

Advanced Seminars in Biochemistry, Molecular Biology and Biomedicine

Code: 42897
ECTS Credits: 6

2025/2026

Degree	Type	Year
Bioquímica, Biología Molecular y Biomedicina	OB	1

Contact

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Teaching groups languages

You can view this information at the [end](#) of this document.

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.

Learning Outcomes

1. CA03 (Competence) Develop critical reasoning in resolving practical cases posed by expert scientists in emerging topics within the fields of Biochemistry, Molecular Biology and Biomedicine.
2. CA04 (Competence) Work individually and in multidisciplinary teams in the fields of Biochemistry, Molecular Biology and Biomedicine.
3. KA04 (Knowledge) Identify the normal physiological processes and pathological alterations in the fields of Biochemistry and Biomedicine from a molecular perspective.
4. KA05 (Knowledge) Critically enumerate content and challenges in the fields of Biochemistry, Molecular Biology and Biomedicine.
5. KA06 (Knowledge) In scientific seminars and/or research projects addressing the main societal challenges, propose and define questions and solutions from Biochemistry, Molecular Biology and Biomedicine.
6. SA04 (Skill) Extract relevant information from scientific content presented by other researchers in seminars and/or published in the scientific literature in the fields of Biochemistry, Molecular Biology and Biomedicine.

7. SA05 (Skill) Critically analyse scientific content presented by other researchers in seminars and/or published in the scientific literature in the fields of Biochemistry, Molecular Biology and Biomedicine.
8. SA06 (Skill) Enumerate solutions to needs raised in academic or professional seminars in the fields of Biochemistry, Molecular Biology and 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.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Critical evaluation of seminars	32	1.28	SA04, SA04
Type: Supervised			
Mentoring	7	0.28	CA03, CA03
Type: Autonomous			
Critical evaluation of seminars	41	1.64	SA05, SA05
Individually and team work	41	1.64	CA04, CA04

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), etc.

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

Optional Seminars: These seminars will be freely chosen by the students and may not be initially determined by the master's degree. Any seminar that is within the reach of students (series of seminars given by the different institutes or research centers, as well as in other universities, etc.) within the field of Biochemistry, Molecular Biology and Biomedicine will be accepted.

To ensure that the seminar is adequate, students must inform the coordinator of the proposal of the seminar they want to attend (antonio.casamayor@uab.cat) at least 15 days in advance in order to make the corresponding announcement through the Virtual Campus to the rest of the students.

This proposal must include:

- Title
- Person who teaches the seminar, and the entity that organizes it.
- Date, time and place in which the seminar is given.

The coordinator must explicitly authorize each of the proposals.

Students may propose any of the seminars that are on the list of compulsory as optional seminars.

The same seminar will only be counted once, as optional or as mandatory.

It is NOT mandatory to participate in this activity to pass the module, that is, participation in this teaching activity is optional.

In this subject, the use of Artificial Intelligence (AI) technologies is allowed as an integral part of the development of the work, provided that the final result reflects a significant contribution of the student in the analysis and personal reflection. The student must clearly identify which parts have been generated with this technology, specify the tools used and include a critical reflection on how these have influenced the process and the final result of the activity. The lack of transparency in the use of AI will be considered a lack of academic honesty and may lead to a penalty in the grade of the activity, or greater sanctions in serious cases.

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.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Evaluation of the summaries of optional seminars	15%	6	0.24	CA04, KA04, KA05, SA04
Critical evaluation of peer presentations (Activity 4)	20%	1	0.04	CA03, SA05
Evaluation of the summaries of mandatory seminars.	35%	12	0.48	CA03, KA04, KA05, SA04
Oral presentation of one seminar	30%	10	0.4	CA04, KA06, SA04, SA06

CONTINUOUS EVALUATION

This module does not provide for the single assessment system.

Continuos evaluation will consist in 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, oral questions asked at the end of the seminars and the summary, text or graphic, delivered on the Virtual Campus will be assessed. The grade obtained in this block corresponds to 35% of the final grade. Late deliveries will be penalized. It will be mandatory to participate in this activity to pass the module and to take the retake.

- **OPTIONAL** (activity 2): Attendance and the summary, text or graphic, delivered through the Virtual Campus, the type of seminar chosen, the relationship between the topic of the seminar and the student's TFM will be assessed. Abstracts of 4 of these seminars will be considered as a maximum. The grade obtained in this block corresponds to 15% of the final grade in case of attending and submitting the summary of the 4 seminars. It will NOT be mandatory to participate in this activity to pass the module. It will not be necessary to participate in this activity to present yourself for recovery.

- **ORAL PRESENTATION** (activity 3) of one of the abstracts presented on the Virtual Campus. This presentation will be made in pairs. The grade obtained in this block corresponds to 30% of the final grade. It will be mandatory to participate in this activity to pass the module and to take the retake.

-**CRITICAL EVALUATION** (activity 4) of the presentations by the students in the audience: each student will receive evaluations of their presentation by the rest of the students in the audience.

Failure to deliver, without justified cause, n of the 3 evaluation rubrics of the classmates' presentations (activity4) decreases $(n/3)$ the grade of the 3+4 activities (50% of the grade of the Module). The penalty for late delivery will be half of that described in the event of non-delivery. Incoherent evaluation (very different from that made by the teacher) of one of the presentation sessions will result in a penalty that will be applied on 1/3 of the grade obtained in the presentation itself.

RESCUE EXAM

If you do not pass the module, you will be able to participate in a retake test consisting of the submission of a written assignment on all the compulsory seminars scheduled during the course. In this paper, the content of the seminars and/or bibliography related to the topic should be discussed.

Only students who have participated in activities 1, 3 and 4 whose weight in the evaluation is equivalent to two thirds of the total grade of the module (67%) may take the exam.

GENERAL CONSIDERATIONS::

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

THE MINIMUM TO BE ABLE TO MAKE A WEIGHTED AVERAGE BETWEEN THE GRADES OF ACTIVITIES 1, 3 AND 4 IS 4 OUT OF 10. FOR ACTIVITY 2 THERE IS NO MINIMUM GRADE.

THE GRADE OF "NOT ASSESSABLE" WILL BE OBTAINED WHEN YOU HAVE NOT PARTICIPATED IN ACTIVITIES 1 AND 2.

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

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

No specific software is required for this Module, beyond an office package to generate and present texts and slides.

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.

Name	Group	Language	Semester	Turn
(SEMm) Seminars (master)	1	English	annual	morning-mixed
(TEm) Theory (master)	1	English	annual	morning-mixed