

**Project Design and Methodology in Terrestrial Ecology**

Code: 42921  
ECTS Credits: 9

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

The proposed teaching and assessment methodology that appear in the guide may be subject to changes as a result of the restrictions to face-to-face class attendance imposed by the health authorities.

## Contact

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## Use of Languages

Principal working language: spanish (spa)

## Prerequisites

Must have completed the initial modules of the Master.

## Objectives and Contextualisation

This module provides a link between the theoretical and methodological training offered in previous modules of the master and its application to solving a specific problem in the field of terrestrial ecology. This is achieved in a supervised individual work whose objectives are that students (1) be integrated into a working group in the chosen field; (2) become familiar with the literature on the subject of their work; (3) be able to provide valid solutions to problems that arise in the design of their master work; (4) produce a complete experimental design to be applied in this work; (5) plan and realistically schedule their master work; and (6) know how to soundly use the relevant methods .

This is a supervised work to train students in a specific field of terrestrial ecology. It can be carried out in the facilities of the UAB, in any of the other institutions participating directly in the master (CREAF, IRTA, CSIC) or in public or private companies or public agencies working in the field of terrestrial ecology.

## Competences

- 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 terrestrial ecology, 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 terrestrial ecology.
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

Not applicable.

## Methodology

Students' own work, under direction of their supervisor.

The proposed teaching methodology may experience some modifications depending on the restrictions to face-to-face activities enforced by health authorities.

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			
Design and methodology of experimental projects	200	8	6, 5, 10, 1, 7, 8, 9, 3, 2
Writing	25	1	4, 5, 10, 1

## Assessment

The written report shall contain the introduction, methodology and expected results of the master work.

Student's assessment may experience some modifications depending on the restrictions to face-to-face activities enforced by health authorities.

## Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Written document	100%	0	0	6, 4, 5, 10, 1, 7, 8, 9, 3, 2

## Bibliography

Hairston NG (1991) Ecological Experiments: Purpose, Design and Execution. Cambridge University Press.

Henderson PA (2003) Practical Methods in Ecology, Blackwell Publishing (electronic book).  
Hillborn R, Mangel M (1997) The Ecological Detective: Confronting Models With Data. Princeton University Press (electronic book).  
Newport C (2016) Deep work: rules for focused success in a distracted world. Piatkus, London.  
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.

## **Software**

NA