1. BASIC INFORMATION

Course	Cycling III
Degree program	Degree in Physical Activity and Sport Sciences
School	Physical activity and sport sciences and physiotherapy
Year	Fourth
ECTS	6 ECTS
Credit type	Compulsory
Language(s)	Spanish and english
Delivery mode	On-site
Semester	S7/S8
Academic year	2027/2028
Coordinating professor	David Barranco Gil

2. PRESENTATION

Cycling III is an elective course taught in the fourth year of the Degree in Physical Activity and Sport Sciences. It is a subject of 6 ECTS credits that aims to deepen the knowledge of cycling with special attention to the competition and high performance in the different disciplines of this sport. This course deals with all the topics related to high competition and performance in cycling being constantly updated given the great evolution of this sport in terms of materials, equipment and training systems aimed at improving the performance of the athlete.

The course is developed in such a way that the theoretical contents are reinforced with related practices, in the cycling workshop, in the gym, the training laboratory and outdoors with the use of MTB and road bikes.

In addition, there are classroom practices, debates, video analysis and other activities that reinforce learning. In this way, it is intended that the future graduate will acquire a series of skills, knowledge and competencies that will enable him/her to manage entities aimed at cycling performance, such as clubs or specialized companies.

3. LEARNING OUTCOMES

Knowledge

KON3. Describes geared towards prevention, adaptation and improvement of physical and sporting performance and health through physical condition and exercise.

- Indicates the different cycling training stages in terms of the athlete's learning.
- Identifies the different performance indicators to be used in cycling.

- Identifies the determinant abilities for cycling performance.
- Explains the fundamentals of and specific terminology used in relation to power training in cycling.
- Describes the different training regimes based on cycling type and discipline.

Skills

SK02. Designates exercise-related tasks, progress indicators and strategies to promote health and sports performance based on individual variables and environmental conditions.

- Develops a cycling training plan including the use of new technology

Competences

COMP2. Formulate and apply a methodological process based on observation, reflection, analysis, assessment, performance, technical/scientific evaluation and/or dissemination in various contexts, in all areas of professional practice related to physical activity and sport.

COMP7. Design and implement—in a straightforward, natural, conscious and continuous manner—appropriate, effective, systematic and varied physical exercise and fitness programmes, based on scientific evidence, for the purpose of enabling individuals to adapt, improve or refresh certain skills related to human movement and its optimisation; ultimately to resolve unstructured problems of an increasingly complex and unpredictable nature, with a focus on particular groups within the population.

COMP8. Develop and draw on the expertise needed to analyse, design and evaluate tests that seek to assess and control physical fitness, and physical/sporting performance.

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

COMP40. Teamwork. Cooperate with others in shared academic or professional objectives, participating actively, empathically and exercising active listening and respect for all members.

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

4. CONTENT

- TOPIC 1. Cyclist training
- TOPIC 2. Specific performance indicators in Cycling
- TOPIC 3. Determinant abilities for cycling performance.
- TOPIC 4. Power training in cycling
- TOPIC 5. Planning specific training for cycling
- TOPIC 6. Technological tools for managing the cycling season

5. TEACHING-LEARNING METHODOLOGIES

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

- Master class
- Learning based on workshop/laboratory teachings
- Case method

- Cooperative learning
- 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 class	12 h
Practical application classes	18 h
Practical application classes	10 h
Autonomus work	56 h
Debates and colloquiums	8 h
Tutoring	12 h
Knowledge tests	2 h
Workshop and/or laboratory activities	20 h
Elaboration of reports and writings	6 h
Case analysis	6 h
TOTAL	**150**

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 evaluation test	40-50%
Oral presentations	5-10%
Practical laboratory workbook	15-15%
Case/Problem	5-20%
Reports and written papers	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. 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).

In any case, you will need to obtain a grade of at 4.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

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).

In any case, you will need to obtain a grade of at 4.0 in the final exam in order for it to count towards the final grade along with all the grades corresponding to the other activities.

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 evaluation tests	40-50%
Oral presentations	5-10%
Workshop-laboratory practice notebook	15-25%
Case/problem	5-20%
Reports and written papers	10-20%

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

9. BIBLIOGRAPHY

The recommended Bibliography is:

- Alcalde Y. Ciclismo y rendimiento: guia para optimizar el entrenamiento y me jorar el ciclismo. Madrid: Tutor; 2011
- Allen H. Ciclismo: Entrenamiento avanzado. Madrid: Tutor; 2013
- Allen H; Coggan A. Entrenar y correr con potenciómetro. Barcelona: Paidotribo; 2013.
- Barbado C. Manual de Ciclo Indoor. Barcelona: Paidotribo; 2005.
- Barbado C, Barranco D. Manual de Ciclo Indoor Avanzado. Barcelona: Paidotribo; 2007.
- Zabala M, Cheung S. La ciencia del ciclismo. El nexo definitivo entre conocimiento y rendimiento. Madrid: Ed Tutor; 2018

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 means 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 opportunities 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

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.