

2020/2021

# Advanced Seminars in Biochemistry, Molecular Biology and Biomedicine

Code: 42897 ECTS Credits: 6

Degree	Туре	Year	Semester
4313794 Biochemistry, Molecular Biology and Biomedicine	ОВ	0	Α

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

#### Contact

## **Use of Languages**

Name: Assumpció Bosch Merino Principal working language: catalan (cat)

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## Other comments on languages

There could be seminars in the three languages (Catalan, Spanish, English). Each invited professor may choose the language of their lecture.

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

#### Content

A program of specific seminars for each course is developed. The list of seminars will be sent at the beginning of each semester to the students of the master. In the program of seminars renowned researchers and industry professionals in the field of Biochemistry, Molecular Biology and Biomedicine will be involved. The seminars will be taught by visiting professors of the master. We will also invite to participate in the series of seminars other teachers invited by the departmental units, institutes and research centers involved in the master (CBATEG, CEB, INC IBB, IIB Sant Pau, VHIR ...) if the coordinator of the module believes they may be suitable for students of the master.

List of some of the usual visiting professors:

- Oscar Zaragoza (Instituo 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 (Josep Carreras Leukaemia Research Institute )

## Methodology

#### Theory

There will be 8 hours of class in the classroom with the whole group. In these classes they will present and discuss the seminars offered during the course.

### Seminars:

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

<u>Mandatory Seminars</u>: 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 (Josep Carreras Leukaemia Research Institute)

<u>Optional Seminars</u>: These seminars will be freely chosen by the student, will not be scheduled or determined by the master. The maximum number of optional seminars that will be taken into account for the final grade will be 4.

#### Tutorials:

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

## **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.	81	3.24	6, 1, 4, 2, 5

#### Assessment

#### CONTINUED EVALUATION

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.

#### Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Evaluation of the summaries of optional seminars	20%	7	0.28	6, 1, 3, 4, 2, 5, 7
Critical evaluation of peer presentations	10%	1	0.04	3, 4, 2, 5
Evaluation of the summaries of mandatory seminars.	30%	11	0.44	6, 1, 3, 4, 2, 5, 7
Oral presentation of one seminar	27%	10	0.4	6, 1, 3, 4, 2, 5, 7
Questions during oral presentations	10%	1	0.04	6, 1, 3, 4, 2

## **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.