

	<b>SUBJECT DESCRIPTION</b>	<b>MODELO PED.012.02</b>
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<i>Course</i>	<b>Sports Science</b>			<i>Academic year</i>	2021/2022		
<i>Subject</i>	<b>Physical activity and chronic disease</b>			<b>ECTS</b>	5		
<i>Type of course</i>	<b>Compulsory</b>						
<i>Year</i>	<b>1º</b>	<i>Semester</i>	<b>2<sup>st</sup> semester</b>	<i>Student Workload:</i>			
<i>Professor(s)</i>	<b>Nuno Miguel Lourenço Martins Cameira Serra</b>			<i>Total</i>	135	<i>Contact</i>	30
<i>Area Coordinator</i>	<b>Carolina Júlia Félix Vila-Chã</b>						

### Planned SD

## 1) LEARNING OBJECTIVES

At the end of this UC, the student must be capable to:

- a) Deepen the knowledge of population with chronic diseases, their limitations and possibilities for development;
- b) Know the different strategies and means of the training process (space and material);
- c) Provide the student with different methodologies for adapting the different sport to the population with chronic disease;
- d) Develop or acquire skills within the UC;
- e) Develop research and interpretation skills, allowing him/her to critically evaluate the information based on the recent data.

## 2) PROGRAMME

Pathophysiology, treatment, risk and benefits of physical exercise, forms of assessment, proper prescription of exercise and specific care during exercise performance in:

### a) Cardiovascular Diseases

1. Atherosclerosis
2. Coronary Insufficiency
3. Hypertension
4. Cerebrovascular Diseases
5. Peripheral Vascular Disease
6. Heart Failure

### b) Endocrine Diseases

1. Obesity
2. Diabetes
3. Dyslipidemias

**c) Osteoarticular Diseases**

1. Osteoarthritis
2. Osteoporosis
3. Low back pain
4. Neck pain

**d) Respiratory Diseases**

1. Chronic Obstructive Pulmonary Disease

**e) Immune Diseases**

1. Acquired Immune Deficiency Syndrome
2. Neoplasms

**g) Kidney Diseases**

1. Chronic Kidney Disease

**3) COHERENCE BETWEEN PROGRAMME AND OBJECTIVES**

This course, through the syllabus developed, contributes for the education of the students as a future professional in sports area. For this purpose the contents presented help and prepare students to make them aware of the need to “know how” and “Know how to do it” in the field of prescription of exercise for special population. It is intended that students obtain knowledge to develop research, assessment and prescription in population with chronic disease.

**4) MAIN BIBLIOGRAPHY**

ACMS (2021): ACSM's Guidelines for Exercise Testing and Prescription. (11th ed.) LWW.

ACSM (2016): ACSM's Exercise Management for Persons With Chronic Diseases and Disabilities (4th ed). Human Kinetics.

ACSM (2017): ACSM's Resources for the Exercise Physiologist (2nd ed). LWW

ACSM (2019): ACSM's Clinical Exercise Physiology. LWW.

Organização Mundial de Saúde (2020). Recomendações da OMS para a atividade Física e Comportamento Sedentário. Tradução realizada pelo Programa Nacional Para a Promoção da Atividade Física (PNPAF), da Direção Geral da Saúde (DGS).

Vila-Chã C., Vaz C., Serra N., Marques E., Corte A. (2019): Promoção da Atividade Física para maiores de 65 anos. Guia prático para profissionais de saúde. Instituto Politécnico da Guarda.

## **5) TEACHING METHODOLOGIES (INCLUDING EVALUATION)**

### **Teaching methodologies**

The course unit consists essentially in theoretic-practical sessions, being mainly developed through the lecture method. The methods and teaching techniques applied were: expository method with the observation models and viewing short films illustrative of the systems studied and the method of group interaction for the purpose of consolidation/ systematization of content covered and their applicability in different sports

### **Evaluation rules**

The evaluation is conducted in accordance with the "Regulation Scheme Frequency and Student Assessment." The normal mode of evaluation will be by frequency. The evaluation focuses on the frequency of student performance in the following components / evidence:

- Two evaluation tests – (50% each) - The test classification must be, in the minimum, of 10 in each. If this minimum grade is not achieved there will be an exam.

## **6) COHERENCE BETWEEN TEACHING METHODOLOGIES AND OBJECTIVES**

The methodologies chosen were selected in order to maximize the acquisition of the contents associated with each objective: (1) Exposure of content (orally and through digital means) - this methodology is used to display the content associated with all learning objectives; (2) Application of knowledge in practical classes using methods based on group interaction and completion of selective quiz. This methodology was used to consolidate the acquisition of contents associated to the objectives defined in the subparagraphs c), d) and e).

## **7) ATTENDANCE**

It is according to the regime in place at ESECD.

Date: 28<sup>th</sup> of June of 2021