

Academic Year/course: 2021/22

## 25637 - Clinical Physiology of Exercise for Health Professionals

### Syllabus Information

**Academic Year:** 2021/22

**Subject:** 25637 - Clinical Physiology of Exercise for Health Professionals

**Faculty / School:** 127 - Facultad de Ciencias de la Salud

**Degree:** 275 - Degree in Physiotherapy

**ECTS:** 6.0

**Year:** 3 and 4

**Semester:** Second Four-month period

**Subject Type:** Optional

**Module:**

### 1. General information

### 2. Learning goals

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

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

#### 4.1. Methodological overview

The methodology followed in this course is oriented towards the achievement of the learning objectives. A wide range of teaching and learning tasks are implemented, such as lectures, laboratory sessions, autonomous work, study and assessment tasks. To achieve this, the lectures and practicals are interleaved to optimize the learning process, reducing the time from students acquiring theoretical knowledge until the application of this. This strategy is gradually adapted to solve practical problems and cases involving ultimately the more applied part of the module, and a way of bringing students to situations that would confront in a job in the field of physical activity and health in specific populations.

Students are expected to participate actively in class throughout the semester.

Further information regarding the course will be provided on the first day of class.

#### 4.2. Learning tasks

The course includes the following learning tasks:

- a. Lectures. Face to face. 10 hours. Theoretical knowledge is presented to the student. Basics of the course will focus on the topics covered in the program that will be accessible on the ADD of the subject. Students can download in PDF each of the theoretical topics exhibited at each lecture.
- b. Laboratory practical classes and/or seminars. Face to face. 10 hours. Will take place in different premises of the Faculty, biomedical laboratory, weight room, pavilion, outdoor in a small group of 4 to 6 Maximum students. They are interspersed with the lectures. In these practices students will perform the following activities: evaluation of the components of physical fitness related to health, exercise design and specific training plans derived from the prescription of physical exercise for improvement and/or maintenance of the state with health.
- c. Support for face-to-face tutorials, evaluation. Face to face. 5 hours
- d. Autonomous work for 35 hours. No face to face.

#### 4.5. Bibliography and recommended resources

[BB: Basic bibliography / BC: Complementary bibliography]

- [BB] Heyward, Vivian H. Advanced fitness assessment and exercise prescription. 7th ed. Champaign, Human Kinetics, 2014
- [BB] Heyward, Vivian H.: Evaluación de la aptitud física y prescripción del ejercicio. 3ª ed. en español, traducción de la 5ª ed. Madrid, Editorial Médica Panamericana, 2008.¡
- [BB] Katch, Victor L., McArdle, William, D., Katch, Frank I.: Fisiología del ejercicio : fundamentos. 4ª ed. Madrid, Editorial Médica Panamericana, 2014
- [BB] Kenney, Larry W., Wilmore, J. H., Costill, D. L. Fisiología del deporte y el ejercicio. Traducción de la 5ª ed. original en inglés. Madrid, Editorial Médica Panamericana, 2014
- [BB] Kenney, Larry W., Wilmore, Jack H., Costill, David L. Physiology of sport and exercise. 6th ed. Champaign, IL., Human Kinetics, 2015
- Physical activity and health / Claude Bouchard, Steven N. Blair, William Haskell, editors . Champaign, IL : Human Kinetics, cop. 2007
- [BB] López Chicharro, José, López Mojares, Luis Miguel: Fisiología clínica del ejercicio. Madrid, Editorial Médica Panamericana, 2008
- [BB] Manual ACSM para la valoración y prescripción del ejercicio. Colegio Norteamericano de Medicina del Deporte ; Director principal, Walter R, Thompson. 3ª ed. rev. y ampl. Badalona, Paidotribo, 2014
- [BB] Wilmore, Jack H., Costill, David L.: Fisiología del esfuerzo y del deporte. 6ª ed., rev. y aum. Barcelona, Paidotribo, 2007
- [BC] Howley, Edward T., Franks, B. Don: Health fitness instructor's handbook. 3rd ed. Champaign, Human Kinetics, 1997
- [BC] Howley, Edward T., Franks, B. Don: Manual del técnico en salud y fitness. Barcelona, Paidotribo, 1995
- [BC] López Chicharro, José, Fernández Vaquero, Almudena: Fisiología del ejercicio. 3ª ed. Madrid, Editorial Médica Panamericana, 2006
- [BC] Patton, Kevin T., Thibodeau, Gary A.: Anatomía y fisiología. 8ª ed. Barcelona, Elsevier, 2013
- [BC] Prescripción de ejercicio físico para la salud. Coordinador, José Ricardo Serra Grima. Madrid, Paidotribo, 1996
- [BC] Sharkey, Brian J.: Guía completa del fitness y salud : fitness aeróbico, fitness muscular, nutrición, control de peso, mejora de los rendimientos. 4ª ed., rev, y act. Madrid, Tutor, 2000