

Master's Degree Dissertation

Code: 44789
ECTS Credits: 12

Degree	Type	Year	Semester
4318297 Plant Biology, Genomics and Biotechnology	OB	0	2

Contact

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Teaching groups languages

You can check it through this [link](#). To consult the language you will need to enter the CODE of the subject. Please note that this information is provisional until 30 November 2023.

Prerequisites

Final Master Thesis must be written and defended in English.

Objectives and Contextualisation

The main objective of the Final Master's Project (TFM) is for students to learn and apply the scientific method in the first person in the thematic area of the Master. Therefore, students must participate in the design, implementation and presentation of the results of a research project.

It is an autonomous and individual work that involves the preparation of a memory and the public defense of a practical work on a topic related to plant biology, genomics or biotechnology.

The main objective is that the student with the realization of this TFM is able to integrate the entire set of knowledge, skills and competences acquired during the master's program with the guidance of a tutor. The TFM does not imply a practical internship or the student's collaboration in a research group or research department. However, the work may be related to the project developed by the student during the External Practices module.

Learning Outcomes

- CA16 (Competence) Possess the learning skills that will enable you to continue studying in a way that will be largely self-directed or autonomous.
- CA19 (Competence) Develop a scientific, technical or industrial project in biology, genomics and plant and fungi biotechnology with respect for human and fundamental rights, diversity and democratic values, as well as the principles of universal accessibility and design for all.

- CA23 (Competence) Write a written report and orally defend the results and conclusions of a research project in Plant Biology, Genomics and Biotechnology for specialised and non-specialised audiences.
- KA19 (Knowledge) Critically identify public and scientific information related to Plant Biology, Genomics and Biotechnology in relation to the scientific and business environment.
- KA20 (Knowledge) Identify research results in relation to obtaining new products or viable biotechnological processes at an industrial and commercial level to transfer to society.
- SA28 (Skill) Communicate research results in the field of Plant Biology, Genomics and Biotechnology in English orally and in writing using appropriate scientific terminology.
- SA32 (Skill) Manage bibliographic information and computer resources in the field of study.
- SA37 (Skill) Hold critical debates in the fields of Plant Biology, Genomics and Biotechnology.
- SA38 (Skill) Design, propose and carry out a research project in the area of Plant Biology, Genomics and Biotechnology, based on an overarching view of the knowledge acquired.

Content

Several orientation seminars/conferences will be held on the different lines of research.

As it is an individual work carried out autonomously by the students under the direction of one or more directors. The contents will depend on each case, since it is a tutored training in the specific field that each student has selected.

The student will carry out the Master's thesis (TFM) where she will develop a research project.

Presentation of the written memory (TFM)

Limit 30 pages, A4, including figures, written in 1.5 or double spaced.

This report must contain the following aspects:

Signature page: there must be a page with the signatures of the applicant and the director of the work. If the director is not a member of the responsible departments, she should have the signature of a tutor or coordinator of the research module.

Abstract (maximum 200 words)

List of abbreviations (if necessary)

Introduction

Goals

Materials and methods

Results

Discussion

conclusions

References (not included in the 30 pages)

The oral defence will consist of a summary exhibit (10-15 minutes) in front of the assessment commission. Members of the Commission may ask students about scientific and technical aspects of the work to discuss different aspects of the work.

The oral defence of the work will be public (as long as there is no agreement of confidentiality).

Language of both the written report and the oral defence is English.

Methodology

Elaboration and public defense of the Final Master Thesis on a topic related to Plant Biology, Genomics or Biotechnology integrating the abilities and competences acquired in the master. For the elaboration of this final

master dissertation the student gets involved in a research project of a research group, preferentially the same where he/she had performed the External Practical Placement.

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.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Supervised			
Lab experimentation	75	3	CA19, KA20, SA32, SA38, CA19
Tutorial sessions	4.5	0.18	
Type: Autonomous			
Elaboration of Final Master Thesis	140	5.6	CA19, CA23, KA20, SA28, SA37, SA38, CA19
Personal study, consult and analysis of articles and reports	80	3.2	CA16, KA19, SA32, CA16

Assessment

The research work will be evaluated by a Committee of 3 members. The assessment Committee will be made up of three doctors that are part of the teaching staff of the Master.

The coordination of the research module, together with the coordinator of the Master, make a list of evaluators of up to 10 members which include faculty experts in different lines of research developed in the UAB (BABVE, Biochemistry and Molecular Biology), UB departments or in the CRAG. If the number of work to evaluate is high, the coordinator of the research module can form different of commissions (from the list of reviewers) for research projects that have a similar theme or methodology.

The written reports shall be deposited in the Department of Animal Biology Plant Biology and Ecology (BABVE) before the deadline set by the module coordinator. The deadline will be announced with sufficient time (usually the delivery will be the last week of June or the first week of September and defence work during the first half of July and September, respectively). Then, if necessary (high number of presentations), various committees can be established. Each committee will determine the day of the oral presentation (before the official closing deadline). Both the written report and the oral defence of the work will always be evaluated by the same Commission to award a single final mark.

The range of qualifications that will be used is: Not Presented, Fail, Pass, Outstanding, Excellent, Honours.

Using as a basis the work presented both the written report and the oral defence, the committee will evaluate the research capacity gained by the student during the semesters in which these research modules have been developed.

There are requested 4 copies of the report, which shall be deposited with the secretary of the Department of Animal Biology, Plant Biology and Ecology, Faculty of Biosciences. There will be a copy for each member of the Commission and the fourth copy will remain in the department.

This subject/module does not include the single assessment system.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Final Master Thesis Report	40%	0	0	CA19, CA23, KA19, KA20, SA32, SA38
Oral presentation of Final Master Thesis	40%	0.5	0.02	SA28, SA37
Supervisor report	20%	0	0	CA16, CA19, CA23, SA32, SA38

Bibliography

Scientific articles and reviews specifically addressing the research topic of the master thesis.

Software

PowerPoint or similar