Universidad Zaragoza

Academic Year/course: 2024/25

68450 - Introduction to Structural, Molecular and Cell Biology

Syllabus Information

Academic year: 2024/25
Subject: 68450 - Introduction to Structural, Molecular and Cell Biology
Faculty / School: 100 - Facultad de Ciencias
Degree: 626 - Máster Universitario en Biofísica y Biotecnología Cuantitativa / Master in Biophysics and Quantitative Biotechnology
ECTS: 6.0
Year: 01
Semester: First semester
Subject type: ENG/Complementos de Formación
Module:

3. Syllabus

This course is part of the complementary module of the Master in Biotechnology, Bio-Big-Data and Drug Discovery and is essential for those students who have not taken biology courses before enrolling in the Master or for those who want to update their knowledge in the field.

5. Assessment system

The evaluation of the subject will be based on a final exam that will account for 80% of the final grade, homeworks presented by the students that will account for 10% of the final grade and laboratory practical classes that will account for 10% of the final grade. The student may opt for a single final theoretical-practical examination in the event of not being able to be adequately evaluated in the previous way, in which they will be able to obtain the maximum grade of the subject (10). Classes are given with PowerPoint presentations, which are available to the student through the teaching digital ring, as well as any other necessary information related to the subject.

Homework

This will account for up to 10% of the final grade of the subject (up to 1 point out of 10). It will consist on the preparation of a seminar related to the contents of the subject and will be presented by the student in the class.

If a student cannot impart the seminar and wants to opt for the maximum grade, he or she must take the only final theoretical-practical test.

Practical classes

Practical classes will take place at the lab and/or computer room. Each student will be given a practical problem to solve using the computer tools explained at the beginning of the practical session. The student will need to prepare an oral presentation about the DNA sequence that has been provided, explaining what protein codes for, an explanation of the structural group of the protein, its properties and peculiarities, where it is located in the cell, and what it is its function, The oral presentation will account for 10% of the final grade.

If a student is unable to complete practical classes and wants to opt for the maximum grade, he or she must take the only final theoretical-practical test.

The final grade of the course is divided into the following sections:

- Theoretical examination: up to 8 points

The theoretical examination will consist of two parts, one test and the other with short-answer questions. It is necessary to pass both parts of the theoretical examination in order to pass the subject, that is, to obtain at least 5 out of 10 points in each part (at least 4 points in each part, out of the total 8 points of the theoretical examination). If one of the two parts of the final theoretical examination (test or short-answer questions) is not passed, the mark appearing in the minutes will be that of the part which has not been passed. If both are not passed, the highest grade will appear. The multiple-choice questions consist of four possible answers, each question is scored with 1 point and each wrongly answered question discounts 0.25 points . The total is then prorated over 4 points. Wrongly answered short answer questions do not count negatively. Each is scored with one point and then prorated over 4 points.

- Practical classes plus seminar: up to 1 point.

- Homework : up to 1 point.

6. Sustainable Development Goals

3 - Good Health & Well-Being
4 - Quality Education
15 - Life on Land