

**COURSE DATA****Data Subject**

Code	33200
Name	Degree final project in biotechnology
Cycle	Grade
ECTS Credits	12.0
Academic year	2022 - 2023

Study (s)

Degree	Center	Acad. year	Period
1102 - Degree in Biotechnology	Faculty of Biological Sciences	4	Other cases

Subject-matter

Degree	Subject-matter	Character
1102 - Degree in Biotechnology	110 - Degree Final project in Biotechnology	End Labour Studies

Coordination

Name	Department
FERRE MANZANERO, JUAN	194 - Genetics
PEÑARROCHA OLTRA, JOSEP MANUEL	245 - Chemical Engineering

SUMMARY

In the Final Project converges all the learning achieved along the three previous years and represents the culmination of the ability to work as a student. The main objective is that, by means of the Final Project, students experience for themselves the difficulties of independent work, and practical (laboratory), bibliographic (update of an issue), experimental design (preparation of research project) or design or analysis of biotechnological facilities at industrial-scale.

The Final Project will take the form of a scientific or technical work (practical, literature search or project, according to the chosen modality) within a Department of the University of Valencia or another external center or company. Students can also perform the Final Project abroad through some form established for this purpose (stage, Leonardo ...). The UVEG, however, will ensure sufficient subjects for Final Projects for all students. In case that the Final Project is developed in a department of the UVEG, the student will be assigned a tutor. In case that the Final Project is performed at an external center, the student will be assigned a supervising tutor from de UVEG and an external tutor, who will manage the Work.



PREVIOUS KNOWLEDGE

Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

Other requirements

Hay que tener superado el 75% de la materias obligatorias y además tener superado el módulo de materias básicas (todas las asignaturas de primer curso).

COMPETENCES (RD 1393/2007) // LEARNING OUTCOMES (RD 822/2021)

1102 - Degree in Biotechnology

- Saber definir bien los conceptos base de la biotecnología y expresarse correctamente expresando dichos términos.
- Desarrollar un espíritu analítico y crítico para interpretar los resultados, y extraer de ellos las aplicaciones biotecnológicas.
- Ser capaz de diseñar un proyecto biotecnológico, desde su concepción hasta su aplicación profesional.
- Saber aplicar una metodología científica para la elaboración de trabajos bibliográficos, estados de la cuestión, y análisis e interpretación de las diferentes opciones en el ejercicio profesional.
- Know how to present projects in all fields of biotechnology both orally and in writing, showing a collaborative attitude for teamwork with professionals from other fields.
- Desarrollar habilidades a través de la utilización de diferentes medios ajenos a la titulación que permitan emprender estudios posteriores con un alto grado de autonomía.
- Be able to practise professionally in the specific profiles of the degree, showing knowledge of the national and international reality in the biotechnology industry, market and public and private institutions.

LEARNING OUTCOMES (RD 1393/2007) // NO CONTENT (RD 822/2021)

- Work with basic literature sources related to the subject and be able to acquire further knowledge on a specific topic.
- Know how to design experiments and develop them by using appropriate scientific techniques and instruments.
- Be able to define the mean concepts of biotechnology and speak properly expressing such terms.



- Be able to analyze data using appropriate statistical tools.
- Delving into the world of research through laboratory work or attendance at research seminars.
- Develop analytical and critical mind to interpret the results and to extract biotechnological applications.
- Be able to design a biotechnology project, from conception to final implementation.
- Be able to apply scientific methodology to the development of literature search, state of art, and analysis and interpretation of the different options in practice.
- Develop skills through the use of different resources to undertake further studies with a high degree of autonomy.
- Be able to perform specific jobs in the profession through knowledge of national and international realities in the field of biotechnological industry, market and public and private institutions.
- Ability to problem solving and decision making.
- Ability of planning and management.
- Capacity for independent learning and adapting to new situations.
- Ability to interrelate and apply the concepts and logical principles acquired in other disciplines.
- Be able to use the new communication technologies.
- Ability to present and discuss the work developed.
- Develop entrepreneurship and initiative.
- Develop skills for experimental work, appropriate interaction with colleagues and develop the critical capacity of the analysis of experimental results obtained.
- Ability to disseminate scientific and technological knowledge

**WORKLOAD**

ACTIVITY	Hours	% To be attended
Graduation project		100
Development of a final project	300,00	0
TOTAL	300,00	

TEACHING METHODOLOGY

The methodology for developing the Final Project is as follows:

- Initial approach: the subject will be proposed or accepted by the tutor.
- Literature search, taking into account:
 - Reference works.
 - Handbooks and general literature.
 - Reviews and articles of journals
- Reading of literature.
- Elaboration of a draft structure of the work.
- Experimental development or design of research projects or industrial facilities, as appropriate.
- Final writing of the work.
- Public presentation

Formal aspects of the report on Final Project:

- For experimental works or bioinformatics, report will consist of: title, abstract, introduction, materials and methods, results, discussion and references.
- For projects of design research and industrial scale projects, report will consist of: title, abstract, memory, literature and additional documentation.
- In the case of work on literature search, report will consist of: title, index, abstract, main text and additional documentation.
- The writing should be logical and grammatically correct.



EVALUATION

Evaluation Criteria:

- Confidential report of the director of the work.
- Knowledge of the state of the selected topic.
- Quality of the report, according to the canons of the discipline.
- Quality of oral presentation.
- Ability to argue and to use the appropriate terminology.