UAB
Universitat Autònoma de Barcelona

Biodiversity and Habitats

Code: 104251
ECTS Credits: 6

2024/2025

Degree	Type	Year
2503710 Geography, Environmental Management and Spatial Planning	OB	3

Contact

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Teaching groups languages

You can view this information at the end of this document.

Prerequisites

The knowledge learnt in the subjects of Geografia Física are taken for granted, and will not be explained again.

Objectives and Contextualisation

This course introduces students to some concepts of biogeography and ecology and explores the causes, processes, and consequences of global environmental change. The course make special emphasis on the influence that human action has had on the landscape and the consequences that current environmental changes can have on society and the natural environment.

The specific objectives of the course are:

- Identify, describe, explain, classify and determine the main plant species of Catalonia landscapes.

- Analyze and interpret a landscape paying special attention to its natural and social dynamics and the different living beings that compose it.

This subject, on the other hand, is linked to the subject "Territorial and Environmental Laboratory: Project", in such a way that the practical exercises and field work developed will also be used in this other subject.

Learning Outcomes

1. CM14 (Competence) Make proposals and actions focused on the management of biodiversity and protected natural areas.
2. KM24 (Knowledge) Interpret the dynamics of a vegetation landscape, taking into account the description and classification of the main plant species in Catalonia.
3. SM18 (Skill) Create vegetation maps incorporating landscape descriptions at different scales through the use of plant species identification guides.

Content

Theoretical contents

Unit 1. Biodiversity and socio-ecological systems

1.1. What is biodiversity?

1.2. What are socio-ecological systems?

Unit 2. Forest habitats and landscapes

2.1. Habitats and landscapes

2.2. Forest dynamics

Unit 3. The soil, its covers and forest fires

3.1. The soil and his covers

3.2. Soil degradation and forest fires

Unit 4. Water and aquatic ecosystems

4.1. Characterization of aquatic ecosystems

4.2. Mediterranean basin management and water quality

Unit 5. Impacts of human activity on natural systems

5.1. Nature-society historical evolution (environmental geohistory)

5.2. Impacts of human activities (invasive species, etc.)

Unit 6. The "new" nature-society relations

6.1. Protected Natural Areas

6.2. Environment and human health

Practical Contents

Field trips

At the beginning of the course, the teacher will explain the protocol of measures and good practices for field trips.

Field trip 1. UAB Campus. Identification and characterization of Mediterranean vegetation.

Field trip 2. Itinerary for the study of Eurosiberian and Boreo-Alpine vegetation (2 days, overnight stay)

Field trip 3. Preparation for the practical exam (optional)

If the field trips cannot take place in person, their format will be adapted (maintaining their weighting) to the possibilities offered by the UAB's virtual tools.

Laboratory and cabinet practices
- The cartography of the vegetation
- Methods of studying vegetation and the vegetal landscape
- Vegetation maps
- Forest cover maps
- Vegetation profiles
- The making of herbariums

In thissubject, gender perspective will be taken into account in the following aspects:

- Not allowing a sexist use of language in the students' oral and written contributions.

- Writing, in the references, the full names of authors, instead of only the initial.

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Class practices - case studies	16.5	0.66	SM18, SM18
Field work	16.5	0.66	KM24, KM24
Master class	14	0.56	KM24, KM24
Type: Supervised			
Virtual herbarium and transect	25	1	KM24, SM18, KM24
Type: Autonomous			
Case resolution	75	3	CM14, CM14

Autonomous Types

Exercises: independent work,
compulsory delivery by students following the instructions in the teaching calendar. They will not change regardle

Directed Types

Theory: master classes in the classroom and t
wo mandatory field trips, presentation of classroom practices and field practices. They will be adapted, if necessa

At the beginning of the course, the teacher will explain the protocol of measures and good practices for field trips

Supervised Types

A virtual herbarium and different maps and vegetation profiles.

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.

Assessment

Continous Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class practices - case studies	35%	0	0	CM14
Final exam of theory	15%	1.5	0.06	CM14
Final practic exam	10%	0.5	0.02	KM24
Test 1	5%	0.5	0.02	KM24
Test 2	5%	0.5	0.02	KM24
Vegetation profiles and cartography	15%	0	0	SM18
Virtual herbarium	15%	0	0	KM24

This subject/module does not incorporate single assessment.

The final grade will be calculated as follows:

Theory Tests (35%)
Test 1: 5%
Test 2: 5%
Final theory exam: 15% (minimum 5 grade to average)
Practical final exam 10% (minimum 5 marks to average)
Classroom practices (35%)

Solve 2 case studies
Preparation of Virtual Herbarium in groups (15%)
Identify, describe and photograph plant species during field trips. The
Field Trips (15%)
Elaboration of vegetation profiles and cartography in groups
The following should be noted:
1) Exams and field trips are MANDATORY, as well as 80% of homework
2) The minimum grade to average in the final exams is 5.
3) Students will obtain a Not assessed/Not submitted course grade unles

4) In the event of a student committing any irregularity that may lead to a significant variation in the grade awarde

5) The undergraduate student has the right to a reassessment of the exams.
Qualifications review procedure:
On carrying out eachevaluation activity, lecturers will inform students (on
In the event that tests or exams cannot be taken onsite, they will be adap

Bibliography

References

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Software

Office and software of SIG avalaible in the classroom of computing services

Language list

Name	Group	Language	Semester	Turn
(PAUL) Classroom practices	1	Catalan	second semester	morning-mixed
(PCAM) Field practices	11	Catalan	second semester	morning-mixed
(PCAM) Field practices	12	Catalan	second semester	morning-mixed
(TE) Theory	1	Catalan	second semester	morning-mixed