

## 1. BASIC DATA

| Subject              | Cycling I                                       |
|----------------------|---|
| Degree               | Degree in Physical Activity and Sports Sciences |
| School/Faculty       | Medicine, Health and Sports                     |
| Course               | Second  |
| ECTS                 | 3 ECTS  |
| Character            | Mandatory                                       |
| Languages            | Spanish and English                             |
| Mode                 | In person                                       |
| Semester             | S3  |
| Academic year        | 2025/2026                                       |
| Coordinating teacher | David Barranco Gil                              |

## 2. PRESENTATION

Cycling I is a compulsory subject taught in the second year of the Bachelor's Degree in Physical Activity and Sports Sciences. It is a 3-credit ECTS course that aims to provide students with tools for participating in cycling-related activities and events. This course will deepen their knowledge of the different cycling disciplines, regulations, competitions, and regulatory bodies of this sport. In addition, students will learn to conduct practical sessions tailored to different ages and levels of biological development, focusing on improving technique, cycling skills, handling different types of bicycles, proper bike adjustment, and mountain bike route guidance, for example.

The course is developed in such a way that the theoretical content is reinforced with related practical exercises, in the cycling workshop, at the gym or outdoors using indoor cycling, MTB and road bikes.

In addition, there are classroom practices, debates, video analysis, and other activities that reinforce learning. The goal is for future graduates to acquire a range of skills, knowledge, and competencies that will enable them to organize, develop, and supervise any cycling-related sporting activity with the utmost rigor.

# 3. LEARNING OUTCOMES

Knowledge



CON7. Identify the historical, legal, ethical, and deontological principles within the framework of sports interventions.

Describe the history, tests and great cyclists of history.

### **Skills**

HAB2. Designs tasks, progressions, and physical exercise strategies geared toward health and athletic performance based on individual variables and environmental conditions.

- Perform different basic cycling technique tests on the bike
- Performs basic cycling mechanics tasks independently

#### **Competencies**

CP1. Describe, develop, and efficiently apply the procedures, strategies, activities, resources, techniques, and methods involved in the teaching-learning process, developing the entire course of action in all sectors of professional intervention in physical activity and sport (formal and informal physical-sports teaching; physical and sports training; physical exercise for health; management of physical activity and sport).

CP2. Design and apply a methodological process comprising observation, reflection, analysis, diagnosis, execution, technical and scientific evaluation, and/or dissemination in different contexts and across all professional intervention sectors of physical activity and sport.

CP36. Creativity: Create new ideas and concepts from known ones, reaching conclusions or solving problems, challenges, and situations in an original way in the academic and professional environment.

CP42. Resilience. Adapting to adverse, unexpected, and stressful situations, whether personal or professional, overcoming them and even turning them into opportunities for positive change.

### 4. CONTENTS

Topic 1. History of the bicycle

Topic 2. Basic cycling technique

**Topic 3.** The bicycle and its components, basic mechanics, clothing and types of bicycles.

# 5. TEACHING-LEARNING METHODOLOGIES

The following are the types of teaching-learning methodologies that will be applied:

- Masterclass
- Case method
- Cooperative learning

### 6. TRAINING ACTIVITIES

The following identifies the types of training activities that will be carried out and the student's time commitment for each of them:

### In-person modality:



| Training activity                   | Number of hours |  |
|-------------------------------------|-----------------|--|
| Master classes                      | 6 h             |  |
| Practical application classes       | 9 a.m.          |  |
| Self-employment                     | 28 h            |  |
| Debates and colloquia               | 4 h             |  |
| Tutorial                            | 6 h             |  |
| Knowledge tests                     | 3 h             |  |
| Preparation of reports and writings | 11 a.m.         |  |
| Case analysis                       | 8 h             |  |
| TOTAL                               | 75 h            |  |

# 7. ASSESSMENT

The evaluation systems and their weighting in the total grade for the subject are listed below :

# In-person modality:

| Evaluation system          | Weight |
|----------------------------|--------|
| In-person assessment tests | 40-50% |
| Case/problem               | 45-50% |
| Reports and writings       | 5-10%  |

On the Virtual Campus, when you access the course, you can view the detailed assessment activities you must complete, as well as the due dates and assessment procedures for each one.



## 7.1. Ordinary call

To pass the course in the regular examination session, it is necessary to obtain a final grade equal to or greater than 5.0, which will result from the sum of the grades obtained in the different evaluable activities (practical exercises, submission of reports, and objective knowledge test).

To qualify for the average of all parts of the subject in the ordinary session, the grade must be equal to or greater than 5.0, using the following weighted average system:

- Objective Test (30% of the total). To qualify, you must have a minimum grade of 5;
- Technical components. (25% of the total). To qualify, you must have a minimum grade of 3;
- Mechanical test (15% of the total). To qualify, a minimum grade of 3 is required;
- Fitness test. (25% of the total). To qualify, you must have a minimum score of 3;
- Class aptitude (5% of the total).

Attendance is mandatory for 80% of the total course; failure to comply with this requirement exempts students from being assessed through regular examinations.

### 7.2. Extraordinary call

To pass the course in the extraordinary session, students must obtain a grade greater than or equal to 5.0 out of 10.0 in their final grade. Any assignments not passed in the regular session must be submitted after receiving the corresponding corrections from the instructor, or those that were not submitted.

To qualify for the average of all parts of the subject in the ordinary session, the grade must be equal to or greater than 5.0, using the following weighted average system:

- Objective Test (30% of the total). To qualify, you must have a minimum grade of 5;
- Technical components. (25% of the total). To qualify, you must have a minimum grade of 3;
- Mechanical test (15% of the total). To qualify, a minimum grade of 3 is required;
- Fitness test. (25% of the total). To qualify, you must have a minimum score of 3;
- Class aptitude (5% of the total).

Particular and exceptional cases will be studied by the professor, who will inform the student personally about what is happening in his or her situation.



# 8. SCHEDULE

This section indicates the schedule with dates for submitting evaluable activities for the subject:

| Evaluable activities   | Date     |
|--|----------|
| Activity 1: Select the correct answer from the options provided regarding the knowledge developed in the subject.                                    | Week 2-7 |
| Activity 2: Handling and riding in different cycling skills.   | Week 2-7 |
| Activity 3: It will consist of being able to assemble and disassemble both wheels and replace the tubes .  | Week 6   |
| Activity 4: It will consist of being able to travel a certain distance in the shortest possible time.  | Week 8   |
| Activity 5: Regularly attend class and behave appropriately and in accordance with what is expected of a student of his/her age and academic level . | Week 1-8 |
| In-person knowledge test   | Week 8   |

This schedule may be subject to changes due to logistical reasons. Students will be notified of any changes in a timely manner.

## 9. LITERATURE

Recommended bibliography is provided below:

- Mayor Y. Cycling and Performance: A Guide to Optimizing Training and Improving Your Cycling Skills.
  Madrid: Tutor; 2011.
- Allen H. Cycling: Advanced Training. Madrid: Tutor; 2013.
- Allen H; Coggan A. Training and racing with a power meter. Barcelona: Paidotribo; 2013.
- Barbado C. Indoor Cycling Manual. Barcelona: Paidotribo; 2005.
- Barbado C, Barranco D. Advanced Indoor Cycling Manual. Barcelona: Paidotribo; 2007.
- Celdrán R, Sola J, Arguedas JM, Barranco B. Power your pedal strokes 2. Analyze your power data.
  Plan Sports Advisors, SL; 2022.
- Zabala M, Cheung S. The Science of Cycling. The Ultimate Connection Between Knowledge and Performance. Madrid: Ed Tutor; 2018.
- Zani Z. Pedaling Well. Madrid: Tutor; 2010.

## 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 goals. Other pillars of our work include the



inclusion of students with specific educational support needs, universal accessibility across the university's various campuses, and equal opportunities.

From this Unit, students are offered:

- 1. Support and follow-up through personalized counseling and plans for students who need to improve their academic performance.
- 2. In terms of attention to diversity, non-significant curricular adjustments are made, that is, at the level of methodology and evaluation, for students with specific educational support needs, thereby pursuing equal opportunities for all students.
- 3. We offer students a variety of extracurricular training resources to develop diverse skills that will enrich their personal and professional development.
- 4. Vocational guidance through the provision of tools and advice to students with vocational doubts or who believe they have made the wrong choice of degree.

Students in need of educational support can write to us at: orientacioneducativa@universidadeuropea.es

## 11. SATISFACTION SURVEYS

Your opinion matters!

The European University encourages you to participate in satisfaction surveys to identify strengths and areas for improvement regarding the faculty, the degree, and the teaching-learning process.

Surveys will be available in the survey space on your virtual campus or via email.

Your feedback is essential to improve the quality of the degree.

Thank you very much for your participation.