

Degree Project

Code: 101885
ECTS Credits: 6

Degree	Type	Year	Semester
2501230 Biomedical Sciences	OB	4	A

Contact

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Use of languages

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

Prerequisites

To be admitted, students must meet the requirements established in the Regulations of the Faculty of Biosciences on the Degree Final Project (TFG) that can be found at the Faculty website.

Objectives and Contextualisation

The Degree Final Project (TFG) aims at the training objectives that are mentioned in the official memory of the degree and constitutes the culmination of the learning process where students will demonstrate the maturity acquired throughout the studies.

Skills

- Apply knowledge acquired to the planning and implementation of research, development and innovation projects in a biomedical research laboratory, a clinical department laboratory or the biomedical industry.
- Contribute to public discussions on cultural matters.
- Develop critical thinking and reasoning and communicate ideas effectively, both in the mother tongue and in other languages.
- Develop independent learning habits and motivation to continue training at postgraduate level.
- Develop independent learning strategies.
- Develop scientific knowledge, critical reasoning and creativity.
- Display knowledge of the concepts and language of biomedical sciences in order to follow biomedical literature correctly.
- Generate innovative and competitive proposals for research and professional activities.
- Identify and understand the advances and challenges of research.
- Plan and implement laboratory analysis experiments and procedures belonging to the biomedical field.
- Present the objectives, development and findings of a biomedical research/innovation project, orally or in writing, to an expert or non-expert audience.
- Read and critically analyse original and review papers on biomedical issues and assess and choose the appropriate methodological descriptions for biomedical laboratory research work.
- Respect diversity in ideas, people and situations.
- Use bioinformatic tools, databases and methods for analysing experimental data.
- Work as part of a group with members of other professions, understanding their viewpoint and establishing a constructive collaboration.

Learning outcomes

1. Analyse information from experimental studies and clinical trials.
2. Contribute to public discussions on cultural matters.
3. Develop critical thinking and reasoning and communicate ideas effectively, both in the mother tongue and in other languages.
4. Develop independent learning habits and motivation to continue training at postgraduate level.
5. Develop independent learning strategies.
6. Develop scientific knowledge, critical reasoning and creativity.
7. Display knowledge of the principal experimental techniques in biomedicine and their use in basic and applied research.
8. Generate innovative and competitive proposals for research and professional activities.
9. Identify and understand the advances and challenges of research.
10. Identify suitable concepts and methodologies for research projects in biomedicine.
11. Interpret scientific literature and the findings of scientific studies.
12. Interpret scientific texts and write review papers on biomedicine.
13. Interpret the results of experimental techniques in biomedicine.
14. Obtain information from biomedical databases.
15. Orally present a structured summary of the review paper.
16. Respect diversity in ideas, people and situations.
17. Work as part of a group with members of other professions, understanding their viewpoint and establishing a constructive collaboration.
18. Write a review paper on a topical issue in biomedicine.

Content

The TFG is an autonomous and individual work based on topics related to any of the subjects within the field of Biomedical Sciences.

The content of the TFG varies with and depends on the annually renewed offer that is made public during the month of July for each Degree. The public offer contains a summary description of the subject under each heading, whose content will be developed and defined by the student under the supervision of a tutor throughout the period of execution of the TFG.

Methodology

The management of the TFG is in charge of the following figures:

- The professor responsible for the subject
- The Faculty committee of the TFG, made up by the professors held responsible for each of the Faculty's TFG
- The professors acting as tutors
- The TFG evaluation committee

The schedule of the administrative and academic steps to be followed is outlined in the website of the Faculty of Biosciences. As for the latter:

- Each student will be assigned an instructor (tutor), who will maintain a follow-up of the student's work through four tutorials; the first one will be aimed at giving the appropriate instructions to carry out the work and to define the temporary pattern of follow-up throughout the course; the three full sessions will be scheduled at the beginning, at the middle and at the end of the work; in those occasions, the students will explain their progress via a personal interview and the presentation of a portfolio.
- When students enrolled in the TFG are part of a mobility program, a way will be offered to attend online tutorials.
- During the TFG term, the student will prepare and update a portfolio that will contain in an orderly manner all the materials collected and elaborated.

- Depending on the TFG typology chosen, the student will prepare the appropriate materials on written, graphic or digital media
- A poster will be the common format for the public presentation of the TFG in the Faculty of Biosciences.

Activities

Title	Hours	ECTS	Learning outcomes
Type: Directed			
TFG presentation and defense	0.5	0.02	1, 2, 7, 6, 3, 10, 13, 11, 12, 15, 16
Type: Supervised			
Tutorials	7	0.28	1, 2, 7, 6, 10, 13, 11, 12, 15, 16, 17
Type: Autonomous			
Preparation of the TFG (portfolio, poster and/or other material)	37.5	1.5	2, 6, 3, 8, 13, 11, 15, 18, 16
REading, studing and information processing	50	2	1, 7, 6, 5, 4, 8, 10, 9, 13, 11, 12, 17
Search and evaluation of information	50	2	1, 7, 6, 5, 4, 10, 9, 11, 12, 14

Evaluation

The evaluation of the TFG consists of two parts:

1. Evaluation by the Evaluation Committee of the TFG (weight: 60% of the final grade). The common format of public presentation of the TFG in the Faculty of Biosciences is that of a poster and will be evaluated by the Degree's Evaluation Commission; three members of this commission will be present during poster presentations. The delivery will be made according to the instructions of the TFG regulations. In exceptional and justified situations, not contemplated in the evaluation regulations of the Faculty, the delay in the delivery of up to one week will entail a qualification reduction of 2 points. No deliveries will be accepted later than this deadline. The presentation will be called on a specific date for each degree, set by the person in charge of the subject, who will also specify the schedule in which the students must be present in the exhibition hall to defend their presentations.

The Evaluation Committee will meet with the student in front of his/her poster in order to discuss it. During the time set for the debate, the student must have all the generated documentation available for revision by the commission, including the portfolio, the written memory, videos, handouts or computer programs which may be considered necessary, following an agreement with the tutor, in some of the typologies.

2. Assessment by the tutor (weight: 40% of the final grade). The tutor will evaluate the written memory and the materials that have been generated throughout the work, paying special attention to the evolution of the student's work and the fulfilment of the objectives set.

Both the Evaluation Committee and the Academic Tutor will deliver their assessments to the person in charge of the subject, who will calculate the final grades based on the weight of each part.

The qualifications of the tutor and the Evaluation Committee are required to obtain a final, global qualification; otherwise the final grade will be "non-evaluable".

The Evaluation Committee may select a number of works, normally not greater than the double of maximum grade marks that can be awarded, among the students with higher qualifications. The selected students who wish to opt for the maximum grade will be required to make an oral and public presentation and defence of the work on a specific date before the Evaluation Committee that will finally award the magna cum laude grades.

If a TFG student enrolled in any of the mobility programs is not able to attend the public defence of the posters for reasons related to his/her mobility programme, the Evaluation Committee will articulate the appropriate mechanisms for the evaluation. To qualify for this non-standard measure it will be necessary to documentarily justify in due time and before the person responsible for the subject the reasons that prevent him/her from attending the public defence. In addition, the work will have to be deposited following the instructions made public on the website of the Faculty, and the student will send all the documentation referred to his/her TFG before the date of the public presentation to the president of the Evaluation Committee.

Evaluation activities

Title	Weighting	Hours	ECTS	Learning outcomes
Evaluation by the academic supervisor	40%	4	0.16	7, 6, 5, 4, 10, 9, 13, 11, 12, 14, 16, 17
Evaluation by the TFG Commission	60%	1	0.04	1, 2, 7, 6, 3, 8, 10, 9, 13, 11, 12, 14, 15, 18, 16

Bibliography

There is no specific bibliography for the TFG.

As a general reference about the philosophy of the TFG, students can use: "El trabajo de fin de Grado - Guía para estudiantes, docentes y agentes colaboradores" McGrawHill, 2013 (ISBN: 978-84-481-8267-0).