



Universitat de Lleida

DEGREE CURRICULUM  
**PRESERVATION AND  
BIODIVERSITY**

Coordination: NADAL GARCIA, JESUS

Academic year 2020-21

Subject's general information

<b>Subject name</b>	PRESERVATION AND BIODIVERSITY			
<b>Code</b>	102470			
<b>Semester</b>	2nd Q(SEMESTER) CONTINUED EVALUATION			
<b>Typology</b>	<b>Degree</b>	<b>Course</b>	<b>Character</b>	<b>Modality</b>
	Double degree: Bachelor's degree in Forest Engineering and Bachelor's degree in Nature Conservation	4	OPTIONAL	Attendance-based
	Bachelor's Degree in Forest Engineering	4	OPTIONAL	Attendance-based
<b>Course number of credits (ECTS)</b>	6			
<b>Type of activity, credits, and groups</b>	<b>Activity type</b>	PRACAMP	PRAULA	TEORIA
	<b>Number of credits</b>	2.4	1.2	2.4
	<b>Number of groups</b>	1	1	1
<b>Coordination</b>	NADAL GARCIA, JESUS			
<b>Department</b>	HORTICULTURE, BOTANY AND LANDSCAPING			
<b>Important information on data processing</b>	Consult <a href="#">this link</a> for more information.			

Teaching staff	E-mail addresses	Credits taught by teacher	Office and hour of attention
NADAL GARCIA, JESUS	jesus.nadal@udl.cat	3	
PEDROL SOLANES, JUAN	joan.pedrol@udl.cat	3	

## Subject's extra information

**Course** / subject in the whole curriculum

The subject of Conservation and Biodiversity is an optional, 4th year of the mention of Natural Systems Management, with the main objective of applying biological knowledge about flora and fauna to the conservation and management of biodiversity and resources natural

### Requirements to take it

Prerequisites: Wildlife management.

### Recommendations

Material for field trips: guides to identify wildlife. Optics (binoculars and telescopes)

## Competences

- Identify the species of flora and fauna of a natural, agricultural, forestry or urban space.
- Use different biodiversity indicators.
- Evaluate the conservation status of biodiversity and characterize existing impacts.
- Propose adequate management for the conservation of biodiversity compatible with existing uses

### General competences

At least the following basic competences will be guaranteed:

CB3 That students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include a reflection on relevant social, scientific or ethical issues.

CB4 That students can transmit information, ideas, problems and solutions to a specialized and non-specialized public

In addition, the graduate must be able to:

CG1. Ability to understand the biological foundations for the development of professional activity, as well as to identify the different biotic and physical elements of the forest environment and renewable natural resources susceptible to protection, conservation and exploitation in the forestry field.

CG2. Ability to analyze the ecological structure and function of forest systems and resources, including landscapes.

CG3 Knowledge of the degradation processes that affect forest systems and resources (pollution, pests and ailments, fires, etc.) and capacity for the use of forest protection techniques, forest hydrological restoration and biodiversity conservation.

CG7 Ability to solve technical problems arising from the management of natural spaces.

CG8.Capacity to manage and protect forest wildlife populations, with special emphasis on hunting and fish farming.

### Specific competences

The graduate in Forest Engineering, detached from finishing his studies, will have acquired the following knowledge and skills:

CEFB8. Knowledge of the biological foundations and foundations of the plant and animal field in engineering

Trained to know, understand and use the principles of:

CEMC1. Forest Botany.

CEMC2. Forest Zoology and Entomology.

CEMC4. Forest Ecology

Ability to know, understand and use the principles of:

CEEF7. Hunting and fishing management. Aquaculture systems

CEEF8. Territorial Planning and Planning.

CEEF9. Forest Landscaping.

## Subject contents

- 1.- Effects of anthropic activity on the environment
- 2.- Diagnosis of the state of the populations.
- 3.- Conservation strategies.
- 4.- Practical work session on fauna and flora conservation websites.
- 5.- Threatened animal species.
- 6.- Wildlife census methodologies.
- 7.- Wildlife conservation and restoration: terrestrial habitats.
- 8.- Wildlife conservation and restoration: aquatic habitats.
- 9.- Threatened and invasive plant species.
- 10.- Sampling methodologies in vegetation.
- 11.- Conservation and restoration of flora: terrestrial habitats.
- 12.- Conservation and restoration of flora: aquatic habitats.

### Practical activities

Field trip to areas of natural interest for the analysis of its conservation problem.

## Methodology

Type of activity	Description	Face-to-face activity		Non-face-to-face activity		Evaluation	Total
		Objectives	Hours	Student work	Hours	Hours	ECTS
<b>Theory</b>	Master class	Main concepts	24	Know, understand and synthesize	36	2	
<b>Problems and cases</b>	Participatory class	Problem and cases resolution	12	Learn to solve problems and cases	24	2	
<b>Field practices</b>	Field practice	Execution of the practice: understand	24	Study and write report	24	2	
<b>Total</b>			<b>60</b>		<b>84</b>	<b>6</b>	<b>6</b>

## Development plan

**Content** (estimated date)

- 1- Effects of anthropic activity on the environment (February 8)
- 2- Conservation strategies (February 9)

- 3-Conservation biology. Diagnosis of population status (February 10)
- 4-Practical session on conservation websites (February 15)
- 5- Distribution of plants. Endangered Species. Invaders (February 16)
- 6- Threatened animal species (February 17)
- 7-Wildlife Census Methodology (February 22)
- 8- Interpretation of wildlife census (February 23)
- 9- Vegetation sampling methodology (February 24)
- 10- Flora conservation and restoration (February 29)
- 11- Conservation and restoration of flora (II) (March 1)
- 12- Wildlife conservation and restoration (March 2)

Departure Terreta / Pyrenees (March 16)

Departure Colanders from Boldú / Ebro Valley (March 30)

Work exhibition

Theory test

## Evaluation

Type of activity	Evaluation		Weight Rating
	Procedure	Number	(%)
<b>Master lecture</b>	Written test on the theory of the subject program	1	40
<b>Problems and cases</b>	Presentation on the cases studied to field practices	1	40
<b>Field practices</b>	Assistance	2	20
<b>Total</b>			100

## Bibliography

### Bibliografia bàsica

CAMPRODON, J. & PLANA, E. 2001. Conservación de la biodiversidad y gestión forestal. Edicions Universitat de Barcelona.

CASALS, F. & SANUY, D. (Ed.). 2006. La fauna vertebrada de les terres de Lleida. Servei de Publicacions de la UdL.

COWX, I.G & WELCOMME, R.L. 1998. Rehabilitation of rivers for fish. Fishing News Books

PRIMACK, R.B. & ROS, J. 2002. Introducción a la biología de la conservación. Ariel Ciencia.

SÁEZ, L., AYMERICH, P. & BLANCHÉ, C. 2010. Llibre vermell de les plantes vasculares endèmiques i amenaçades de Catalunya. Barcelona: Argania.