

Forest Ecology

Code: 100819
ECTS Credits: 6

Degree	Type	Year	Semester
2500251 Environmental Biology	OT	4	0

Contact

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Use of languages

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

Teachers

José David García Callejas
Maria Teresa Rosas Torrent
Raul Garcia Valdes
Sandra Saura Mas

Prerequisites

Before enrolling into the Forest Ecology course it is desirable that students have attained the learning skills corresponding to the following courses of their degree: Mathematics, Biostatistics, Natural Environment Prospecting, Botany, Ecology and Vegetation Analysis.

Objectives and Contextualisation

The objective of this course is to produce the knowledge and methodological skills required for (1) learn the reality of forests, particularly in the Mediterranean region; (2) gain basic understanding on their functioning and dynamics; and (3) acquire notions on the main principles and tools used in forest management and logging practices. The student will need to use some of the mathematical, computational and statistical tools acquired in previous courses of the degree.

Content

The syllabus consists of 13 topics, structures in four blocs:

Bloc 1. What are forests and how do we study them?

1. From the tree to the forest.
2. The global importance of forests.
3. Describina a forest.

Bloc 2. Forest functioning

4. ¿How do trees work?
5. Primary production and carbon stocks in forests.
6. Water and nutrient fluxes in forests.

Bloc 3. Forest dynamics

7. Forests in time.
8. Main disturbances and their effects.
9. Forest models.
10. Forests and global change.

Bloc 4. Forest multifunctionality. Ecosystem services

11. Forest management and ecosystem services.
12. Logging and forestry.
13. Managing Mediterranean forests.