledge and leading research and development projects with the rest of the scientific community, based on a cooperative and multidisciplinary approach.
- CE8: Planning, scheduling, implementing, tracking and assessing training and competition processes according to performance level, age, and population group.
- CE9: Diagnosing level of physical fitness, motor skills and nutritional health in order to be able to design training programs and provide nutritional advice applicable to different sporting specialties and performance levels.
- CE10: Selecting and knowing how to use the right spaces, equipment and facilities for each type of activity.
- CE11. Acquiring knowledge independently (self-learning).

Learning outcomes:

- Preparing training programs for people of different ages, performance levels, and sporting disciplines.

- Report containing the performance assessment and diagnosis of people of different ages, performance levels, and sporting disciplines.
- Resolving issues or events that may occur during the training process throughout the different stages of sports training (for children, adolescents, adults or high-performance athletes, the elderly).
- Understanding of different training methods and tools used to develop each component of physical fitness or sporting discipline.
- Using new technologies to optimize outcomes in sports training.
- Knowing the most suitable operating procedures for dealing with special situations such as those that occur in competition, changes in conditions, habits, schedules, altitude, etc.

The table below shows the relationship between the competencies developed in the course and the learning outcomes pursued:

Competencies	Learning outcomes
CB1, CB2, CB3, CB4, CB5 CT1, CT3, CT4, CT5, CT7, CT10 CE1, CE2, CE3, CE5, CE6, CE7, CE8, CE10, CE11.	RA1
CB1, CB2, CB3, CB4, CB5 CT1, CT5, CT7, CT9, CT10 CE1, CE2, CE3, CE4, CE5, CE6, CE7, CE8, CE9, CE10, CE11.	RA2
CB1, CB2, CB3, CB4, CB5 CT1, CT3, CT4, CT9, CT10 CE1, CE2, CE3, CE4, CE5, CE6, CE7, CE8, CE9	RA3
CB1, CB2, CB3, CB4, CB5 CT1, CT3, CT5, CT7, CT9, CT10 CE3, CE4, CE5, CE6, CE7, CE8, CE9, CE10, CE11.	RA4
CB1, CB2, CB3, CB4, CB5 CT1, CT3, CT4, CT5, CT7, CT9 CE1, CE2, CE3, CE4, CE5, CE6, CE7, CE8, CE9, CE11.	RA5
CB1, CB2, CB3, CB4, CB5 CT1, CT3, CT4, CT5, CT7, CT9, CT10 CE1, CE3, CE4, CE5, CE6, CE7, CE8, CE9, CE10, CE11.	RA6

4. COURSE CONTENT

1. Components of physical fitness

2. Strength training
3. Endurance training
4. Speed and sporting technique training
5. Agility training.
6. Training for children and adolescents.
7. Training in special conditions (heat, cold, altitude)
8. Planning, periodization and scheduling of sports training.
9. Training load tracking.
10. Planning, periodization and scheduling methods and strategies in sports training.
11. Competitor tracking in complex sports.
12. Competitor analysis in individual and team sports.
13. Recovery in professional sports.

5. LEARNING METHODOLOGIES

The types of teaching methodologies are listed below:

- Master Class
- Case Method
- Cooperative learning
- PBL

6. LEARNING ACTIVITIES

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

Learning activity	Number of hours
Components of physical fitness (Speed, Agility, Endurance)	20 hours on campus 25 hours of self-directed learning
Components of physical fitness (Strength)	45 hours on campus 30 hours of self-directed learning
Planning and Periodization of training	25 hours on campus 25 hours of self-directed learning
Training load tracking	25 hours on campus 15 hours of self-directed learning

Training for children and adolescents	25 hours on campus 15 hours of self-directed learning
Training in special conditions (altitude, heat, humidity)	10 hours on campus 15 hours of self-directed learning
TOTAL	**275 h**

7. ASSESSMENT

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

Assessment system	Weight
Activity 1. Exam	20%
Activity 2. Recovery methods in professional sports	20%
Activity 3. Assessment of an individual's strength and speed profile.	20%
Activity 4. Annual training plan for a particular sport, specifying macro/meso/microcycle	20%
Activity 5. Designing a macrocycle training schedule for an ultra-distance runner who is going to prepare for a long-distance race (Gran Trail de Peñalara, 110 km).	20%

When you access the course on the *Campus Virtual*, you'll find a description of the activities you have to complete, as well as the deadlines and assessment procedures for each one. The activities can be changed due to master´s needs

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.

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. 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 section indicates the schedule with delivery dates of evaluable activities of the subject:

Assessable activity	Date
Activity 1. Exam	March
Activity 2. Recovery methods in professional sports	March
Activity 3. Assessment of an individual's strength and speed profile.	April- May
Activity 4. Annual training plan for a particular sport, specifying macro/meso/microcycle	February-March
Activity 5. Designing a macrocycle training schedule for an ultra-distance runner who is going to prepare for a long-distance race (Gran Trail de Peñalara, 110 km).	May

This schedule may undergo modifications for logistical reasons of the activities. Any modification will be notified to the student in a timely manner.

9. BIBLIOGRAPHY

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10. DIVERSITY ATTENTION UNIT

Students with specific educational support needs:

Adaptations or curricular adjustments for students with specific educational support needs, in order to guarantee equal opportunities, will be guided by the Diversity Attention Unit (UAD).

The issuance of a report of curricular adaptations / adjustments by said Unit will be essential, so students with specific educational support needs should contact through: unidad.diversidad@universidadeuropea.es at the beginning of each semester

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.