

External Practicum

Code: 100916
ECTS Credits: 12

Degree	Type	Year	Semester
2500253 Biotechnology	OT	4	0

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

Name: Sandra Villegas Hernández
Email: Sandra.Villegas@uab.cat

Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Prerequisites

Only one place can be requested to make a practical stay if the first year of the degree has been passed and 120 credits from the first three years.

In addition, you must be enrolled at the time you start the stay and have paid the amount of the accident and civil liability insurance provided in the tax regulations.

Objectives and Contextualisation

It is an optional subject that will be taken preferably in the fourth year or in summer after finishing the programmed activities of the third year of the degree.

The objectives of the subject are:

- . Promote the integration of the student in the world of the company or in a research group, be it in a public or private entity.
- . Know and apply biotechnological techniques that are used in some industrial fields or in specific research projects.
- . Prepare autonomously a report on the practical stay.

Competences

- Apply the principal techniques for the use of biological systems: recombinant DNA and cloning, cell cultures, manipulation of viruses, bacteria and animal and plant cells, immunological techniques, microscopy techniques, recombinant proteins and methods of separation and characterisation of biomolecules.
- Describe the principles behind the design and functioning of bioreactors and calculate, interpret and rationalise the main parameters in transport phenomena and the matter and energy balances in bioindustrial processes.

- Identify the strategies for producing and improving products in different sectors using biotechnological methods and display an integrated vision of the R&D&I process.
- Lead and manage teams, and develop capacities for organisation and planning
- Learn new knowledge and techniques autonomously.
- Make an oral, written and visual presentation of ones work to a professional or non-professional audience in English or in one's own language.
- Make decisions.
- Read specialised texts both in English and ones own language.
- Reason in a critical manner
- Search for and manage information from various sources.
- Think in an integrated manner and approach problems from different perspectives.
- Work individually and in teams

Learning Outcomes

1. Acquire an integrated vision of the biotechnological process in industry.
2. Contrast the theoretical and practical knowledge acquired.
3. Lead and manage teams, and develop capacities for organisation and planning
4. Learn new knowledge and techniques autonomously.
5. Make an oral, written and visual presentation of ones work to a professional or non-professional audience in English or in one's own language.
6. Make decisions.
7. Put into practice the techniques of various experimental areas of biotechnology.
8. Put the theoretical knowledge acquired into practice in a professional environment.
9. Read specialised texts both in English and ones own language.
10. Reason in a critical manner
11. Search for and manage information from various sources.
12. Think in an integrated manner and approach problems from different perspectives.
13. Work individually and in teams

Content

The content of this subject is variable as it will depend on the specific entity in which the stay is carried out.

In spite of this, in all cases, the content will always have a close relationship with Biotechnology, in the activity that it proposes to develop, be it in a company or in a research group.

There are the following types of places:

Modality A: Internal places UAB

Modality B: External places

Students in Modality A will have an academic tutor.

Those of modality B will be tutored by a member of the teaching team of the subject and by an external tutor.

Methodology

The subject can be taken in the following periods: summer 3rd year, 1st semester 4th year, 2nd semester 4th year and summer 4th year. The calendar of the process will be made public every academic year on the website of the Faculty of Biosciences.

The student will find all the information related to this subject, how to formalize the placement request and all the procedures derived from the award of the plaza on the website of the Faculty entitled "Academic Practices in Entities."

The Faculty will organize each course a general informative session aimed at students in the third year and fourth of the degrees of the Faculty.

The person responsible for the subject will schedule a specific informational session every academic year.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Supervised			
Practical stay	280	11.2	4, 1, 11, 2, 5, 3, 9, 12, 8, 7, 6, 10, 13
Type: Autonomous			
Final report drawn up by the student	20	0.8	11, 2, 9, 12, 6, 10, 13

Assessment

The assessment will consist of the following parts:

Evaluation of the final memory of the student (40% weight). The use of English in the memory may add up to 0.5 points in addition to the qualification of this section.

Final report issued by the Academic Tutor (Modality A) / External Tutor (Modality B) (weight 60%).

The final report will be delivered in electronic format to the person in charge of the subject, no later than 15 days after the end of the stay. In exceptional cases that must be authorized by the person in charge of the subject, this period can be extended up to a maximum of 30 days.

In order to be evaluated, the teacher responsible for the subject must receive the tutor's evaluation report and the memory prepared by the student. In the case of not meeting any of these requirements, the mark of the subject will be "Not evaluable".

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Final report drawn up by the student	40%	0	0	4, 1, 11, 2, 5, 3, 9, 12, 8, 7, 6, 10, 13
Final report issued by the academic tutor (modality A) or the external tutor (modality B)	60%	0	0	4, 1, 11, 2, 5, 3, 9, 12, 8, 7, 6, 10, 13

Bibliography

The Bibliography will be variable and will refer to the specific task that each student will develop during their practical stay and what they need to prepare the final report.