

Analysis and Management of Natural Landscapes

Code: 43054
ECTS Credits: 6

Degree	Type	Year	Semester
4313784 Interdisciplinary Studies in Environmental, Economic and Social Sustainability	OT	0	1

Contact

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Other comments on languages

Hi haurà suport en anglès per al seguiment de les classes

Use of languages

Principal working language: spanish (spa)

Teachers

Martí Boada Juncà

Josep-Antoni Pujantell Albos

External teachers

Carles Barriocanal

Cinthia Pereira

Prerequisites

Students must have knowledge in environmental sciences and ability to follow lectures in English and Spanish.

Objectives and Contextualisation

To understand the landscape as an expression of natural and social history.

To interpret the structure and dynamics of the major biomes, sociological dimension.

Methodological approach to understanding and analyzing examples in Latin America, Europe and Mediterranean region.

The module provides a historical perspective on the conservation origins and Natural Protected Areas (NPA), as well as the existing legislative figures of protection.

Protected areas management tools and biodiversity monitoring and conservation (in-situ, ex-situ) in the context of global change and its socioecological implications are studied.

Criteria and analytical and legal tools for diagnosis, assessment of environmental services and NPA management, particularly in the case of Biosphere Reserves and Urban biodiversity (the city as a socioecosystem) will be reviewed.

Main strategies for environmental education and communication, participation and community conservation processes involving NPA, will be studied from different case studies.

Skills

- Analyse how the Earth functions on a global scale in order to understand and interpret environmental changes on the global and local scales.
- Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
- Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
- Seek out information in the scientific literature using appropriate channels, and use this information to formulate and contextualise research in environmental sciences.
- Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
- Work in an international, multidisciplinary context.

Learning outcomes

1. Assess human impact on coastal areas and the function of marine nature reserves, both coastal and oceanic, in biodiversity conservation and the capacity to generate biomass.
2. Communicate and justify conclusions clearly and unambiguously to both specialised and non-specialised audiences.
3. Integrate knowledge and use it to make judgements in complex situations, with incomplete information, while keeping in mind social and ethical responsibilities.
4. Interpret current models for protected natural areas with local and worldwide cases, both marine and terrestrial.
5. Locate and analyse the great biogeographical regions and their situation regarding the conservation of biodiversity.
6. Seek out information in the scientific literature using appropriate channels, and use this information to formulate and contextualise research in environmental sciences.
7. Solve problems in new or little-known situations within broader (or multidisciplinary) contexts related to the field of study.
8. Work in an international, multidisciplinary context.

Content

Session 1. October 16

Presentation of the module. Martí Boada and Josep Pujantell

Conceptual dynamics. Origins of the landscape. Biophysical and socioeconomic inducing forces. Active transformation of landscapes. Martí Boada

Session 2. October 18

Qualitative and quantitative approaches to landscape analysis. Josep Pujantell

Biodiversity management and indicators of global change: the case of birds. Jordi Baucells (Catalan Institute of Ornithology, ICO)

Session 3. October 23

Socio-ecological heritage and rural landscapes. Josep Pujantell

Conservation and the role of the primary sector in sustainable production. Marc Costa (Fundación Món Rural, FMR)

Session 4. October 25

Analysis, participation and territorial management from socioecology. Iago Otero (Humboldt University, Berlin)

Ex-situ and in-situ conservation. The case of the Montseny brook newt. Salvador Carranza (researcher at the Institute of Evolutionary Biology, CSIC-UPF)

Session 5. October 30

Management of fauna and biosafety. Guillem Chacón (Institute of Tropical Biodiversity, IBT)

Methodologies for the analysis of environmental services and public use. Actors and participatory processes in a Biosphere Reserve. Cinthia Pereira (ICTA)

Session 6. November 6

Protected areas and sustainable tourism. Methodologies of evaluation and certification. Carles Barriocanal (ICTA)

Knowledge of the environment, health and toxicity. Martí Boada and Teresa Romanillos (ICTA).

Session 7. November 8

Conservation and management through protection figures: natural parks and national hunting reserves. Jordi Palau (Director of the National Hunting Reserve of Boumort and former director of the Natural Park of Alt Pirineu)

Conservation of landscape and biodiversity: a perspective from civil society. Jordi Sargatal (former director of the Aiguamolls Natural Park of the Empordà)

Final session. Date to be confirmed

The management of natural resources. To touch or not to touch? This is the question. Eduardo Rojas (Professor at the Polytechnic University of Valencia, former Deputy Director General of Forestry at FAO, Food and Agriculture Organization)

Field trip 1. Natural Park and Montseny Biosphere Reserve (date to be confirmed)

Field trip 2. Collserola Natural Park. An example of protected space near a large city (date to be confirmed)

Field trip 3. Aiguamolls Natural Park of the Empordà (date to be confirmed)

Methodology

Lectures

Troubleshooting classes / cases / exercises

Classroom practices

Active participation in the classroom

Field trip

Essays/works

Activities

Title	Hours	ECTS	Learning outcomes
Type: Directed			
Theoretical presentations	30	1.2	2
Type: Supervised			
Essays oral presentations	20	0.8	2, 3
Type: Autonomous			
Essays/works preparation	40	1.6	6, 2
Lectures	40	1.6	3

Evaluation

The final mark will be the result of the assistance and active participation in class (40%), the delivery of essays/works (40%) and oral presentations (20%).

Evaluation activities

Title	Weighting	Hours	ECTS	Learning outcomes
Active participation in the classroom	40%	4	0.16	6, 7, 2, 3
Essays oral presentations	20%	2	0.08	6, 4, 7, 2, 3, 5, 8, 1
Essays/works delivery	40%	14	0.56	6, 4, 7, 2, 3, 5, 8

Bibliography

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