

66709 - Management and conservation of natural zones and biodiversity

Syllabus Information

Academic year: 2024/25

Subject: 66709 - Management and conservation of natural zones and biodiversity

Faculty / School: 103 - Facultad de Filosofía y Letras

Degree: 328 - Master's in Land and Environmental Planning

ECTS: 6.0

Year: 1

Semester: Annual

Subject type: Optional

Module:

1. General information

Objectives: to show the territory as the place where ecosystems, biodiversity and their functions and services are found, from the spatial perspective of land management, to help make decisions through the valuation and management of geographic tools.

Context and meaning: it complements the spatial perspective of land use planning, with the conservation of natural spaces and natural diversity, intertwined with Territorial Design and Planning, Environmental Impact Assessment and environmental restoration, considering ecosystems, their services and their economic value.

Sustainable Development Goals: 6 (Objectives 6.3, 6.6), 13 (Objectives 13.1, 13.2, 13.3, 13.b), 14 (Objectives 14.2, 14.5), 15 (Objectives 15.1, 15.2, 15.3, 15.4, 15.5, 15.7, 15.8, 15.9).

2. Learning results

- To recognize the value of biological diversity and its importance in the general context of land management.
- To identify the functions of ecosystems and the criteria for their evaluation.
- To know how to identify biodiversity assessment criteria: what data are needed for assessment, what techniques to apply to the data, and how to evaluate the results.
- To know the principles of landscape ecology and its application to the conservation of spaces and species.
- To know the fundamentals of the theory of island equilibrium and metapopulations applied to the selection of natural areas.
- To know how to apply multi-criteria options to select spaces that should be preserved.
- To know the fundamental international, national and regional legislation governing the conservation of diversity, as well as the value of recovery plans for endangered species.
- To be capable of proposing and solving simple practical cases of conservation, design and management of natural spaces, being part of interdisciplinary teams and with the ability to transmit the results.

3. Syllabus

BLOCK 1. Ecological fundamentals

- Topic 1. From gene to ecosystem.

- Topic 2. Populations

- Topic 3. Communities

BLOCK 2. Geography and diversity

- Topic 4. Geography and ecosystems.

- Topic 5. The value of diversity.

- Topic 6. Current status of diversity.

BLOCK 3. Diversity management and conservation tools.

- Item 7. International planning and management instruments.

- Item 8. National planning and management instruments.

- Item 9. Biodiversity conservation. Species conservation.

- Item 10. Biodiversity conservation. Conservation and protection of spaces.

4. Academic activities

The fundamentals of conservation are studied based on the knowledge of natural systems, their functioning and enhancement,

current problems and legal figures at different spatial scales. Through ecosystem recognition exercises, we work with indicators, multi-criteria selection and GIS tools, working as a team in a specific area, applying conservation criteria, biodiversity indicators and analysing preservation and conservation conflicts.

Activities:

Type 1. Master class.

Type 2. Problem solving and case studies.

Type 3. Laboratory practices.

Type 4. Works.

Type 6. Special practices.

5. Assessment system

FIRST CALL

a) *Continuous assessment system*

Block 1 works: Individual work. 3 points

Block 2 works: Individual work. 3 points

Block 3 works: Individual work. 3 points

Field activities. 1 point

As general criteria, for the assessment of each of the different documents and activities carried out by the student, the following are considered: clarity and cleanliness of the exposition; good definition of objectives, if applicable; proper handling of sources and data; clarity in the presentation of graphical and numerical results, etc. Adequate use of terms and concepts; obtaining conclusions, if it is the case according to the objectives and method followed; any other that the teacher, at the time of reading or assessment, deems appropriate.

b) *Global assessment test*

To be taken on the date established in the centre's examination calendar. The assessment criteria are the same as those expressed in the continuous assessment system. The continuous assessment system and criteria are repeated.

FIRST CALL

Identical to the global assessment test of the first call.

6. Sustainable Development Goals

13 - Climate Action

14 - Life Below Water

15 - Life on Land