

60855 - Physical fitness and energy expenditure assessment

Syllabus Information

Academic year: 2023/24

Subject: 60855 - Physical fitness and energy expenditure assessment

Faculty / School: 229 - Facultad de Ciencias de la Salud y del Deporte

Degree: 549 - Master's in Evaluation and Physical Training for Health

ECTS: 6.0

Year: 1

Semester: First semester

Subject type: Compulsory

Module:

1. General information

The main objective of this subject is that the students learn how to choose, perform, interpret and report the most appropriate physical fitness tests for the chosen population groups, assessing their risks and needs.

These approaches and objectives are aligned with the following Sustainable Development Goals (SDGs) of the United Nations Agenda 2030 (<https://www.un.org/sustainabledevelopment/es/>), so that the acquisition of the learning results of the subject provides training and competence to contribute to some extent to their achievement.

- Objective 3: Health and Well-being
- Objective 4: Quality Education
- Objective 5: Gender Equality

2. Learning results

Upon completion of this subject, the student will be able to:

- Adequately assesses the health status of the subject using the tools provided for this purpose.
- Accurately identify and analyse the subject's lifestyle and personal habits.
- Conveniently select the different possibilities of fitness assessment according to the characteristics of the individual.
- Apply in a relevant manner the most appropriate tests and protocols for physical fitness assessment in each case.

3. Syllabus

1. Assessment of health status

- Medical history questionnaire
- Analysis of coronary risk factors
- Physical examination
- Laboratory tests
- Physician's report
- Informed consent form
- Assessment of lifestyle and personal habits

2. Cardiorespiratory endurance assessment

- Evaluation at rest
- Maximal and submaximal stress tests and protocols
- Field tests

3. Assessment of muscular strength and endurance

- Instruments for the measurement of muscle strength and endurance
- Strength and endurance tests
- Problems associated with muscle fitness testing

4. Flexibility assessment

4. Academic activities

1. **Master class.** Face-to-face. 17,5 hours. The students are introduced to the basic theoretical knowledge of the subject.
2. **Problem solving and case studies.** Face-to-face. 17,5 hours. Different topics related to the program of the subject will be worked on in a critical manner. Students are encouraged to participate actively.
3. **Practices.** Face-to-face. 25 hours. In different facilities of the faculty, biomedical laboratory, pavilion,...
4. Non-attendance **work.** 20 hours. Autonomous learning will be reinforced through monographic work (group or

individual).

5. Assessment system

There are two assessment options, for both calls:

1. **Continuous assessment**; the final grade will be weighted with the following sections:
 - a. **Application of knowledge**: it will be weighted **30%** of the final grade, and will consist of different **tasks** proposed by the teacher.
 - b. **Attendance and participation** of students *during practices and seminars*: will be weighted **20%** of the final grade, and will consist of **work in small groups** on practical cases.
 - c. **Written test**: it will be weighted **50%** of the final grade, and will include multiple choice questions and short answer or open-ended questions. In order to pass the subject, the grade of the written test must be equal to or higher than 5 points.
2. **Global assessment**
 - a. **Written test**: the grade of this test will be the **final grade**, and will include multiple-choice and short answer or open ended questions.

For the extraordinary exam, the grades for homework and assignments, if submitted, will be kept. A written test will be taken in the same format as that of the ordinary exam. The weightings will also be the same.

Fraud or total or partial plagiarism in any of the assessment tests will result in not passing the subject and achieving the minimum grade, in addition to the disciplinary sanctions that the Quality Assurance Committee decides for these cases.