

## Course guide

### 210931 - EC P - Ecology and Landscape

Last modified: 14/12/2023

**Unit in charge:** Barcelona School of Architecture  
**Teaching unit:** 740 - DUTP - Department of Urbanism, Territory and Landscape.  
**Degree:** MASTER'S DEGREE IN LANDSCAPE ARCHITECTURE (Syllabus 2015). (Optional subject).  
**Academic year:** 2023    **ECTS Credits:** 3.0    **Languages:** Catalan, Spanish, English

#### LECTURER

**Coordinating lecturer:** DANIEL GOMEZ DE ZAMORA MARTINEZ - FRANCISCA JOSEFA MORÁN NÚÑEZ

**Others:** Primer quadrimestre:  
DANIEL GOMEZ DE ZAMORA MARTINEZ - Grup: 1R1S  
FRANCISCA JOSEFA MORÁN NÚÑEZ - Grup: 1R1S

#### TEACHING METHODOLOGY

Theoretical classes.

Lectures in master class format where the disciplinary body is presented and main concepts are established. To attain knowledge, bibliographic material is provided, this material will be worked independently and will be discussed in complementary activities. Thematic lectures by external speakers that develop examples of professional work on the main themes of landscape ecology.

Field trips.

Visits and fieldwork to explore landscape projects developed under the criteria of landscape ecology.

Personal untutored work

This activity includes, mandatory, the performance of work derived from classes.

#### LEARNING OBJECTIVES OF THE SUBJECT

- Know, understand and apply the basic concepts of landscape ecology
- Know, understand and apply the basic concepts socio-ecology.

#### STUDY LOAD

Type	Hours	Percentage
Hours large group	22,5	100.00

**Total learning time:** 22.5 h

## CONTENTS

### Description:

Develop the basics of landscape ecology and socio-ecology:

- 1) Basis of Landscape Ecology: tile, connector array; Ecotone: edge effects; Ecological connectivity; Habitat fragmentation.
- 2) Urban ecology: function and metabolism; Green city infrastructure, urban ecosystem services system. Quality indicators of urban space.
- 3) Ecological landscape planning: green infrastructure and territory, the territorial matrix of ecosystem services
- 4) Tertiary landscape and manage sustainable traditional uses of the landscape.
- 5) Basic concepts of ecological economics.

**Full-or-part-time:** 45h

Theory classes: 30h

Laboratory classes: 15h

## GRADING SYSTEM

The final summative evaluation will be the result of the partial evaluations obtained in the various activities carried out in accordance with the planning of the course.

The evaluative activities consist of an exam on the subjects developed in the theoretical classes (40%); a practical exercise in ecological analysis of a concrete territory (40%); and a summary text of each of the visits (20%).

### Continuous telematic evaluation

In online teaching situations, continuous assessment will be carried out synchronously and asynchronously by the means established by the University and the School, with a periodic record of academic activity through submissions, forums, questionnaires or any other means facilitated by the Atenea platform, or the alternatives provided to the teaching staff. In the situations in which this telematic teaching is a product of face-to-face teaching that has already begun, or for questions of extra-academic order, the changes in the weightings or regular control systems of the teaching will be communicated in detail to all students by the Athena of each subject.

### Telematic final evaluation

If the continuous telematic evaluation is not positive, a second evaluation can be carried out, which will consist of a final test of a global nature in telematic format that will be established in accordance with the criteria of the professor responsible and the media and ICTs provided by the University or School.

The measures for adaptation to non-classroom teaching will be implemented in accordance with the criteria of ICT security and personal data protection to ensure compliance with the legislation on Personal Data Protection (RGPD and LOPDGD)

## BIBLIOGRAPHY

### Basic:

- Forman, Richard T. T; Godron, M. Landscape ecology. New York [etc.]: Wiley, 1986. ISBN 9780471870371.
- Mayor, X. Connectivitat ecològica: elements teòrics, determinació i aplicació : importància de la connectivitat ecològica com a instrument de preservació de l'entorn i d'ordenació del territori a Catalunya. Barcelona: Generalitat de Catalunya, Consell Assessor per al Desenvolupament Sostenible, 2008. ISBN 9788439376859.
- "Infraestructuras transversales a cursos fluviales e infraestructura lineales de conducción de agua. Medidas para la reducción de sus impactos sobre la fauna y los hábitats fluviales". Book of abstracts of the XV Congress of the Iberian Association of Limnology. p. 171-172.
- Farina, A. Ecología del paisaje. San Vicente del Raspeig: Publicaciones de la Universidad de Alicante, 2011. ISBN 9788497171670.
- Forman, Richard T. T. Urban ecology : science of cities. Cambridge: Cambridge University Press, 2014. ISBN 9780521188241.
- Forman, Richard T. T. Urban regions: ecology and planning beyond the city. Cambridge: Cambridge University Press, 2008. ISBN 9780521670760.
- Forman, Richard T. T. Land mosaics: the ecology of landscapes and regions. Cambridge [etc.]: Cambridge University Press, 1995. ISBN 9780521479806.



## RESOURCES

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**Hyperlink:**

- Intranet Docent. <https://atenea.upc.edu/moodle/login/index>