

**Project Design and Methodology in Flora and Fauna
Management**

Code: 42922
ECTS Credits: 9

Degree	Type	Year	Semester
4313774 Land Ecology and Biodiversity Management	OT	0	2

Contact

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Use of languages

Principal working language: spanish (spa)

Prerequisites

Initial Modules of the master should have been coursed

Objectives and Contextualisation

This module offers a link between the most theoretical and general training that is offered in the initial modules of the master's degree, on the one hand, and the practice that involves the completion of the final master's degree.

It is a supervised training to prepare the student in a specific field. In this case, the scope will be the specific one for the issues of management, conservation and evaluation of populations and communities - animal and vegetable or fungal - as well as ecosystems and natural spaces. This is a work carried out with the supervision of a director, whose purpose is that the students:

- (1) integrate into a research group or work in the corresponding field;
- (2) familiarize with specialized literature in the subject matter of their work;
- (3) be able to provide valid solutions to the problems or questions that arise during the design of their final master's degree;
- (4) Prepare a complete experimental design that will be applied in your final master's degree;
- (5) plan their work chronologically coherently; and
- (6) know and learn how to use the methodologies, tools and quantitative tools needed to develop the correctly their investigations.

It can be carried out at the UAB facilities, in any of the other institutes that collaborate directly or indirectly in the master's degree (CREAF, IRTA, CSIC, Diputació de Barcelona) or companies (public or private) or public entities dealing in the any field related to the master's content.

Skills

- Autonomously plan, design and carry out original technical or research work in the field of environmental biology.
- Continue the learning process, to a large extent autonomously.
- Critically assess the strong and weak points of a study. Organise, plan and manage projects related to the area of study.
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- Seek out information in the scientific literature using appropriate channels, and use this information to formulate and contextualise a project.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.

Learning outcomes

1. Autonomously organise and carry out a study in the field of biodiversity, from the initial hypotheses to the detailed planning.
2. Correctly use the methodologies needed to carry out the work.
3. Delve deeply into a particular area of study, showing curiosity and the ability to work autonomously.
4. Discuss ideas, using scientific evidence and arguments.
5. Display the (constructively) critical spirit that is essential to science.
6. Offer valid solutions to problems or doubts that arise when designing the master's dissertation.
7. Participate in a research or working team in the field of biodiversity management or applications.
8. Plan ahead and schedule work realistically.
9. Produce a complete experimental design for application in the master's dissertation.
10. Use the main tools for searching in specialist literature.

Content

Doesn't apply

Methodology

Performing tasks for obtaining data, field work, etc., related to the development of the Master's Final Project. It will be done individually with the supervision of the director.

The preparation of the report may eventually overlap with the development of the Master Final Project.

Activities

Title	Hours	ECTS	Learning outcomes
Type: Supervised			
Design and initial phases of the Master's Project	200	8	6, 10, 7, 8, 9, 3, 2
Memory redaction	25	1	4, 5, 1

Evaluation

The written memory must contain:

- Antecedents
- Methodology (Material and Methods)
- Expected results of the Master's Final Work.

Evaluation activities

Title	Weighting	Hours	ECTS	Learning outcomes
Design and initial development of The Project	100%	0	0	6, 4, 5, 10, 1, 7, 8, 9, 3, 2

Bibliography

Colwell R (2013) EstimatesS 9.1.0 user guide.

<http://viceroy.eeb.uconn.edu/EstimateS/EstimateSPages/EstSUsersGuide/EstimateSUsersGuide.htm>

Hairston NG (1996) Ecological Experiments: Purpose, Design and Execution. Cambridge University Press.

Quinn GP, Keough M J (2010) Experimental Design and Data Analysis for Biologists. Cambridge University Press.

Resetarits W, Bernardo J (2001) Experimental Ecology. Issue and Perspectives. Oxford University Press.

Underwood AJ (1997) Experiments in Ecology. Their Logical Design and Interpretation Using Analysis of Variance. Cambridge University Press.