COURSE DATA

DATA SUBJECT

Code: 33200
Name: Degree final project in biotechnology
Cycle: Undergraduate Studies
ECTS Credits: 12
Academic year: 2025-26

STUDY (S)

Degree	Center	Acad. year	Period
1111 - Grado en Biotecnología	Facultat de Ciències Biològiques	4	Indefinite (Individuals)

SUBJECT-MATTER

Degree	Subject-matter	Character
1111 - Grado en Biotecnología	Degree final project in biotechnology	FINAL DEGREE PROJECT

COORDINATION

GARCIA MURRIA MARIA JESUS

PINA PEREZ MARIA CONSUELO

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), design or analysis of biotechnological facilities at industrial-scale, or design of teaching and/or dissemination strategies and methodologies.

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

COMPETENCES / LEARNING OUTCOMES

-

Actuar con autonomía en el aprendizaje, tomando decisiones fundamentadas en diferentes contextos, emitiendo juicios en base a la experimentación y el análisis y transfiriendo el conocimiento a nuevas situaciones

Apply analytical, synthetic and critical thinking skills in the application of the scientific method.

Apply and understand knowledge in biotechnology and use that knowledge in professional contexts.

Assimilate ethical and legal principles in scientific research in biotechnology.

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.

Carry out professional tasks specific to the degree profile by applying knowledge of the national and international reality of the biotechnology industry, markets, and public and private institutions.

Colaborar eficazmente en equipos de trabajo, asumiendo responsabilidades y funciones de liderazgo y contribuyendo a la mejora y desarrollo colectivo

Communicate ideas, problems and solutions within the field of biotechnology.

Conocer los elementos fundamentales de la comunicación y percepción pública de las innovaciones biotecnológicas y de los riesgos asociados a ellas

Conocer y comprender, desde el propio ámbito de la titulación, las desigualdades por razón de sexo y género en la sociedad; integrar las diferentes necesidades y preferencias por razón de sexo y de género en el diseño de soluciones y resolución de problemas

Contribuir en el diseño, desarrollo y ejecución de soluciones que den respuesta a demandas sociales, teniendo en cuenta como referente los Objetivos de Desarrollo Sostenible

Demostrar razonamiento crítico y autocrítico en el ámbito de la titulación, considerando aspectos tales como la ética profesional, los valores morales y las implicaciones sociales de las diferentes actividades realizadas

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.

Desarrollar un espíritu analítico y crítico para interpretar los resultados, y extraer de ellos las aplicaciones biotecnológicas.

Design and carry out a complete protocol for obtaining and purifying a biotechnological product.

Develop cooperation skills with other professionals.

Disseminate and engage in public debate on issues related to biotechnology and its applications.

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.

Participate in multidisciplinary teams, engaging in teamwork and collaboration.

Present and explain projects both orally and in writing in all areas of biotechnology, fostering a collaborative attitude in teamwork with professionals from other fields.

Propose creative and innovative solutions to complex situations or problems, typical of the area of ¿¿¿¿connection, to donate responses to the various professional and social needs

Que el estudiantado demuestre su capacidad para calcular correctamente los parámetros relevantes de un proceso o un experimento mediante la representación de los datos experimentales

Que el estudiantado demuestre su capacidad para utilizar las diferentes fuentes bibliográficas y bases de datos biológicos y usar las herramientas bioinformáticas

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.

Saber comunicarse de manera efectiva, tanto de forma oral como escrita, adaptándose a las características de la situación y de la audiencia

Saber definir bien los conceptos base de la biotecnología y expresarse correctamente expresando dichos términos.

Ser capaz de diseñar un proyecto biotecnológico, desde su concepción hasta su aplicación profesional.

Tener una visión integrada del proceso I+D+i desde el descubrimiento de nuevos conocimientos básicos hasta el desarrollo de aplicaciones concretas de dicho conocimiento y de la introducción en el mercado de nuevos productos biotecnológicos

Understand and apply the criteria for evaluating biotechnological risks.

Use English to write reports and to interpret information from protocols, manuals and databases.

Work in laboratories, including safety procedures, waste management and accurate activity logging.

DESCRIPTION OF CONTENTS

WORKLOAD

PRESENCIAL ACTIVITIES

Activity	Hours
Attendance at supplementary activities	0,00
Monitoring and tutoring of the bachelor's thesis	0,00
Presentation and defence of the bachelor's thesis	0,00
Total hours	**0,00**

NON PRESENCIAL ACTIVITIES

Activity	Hours
Independent preparation of the bachelor's thesis	0,00
Preparation of the bachelor's thesis project	0,00
Total hours	**0,00**

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.

The mechanism for assigning tutors will be as follows:

-The CAT of the Degree in Biotechnology will assign a tutor to students who have passed the module of basic subjects and 75% of the compulsory subjects of the degree.

-Tutor professors: In order to perform the function of tutor it will be required to be in possession of the title of Doctor and be part of the teaching staff of the degree.

The functions of the tutor professors are:

-To sign an apprenticeship contract with the student, which includes the mutual commitment of acceptance of the conditions and which commits both for one academic year, renewable by mutual agreement if necessary. In case of non-compliance or disagreements, the CAT and the competent bodies of the center will resolve.

-Assess and accept, if appropriate, the proposed topic of work done by the student or make a new proposal.

-Guide the work, giving clear indications on the formal aspects, the resources to be obtained and used by the student, without forgetting the relevant heuristic and ethical recommendations.

-Supervise the process of preparing the work, in time and form and, if necessary, propose appropriate corrections to give the go-ahead for the presentation and defense of the work.

-To make a confidential report on the student and on the adequacy of the work.

In the case that the direction of the work is carried out through an external tutoring, the function of the tutor professor will be reduced to a supervision on formal aspects of the work.

Evaluation Committee: will be composed of three professors of the degree, according to the criteria established by the CAT. Its functions will be:

-Review and control of the Final Project proposals.
-Final evaluation of the work.

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.

REFERENCES