

Master's Dissertation

Code: 42948
ECTS Credits: 6

2025/2026

Degree	Type	Year
Cytogenetics and Reproductive Biology	OB	0

Contact

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Teaching groups languages

You can view this information at the [end](#) of this document.

Prerequisites

The prerequisites for enrolling in the Master's Degree Final Project module are the same as the admission requirements for the Official Master's Degree in Cytogenetics and Reproductive Biology.

Additionally, a sufficient level of English is required to effectively complete the various stages of the work, as most of the bibliographic sources to be reviewed are in English. This includes evaluating the state of the art to prepare the Introduction, formulating the working hypothesis and objectives, selecting the most appropriate methodologies from the available options, as well as assessing and developing new methodologies. Furthermore, it will be essential to obtain, evaluate, and discuss the results in relation to the existing literature in the field, in order to draw the specific conclusions of the work.

Objectives and Contextualisation

The primary objective of the Master's Thesis is for students to directly acquire the knowledge and application of the scientific method. To achieve this, students are required to prepare, present, and publicly defend the results of the experimental work conducted during their time at the host group or institution, thereby demonstrating the integration of the established knowledge, skills, and competencies.

Competences

- Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
- Continue the learning process, to a large extent autonomously.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Interpret, resolve and report on clinical cases or scientific findings in the area of the master's degree.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
- Use and manage bibliography or ICT resources in the master's programme, in one's first language and in English.
- Use creative, organisational and analytic skills when taking decisions.

Learning Outcomes

1. Communicate and justify conclusions clearly and unambiguously to both specialist and non-specialist audiences.
2. Continue the learning process, to a large extent autonomously.
3. Design, develop and synthesise a basic or applied research project within the master's programme
4. Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
5. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
6. Suggest innovative projects based on combining the knowledge acquired.
7. Use acquired knowledge as a basis for originality in the application of ideas, often in a research context.
8. Use and manage bibliography or ICT resources in the master's programme, in one's first language and in English.
9. Use creative, organisational and analytic skills when taking decisions.

Content

Students will undertake an R&D project in a research laboratory or company related to their chosen specialty, with the project's scope defined in collaboration with the Director/Tutor of their Master's Thesis. Based on the work conducted, students are required to prepare a written report and an oral presentation, both of which must adhere to the following criteria:

1. Written memory

1.1- General aspects:

Style: It must be written in a scientific register, employing an impersonal and direct style.

Extinction: The maximum length must be 15 pages (excluding the title page, table of contents, abstract, bibliography, list of acronyms and abbreviations, and any annexes). The font used should be 'Times New Roman' size 12 or 'Arial' size 11, with a line spacing of 1.5 and default margins ('Normal') in Microsoft Word (i.e., top and bottom: 2.5 cm; left and right: 3 cm)

Language: The report may be written in Catalan, Spanish or English.

Submission: The written report must be submitted electronically before the date established by the module coordination for the corresponding academic year. The submission will be made in electronic format (PDF) through the virtual campus of the subject. The file sent must be named after the two surnames of the author of the presentation (Example: AntonMartorell.pdf).

1.2- Sections:

Cover page: It must contain the following information: work title, name and affiliation of the students, chosen specialty, academic year. Name and affiliation of the tutor of the centre/director of the work (and tutor of the UAB if applicable). Date. Signature of the student. Signature of the tutor/principal.

Table of Contents: It must be paginated.

Abstract: It must consist of a paragraph, not exceeding 250 words, summarizing the work conducted, the most relevant background, the methods employed, the results obtained, and the key conclusions.

Introduction and/or Literature Review: The state of the art will be reviewed in sufficient detail to effectively introduce the objectives of the work to the faculty members in the field of Cell Biology.

Hypothesis and Objectives of the Study: A working hypothesis will be proposed, and the objectives will be clearly outlined in a concise, precise, and unambiguous manner.

Material and Methods: The materials used will be presented, and the methodology will be described in detail, particularly if it is innovative. Where applicable, the criteria for analysis and the statistical methods employed will be clearly outlined.

Results and Discussion: These sections may be presented together or separately. The results will be displayed using tables and/or graphs. The interpretation of the results from a biological or clinical perspective will be considered favorably, depending on the context of the study. The discussion will adopt a more flexible structure and, when appropriate, will include a comparison of the obtained results with those of previous studies, highlight the novel contributions of the work, discuss its implications, and propose potential directions for future research.

Conclusions: The conclusions of the work should be directly derived from the results obtained. They must be numbered and concise, with a preference for no more than five conclusions. The presentation of numerical data in this section should be kept to a minimum.

Bibliography: It must include, in a consistent and standardized format, all bibliographic references cited in the report, which should be properly acknowledged within the text.

List of acronyms and abbreviations: Both abbreviations and acronyms used at work must be correctly defined in a specific section.

Annex: This section may include additional pertinent information and must not exceed a maximum of 3 pages..

2- Oral presentation

Content: The defense of the Master's Thesis must accurately reflect the content of the written report presented.

Duration: The presentation must not exceed 10 minutes in duration. This oral presentation will be conducted in person and will be public, following the calendar and schedule to be published on the virtual campus of the course. Following the presentation, all members of the evaluation committee will have the opportunity to ask questions to discuss the most pertinent aspects of the work. The discussion with the evaluation committee should not exceed 10 minutes. Additionally, if there are faculty members from the Master's program present, they will also have the opportunity to ask questions regarding the work.

Language: The oral presentation may be conducted in Catalan, Spanish, or English.

Format: The first slide of the presentation must include: The name of the student, the name and affiliation of the tutor/director of the work, the date of the presentation, and the chosen specialty.

Delivery: The file to be used during the oral presentation must be submitted via the course's virtual campus a few days prior to the scheduled date for the first oral presentation. This date will be determined by the Module coordinator for each academic year. The submitted file should be named using the two surnames of the student. (Example: AntonMartorell. ppt).

It is strongly recommended that all students of the Master's program attend the oral presentations of their peers' Master's Thesis projects.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
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Type: Supervised			

Introduction to experimental work in the laboratory on the subject	20	0.8	9, 6, 5, 4, 2, 7, 8
Introduction to literature search of the topic.	5	0.2	3, 9, 4, 2, 7, 8
Introduction to the collection and evaluation of relevant results and communicate them. Discussion of Results	10	0.4	9, 6, 1, 4, 2, 8
Type: Autonomous			
Bibliographic search of on the topic	15	0.6	3, 9, 4, 2, 7, 8
Collection, evaluation and criticism of the results based on the existing literature	65	2.6	9, 6, 1, 4, 2, 8
Tasks laboratory experimentation on the theme	35	1.4	9, 6, 5, 4, 2, 7, 8

The methodology employed in the completion of the Master's Degree Final Project is centered on the ongoing tutoring and guidance of students throughout the academic year. At the start of each academic year, the relevant coordinator will assign a tutor or supervisor for the Master's Degree Final Project to each student, based on the chosen specialty. These tutors may be researchers from collaborating companies/centers with established agreements with the institution, or faculty members involved in the Official Master's Degree in Cytogenetics and Reproductive Biology, the Department of Cell Biology, Physiology and Immunology, or other UAB departments, as well as researchers from affiliated or collaborating research centers. In such cases, an academic tutor from the UAB will also be appointed.

The role of the directors/tutors of the Master's Degree Final Project is to provide guidance in the acquisition of the specified competencies, while also ensuring personalized and individualized monitoring of each student's progress.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Brief oral presentation of the results obtained in the subject developed	70%	0	0	3, 9, 6, 5, 1, 4, 2, 7, 8
Report written of developed issue	30%	0	0	3, 9, 6, 5, 1, 4, 2, 7, 8

The evaluation committee will consist of three members from the PhD faculty of the Master's Degree in Cytogenetics and Reproductive Biology. This committee will assess the module based on the written report of the Master's Degree Final Project and its oral defense.

The committee will evaluate the written report, which will account for 30% of the final grade. Additionally, the oral presentation of the work will be evaluated, contributing 70% to the overall grade for the module. The correct use of English during the oral presentation and defense will also earn 0.5 extra points in the evaluation.

To be eligible for evaluation, students must submit both the internship report file and the presentation within the established deadline. Furthermore, the student must present the oral presentation in person on the designated date. Failure to meet any of these requirements will result in the module being marked as 'Not assessed.'

In the event of total or partial plagiarism being detected in the Master's Degree Final Project report, the module will automatically be considered as failed.

For this subject, the use of Artificial Intelligence (AI) technologies is permitted exclusively for support tasks, such as text correction or translations. The student must clearly identify which parts have been generated using this technology, specify the tools used, and include a critical reflection on how these tools have influenced the process and the final outcome of the activity. Lack of transparency in the use of AI in this graded activity will be considered a breach of academic integrity and may result in partial or total penalties in the activity's grade, or more severe sanctions in serious cases.

Bibliography

This module does not have a specific bibliography.

Software

No specific software is used in this module.

Groups and Languages

Please note that this information is provisional until 30 November 2025. You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject.