

60857 - Body composition and health

Syllabus Information

Academic year: 2023/24

Subject: 60857 - Body composition and health

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

This subject aims to provide students with an understanding of the history and evolution of body composition over the years. It also covers the explanation of the special characteristics of some population groups. The assessment of such characteristics will provide information on the starting levels to be taken into account when planning and prescribing exercise to improve their health.

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. Specifically, to the achievement of targets 3.4 of objective 3 and 4.3, 4.4 and 4.7 of objective 4.

2. Learning results

1. To know the methods of assessment and estimation of body composition as well as the influence of biological and environmental factors, paying special attention to specific population groups.
2. To manage equipment and methods for the assessment and estimation of body composition.
3. To analyse and interpret body composition and the effects of physical activity in the general population and in different specific population groups.

3. Syllabus

1. Science of body composition. History and state of the art.
2. Methods to measure body composition.
3. Models and components of body composition.
4. Biological and environmental influences on body composition.
5. Priority pathologies related to body composition.
 - Obesity and overweight
 - Osteoporosis
 - Sarcopenia
6. Body composition in specific population groups.

4. Academic activities

- Lectures: sessions where the teacher will explain the subject's topics: 18 hours.
- **Problem solving and case studies:** in these sessions students will perform activities such as: search and analysis of scientific evidence, analysis of videos and graphs, solving problems related to body composition, etc.: **16hours**.
- **Laboratory practice:** practical sessions at the faculty laboratory: **16hours**
- **Special practices in facilities:** practical sessions on body composition conducted in an external laboratory: **10hours**.
- **Teaching work:** different teaching assignments: **20 hours**
- **Study:** **64 hours**
- **Assessment tests:** **6 hours**.

5. Assessment system

The student will be able to choose between two assessment options: continuous assessment or global test. If the student does not pass the continuous assessment or does not agree with the grade achieved, they have the right to take the global test.

Option 1: Continuous assessment:

There are three requirements to pass the continuous assessment:

1. *Follow-up and review activities (20%)*: different theoretical-practical or review activities will be proposed during the term. Students must perform at least 70% of them. All of them will be assessed from 0 to 10 points and the average of all of them will be computed contributing 20% to the final grade of the continuous assessment.
2. *Theoretical-practical cases (50%)*: students will individually solve 2 practical cases designed for this purpose through the ADD (*Anillo Digital Docente*) of the subject. They will need to apply the knowledge acquired. Each case is graded from 0 to 10 and will contribute 25% to the final grade.
3. *Subject work (30%)*. Each student will have to review and discuss a minimum of 3 scientific articles related to body composition and focused on the topic or study population chosen for the student's master's final project. The work will be explained in detail in class. Specific instructions will be posted in the subject's ADD. The presentation of this work to the teacher is mandatory to pass the subject, it will be graded from 0 to 10 and will contribute 30% to the final grade.

In order to pass the subject through the continuous assessment system, it is required to attend at least 70% of the sessions and to obtain a grade equal to or higher than 5 in each of the cases and the work. The final grade will be the weighting of the three tests according to the formula: final grade = [(average of follow-up and review activities x 0.20) + (grade case 1 x 0.25) + (grade case 2 x 0.25) + (exposition grade x 0.30)].

Option 2: Global Test

The degree of acquisition and understanding of the conceptual and practical contents will be assessed by means of a written exam. It will consist of a double test:

1. multiple-choice questions with 4 possible answers. Student must choose the one they considers correct. For each wrong answer, 1/3 of the grade obtained by adding up the correct answers (50% of the exam grade) will be deducted.
2. The exam may include short questions, problem or case solving, graph interpretation, protocol design or anything related to the contents worked on in the practices (50% of the exam grade).

The final grade will be obtained as the sum of the grade of parts 1 and 2, with a grade from 1 to 10. The objective test will contribute 100% to the final grade in the overall assessment.

Note*In both options, students will have the possibility to improve their final grade by obtaining a maximum of 1 extra point. It will allow those who have passed the subject to improve their grade. The activity to be performed, and its corresponding grade, must be previously agreed with the faculty responsible for the subject. An example of such activity is the attendance and participation in conferences or other events considered of interest for the students of this subject due to their contents.

Tests for students in other calls than the first one. For students who have not passed the continuous assessment or who have to write tests in successive calls because they have not passed the subject in the first one, the assessment criteria will be those of the global assessment.

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. For more detailed information on plagiarism and its consequences please consult: <https://biblioteca.unizar.es/propiedad-intelectual/propiedad-intelectual-plagio>