

Academic Year/course: 2021/22

## 30145 - Teaching: Physical Activity and Sport

### Syllabus Information

**Academic Year:** 2021/22

**Subject:** 30145 - Teaching: Physical Activity and Sport

**Faculty / School:** 179 - Centro Universitario de la Defensa - Zaragoza

**Degree:** 563 - Bachelor's Degree in Industrial Organisational Engineering

**ECTS:** 6.0

**Year:** 4

**Semester:** First semester

**Subject Type:** Optional

**Module:**

## 1. General information

### 1.1. Aims of the course

- To identify the anatomical and physiological bases involved in the practice of physical activity and sport.
- To apply the physiological principles of exercise in the planning and execution of sports activities.
- To establish the most appropriate training methods according to the sporting objective.
- To use appropriate tools for the assessment of physical fitness.
- To understand the importance of science as a useful tool in this area of knowledge.

Specialization in Defence: These approaches and objectives are in line with the following Sustainable Development Goals (SDGs) of the United Nations 2030 Agenda (<https://www.un.org/sustainabledevelopment/>), in such a way that the acquisition of the course learning outcomes provides training and competence to contribute to their achievement to some degree.

- Objective 3: Good health and well-being

### 1.2. Context and importance of this course in the degree

The subject is part of the specialty of Human Resources and it is integrated as part of the training received by the Infantry or Cavalry student of the Army.

The course allows the future officers of the Army to become familiar with the necessary knowledge they need to perform their duties and to improve their physical fitness and health.

### 1.3. Recommendations to take this course

It is a subject of the fundamental specialty of Infantry or Cavalry.

The students must have passed most of the degree, so they should be able to successfully complete it.

## 2. Learning goals

### 2.1. Competences

- Ability to plan, budget, organise, manage and monitor tasks, people and resources.
- Ability to solve problems and take decisions with initiative, creativity and critical reasoning.
- Ability to communicate knowledge and skills in Spanish.
- Ability to work in a multidisciplinary group and in a multilingual setting
- Ability to continue learning and develop self-learning strategies.
- Familiarity with the fundamentals of sports training.

### 2.2. Learning goals

- To describe the anatomical and physiological bases involved in physical activity and sports.
- To define and analyze the different approaches from which the teaching of physical activity and sports is developed.
- To identify, classify and develop appropriate tasks for the development of the different physical fitness-related variables.
- To describe the methodological processes involved in the planning of sports training.
- To describe and use the different training systems.
- To explain the basic characteristics of the session and its parts.
- To recognize the different teaching styles.
- To learn the different basic concepts of sports training.
- To describe the different ways of evaluating and planning in the teaching of physical activity and sports.

### **2.3. Importance of learning goals**

The learning goals are part of the skills that students should acquire as part of their training in their fundamental specialty.

## **3. Assessment (1st and 2nd call)**

### **3.1. Assessment tasks (description of tasks, marking system and assessment criteria)**

- Final exam: 50%. (A minimum of 5 is required to pass the course).
- Two works (in groups): 20% each one. (Mandatory delivery)
- Attitude, participation and performance in class: 10%.

## **4. Methodology, learning tasks, syllabus and resources**

### **4.1. Methodological overview**

If this teaching could not be done in person for health reasons, it would be done telematically.

The main objective of this course is to learn the basic fundamentals of sport training. In order to achieve this aim, students will study anatomy and exercise physiology concepts and they will analyze the training methodology for the development of physical fitness, with special attention in strength and aerobic capacity. Finally, they will study the planning process of sports training and physical fitness assessment.

### **4.2. Learning tasks**

The course includes the following learning tasks:

- Lectures.
- Practical activities and comprehension questions.
- Academic work in groups.
- Autonomous study.

### **4.3. Syllabus**

The course will address the following topics:

- 1- Skeletal system and muscular system
- 2- Muscle contraction
- 3- Energy sources for muscular contraction
- 4- Principles of sports training
- 5- Endurance
- 6- Strength
- 7- Flexibility
- 8- Planning of sports training
- 9- Sports nutrition

### **4.4. Course planning and calendar**

Calendar of sessions and exam dates:

It will be announced by the teacher, both in class and through the moodle platform.

## 4.5. Bibliography and recommended resources

Bibliography available at:

<http://psfunizar10.unizar.es/br13/egAsignaturas.php?codigo=30145>