

60855 - Physical fitness and energy expenditure assessment

Syllabus Information

Academic Year: 2019/20

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

1.1.Aims of the course

1.2.Context and importance of this course in the degree

1.3.Recommendations to take this course

2.Learning goals

2.1.Competences

2.2.Learning goals

2.3.Importance of learning goals

3.Assessment (1st and 2nd call)

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

4.Methodology, learning tasks, syllabus and resources

4.1.Methodological overview

This course has a theoretical and practical orientation so that students will be able to apply the theoretical and practical knowledge they acquire during the course.

4.2.Learning tasks

The course includes the following learning tasks:

- **Lectures.** The methodology is appropriate to adapt the general cognitive level of the course contents to the level of the students. During lectures, dialogue will be promoted by asking questions, the use of problem-based learning, etc., looking for an active methodology. Lectures will be supported by diagrams and illustrations on PowerPoint presentations. This material will be available via the virtual platform Moodle. Revision of materials is recommended before attending different lectures. Moreover, in certain topics additional material will be provided, and finding different written materials will be encouraged to achieve deeper learning.
- **Seminars.** In addition to lectures, small seminars will be held, in the form of practical workshops taught by the teacher or guest speakers to deepen into topics of particular interest and relevance.
- **Practice sessions.** They consist of a series of activities that combine individual work and cooperative work. Depending on the proposed activities, they will take place in different spaces (sports hall, fitness room, laboratory,

etc.).

- **Essay.** It will seek to reinforce independent learning, by conducting case studies (group or individual). Group work will include search and literature review, written technique and oral presentation in class, encouraging reflection and discussion, of one or more essays previously supervised in tutorials by the teacher. Mandatory individual essay will be based on the proposal for physical fitness evaluation of a specific population group, previously agreed with the teacher.
- **Tutorials.** They aim to answer questions or provide specific bibliography of a specific topic in relation to lectures and practice sessions. In addition, monitoring of assignments will be done. Tutorials will take place both in the teacher's office, and via email or Moodle.

4.3.Syllabus

The course will address the following topics:

Topic 1. Health status assessment

- - Medical History Questionnaire
- - Analysis of coronary risk factors
- - Physical examination
- - Laboratory tests
- - Physician report
- - Informed consent

Topic 2. Lifestyle and personal habits assessment

Topic 3. Cardiorespiratory fitness assessment

- - Resting test
- - Maximal and submaximal testing and protocols
- - Field tests

Topic 4. Assessment of muscle strength and endurance

- - Devices for measuring muscle strength and endurance
- - Tests of strength and endurance
- - Issues associated with muscular fitness tests

Topic 5. Flexibility programs assessment

Topic 6. Stress and neuromuscular tension assessment

4.4.Course planning and calendar

Lectures and practice sessions will take place on Mondays from 19.00 to 21.00 and Thursdays from 16.00 to 17.30.

Lectures will be held usually in the Rio Isuela (Huesca) Pabellón (sports center) and practice sessions in the lab of GENUD research group in Zaragoza; this will be notified well in advance.

4.5.Bibliography and recommended resources