Universitat Autònoma de Barcelona

2023/2024

Advanced Seminars in Biochemistry, Molecular Biology and Biomedicine

Code: 42897
ECTS Credits: 6

Degree	Type	Year	Semester
4313794 Biochemistry, Molecular Biology and Biomedicine	OB	0	A

Contact

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Teaching groups languages

You can check it through this link. To consult the language you will need to enter the CODE of the subject.
Please note that this information is provisional until 30 November 2023.

Prerequisites

Basic knowledge of Biochemistry, Molecular Biology and Biomedicine.

Objectives and Contextualisation

The main objectives of this module are:
The students should attend different seminars and they should be able to understand and analyze the contents of these seminars.
The students should be able to integrate knowledge in biochemistry, molecular biology and biomedicine acquired in the master with the contents of these seminars.
The students should be able to ask questions to the professors about the content of lecture.
The students should be able to summarize and critically evaluate the scientific content described in the seminars.

Competences

- Analyse and explain normal morphology and physiological processes and their alterations at the molecular level using the scientific method.
- Continue the learning process, to a large extent autonomously.
- Develop critical reasoning within the subject area and in relation to the scientific or business context.
- Integrate contents in biochemistry, molecular biology, biotechnology and biomedicine from a molecular perspective.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.

- Use and manage bibliography and IT resources related to biochemistry, molecular biology or biomedicine.

Learning Outcomes

1. Analyse and understand normal and pathological molecular processes described in seminars.
2. Continue the learning process, to a large extent autonomously.
3. Develop critical reasoning within the subject area and in relation to the scientific or business context.
4. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
5. Summarise and critically evaluate the scientific content of all seminars.
6. Understand and analyse the contents of seminars and formulate questions for the speakers.
7. Use and manage bibliography and IT resources related to biochemistry, molecular biology or biomedicine.

Content

A specific seminar program is developed for each academic year. The list of seminars will be sent at the beginning of each semester to the master's students. Research and industry professionals of recognized prestige in the field of Biochemistry, Molecular Biology and Biomedicine will participate in the programming of the seminars.The seminars will be taught by visiting professors from the master's. You will also be able to participate in the series of seminars for teachers invited by the Departmental Units, Institutes and Research Centers that participate in the master's degree (CBATEG, CEB, INC, IBB, IIB, Sant Pau, VHIR...) and that, at the discretion of the coordinator, are suitable for the master's students.

Methodology

Theory
There will be 8 hours of class in the classroom with the full group where the seminars offered during the course will be presented and discussed. Each seminar will be introduced by a group of 2 students, who will have attended the seminar. Each student will have to present a seminar, in one of the three sessions, throughout the course. The rest of the class will have to ask questions to the classmates who presented the seminar. The students in the audience will make a critical evaluation of their peers' presentations following a rubric provided by the teacher. Participation in this teaching activity is mandatory in order to be evaluated and pass the module.

Seminars:
The student must attend and participate in the seminars programmed by the master. Two types of seminars: mandatory and optional.

Mandatory Seminars: The student must attend at least 8 of these scheduled seminars. The student can choose which seminars he attends. At the beginning of each semester, students will receive a preliminary list of the seminars scheduled.

Some of the speakers who teach these seminars are: Oscar Zaragoza (Instituto de Carlos III CNM) -Martí Aldea (IBMB-CSIC) -E Fuentes/ A. Gonzalez (UAB) -E. Zapico (HSCSP RI) -J.C. Escolà (HSCSP RI) -J.L. Sánchez (HSCSP RI) -E. Gonzalez (Hospital Clinic BCN Centro Diagnóstico Biomédico) -A Papageorgiou (TCB; Finland) -Guillermo Velasco (Universidad Complutense de Madrid) -Jordi Moreno (CRAG- Barcelona) -Marcus Buschbeck (JosepCarreras Leukaemia Research Institute).

Participation in this activity is essential in order to be evaluated.

Optional Seminars: TThese seminars will be freely chosen by the students, and may not be initially determined by the master's degree. The seminars may be whatever is available to the students: series of seminars taught by different institutes or research centers, there with other universities, etc., which follow from the field of Biochemistry, Molecular Biologyi Biomedicine.In order to ensure that the seminar is adequate. Student will have to communicate to the coordinator the proposal of the seminars to those who will attend with a minimum anticipation of 15 days so that the correspondent announces the Virtual Campus to the rest of the students.

Tutorials:
Individual or small group sessions will be held at the request of the students to comment and answer questions about seminars.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Seminars Class	24	0.96	6, 1, 3, 4, 2, 5, 7
Theory class	8	0.32	3, 4, 2, 7
Type: Supervised			
Tutorials	7	0.28	6, 1, 3, 4, 2, 5, 7
Type: Autonomous			
Comprehension, study and personal reflection on the content of seminars.	82	3.28	6, 1, 4, 2, 5

Assessment

AVALUACIÓ CONTINUADA

This module does not provide for the single assessment system.

It will consist in the evaluation of the attendance to the seminars, the evaluation of summaries delivered through the virtual campus, the oral presentation of one of the summaries, the critical evaluation on the presentation of peers and their ability to ask questions.

- MANDATORY (activity 1): attendance, asked questions at the end of the seminar, text or graphic abstract submmited by Virtual Campus will be evaluated. The grade obtained corresponds to 35% of the final grade. It will penalize outside of termini submmisions. Participation in this activity is compulsory to pass the module and also to take the to rescue exam.

- OPTATIVE (activity 2): Assistance and the abstracts presentation sessions, text or graphic abstract submmited by Virtual Campus, choosen types of seminari, the relation of the theme of the seminar to the TFM will be evaluated. The grade obtained in this block corresponds to 15% of the final grade. It will NOT be compulsory to participate in this activity to pass the module. Neither will it be necessary to participate in this activity to take the rescue exam.

- ORAL PRESENTATION (activity 3) of one of the abstracts presented to the Virtual Campus. This presentation can be done in grups of two students or individually. The grade obtained in this block corresponds to 30% of the final grade. It will penalize the regulations outside of termini. It will be mandatory to participate in this activity to pass the module and to submit to recovery.

-CRITICAL ASSESSMENT (activity 4) of the presentations by the classmates, where each student receives evaluations from the mates following a rubric that the teacher will distribute. The weight of this activity will be 20%of the final grade. It will be mandatory to participate inthis activity to pass the module and to take the rescue exam.

Non-delivery of n (out of 3) evaluation rubrics of peers presentations, without justified cause, (activity 4) will decreas (n/3) the grade of the activities 3+4 (50% of the final grade of the Module). The penalty for late delivery is half that described in case of non-delivery. The inconsistent assessment of one of the presentation sessions will result in a penalty that will be applied to 1/3 of the grade obtained for the own presentation.

RESCUE EXAM

In case of not passing the module, it will be possible to participate in a rescue exam consisting of the delivery of a written work based on all the compulsory seminars scheduled during the course. In this work the content of the seminars and/or bibliography related to the subject will have to be discussed.

Only students who have participated in activities 1, 3 and 4, the weight of which is equivalent to 80% of the total grade of the module, will be able to present to the rescue exam.

GENERAL CONSIDERATIONS::

THIS MODULE CAN ONLY BE PASSED IF YOU PARTICIPATE IN ACTIVITIES 1, 3 AND 4..

THE MINIMUM GRADE TO BE ABLE TO WEIGHT AN AVERAGE BETWEEN THE QUALIFICATIONS OF ACTIVITIES 1, 3 AND 4 IS 4. FOR THE ACTIVITY 2 THERE IS NO MINIMUM.

THE QUALIFICATION OF "NON-EVALUABLE" WILL BE OBTAINED WHEN THE EVALUATION ACTIVITIES PERFORMED HAVE A WEIGHTING LESS THAN 80%.

IMPORTANT: If plagiarism is detected in any of the submitted assignments, it may lead to the student suspending the entire module.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Evaluation of the summaries of optional seminars	15%	6	0.24	6, 1, 3, 4, 2, 5, 7
Critical evaluation of peer presentations (Activity 4)	20%	1	0.04	3, 4, 2, 5
Evaluation of the summaries of mandatory seminars.	35%	12	0.48	6, 1, 3, 4, 2, 5, 7
Oral presentation of one seminar	30%	10	0.4	6, 1, 3, 4, 2, 5, 7

Bibliography

The bibliography will be specific for each of the seminars and will be based mainly in research articles on the content of the seminars.

Software

Familiarization with a simple program capable of analyzing DNA sequences, to locate restriction enzyme sequences, oligonucleotide design, etc. is recommended.No specific software is required for this Module, beyond an office package to generate and present texts and slides.