



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## COURSE SYLLABUS

### Landscape Ecology

2425-2-F7501Q046

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#### Course title

Landscape ecology

#### Topics and course structure

Concept of landscape, landscape models, analysis and management of natural and man-dominated landscapes

#### Objectives

**Knowledge of main topics of landscape ecology**

***Knowledge and understanding***

To know main landscape ecology schools and related theories

***Applying knowledge and understanding***

To know main criteria of ecological planning

***Making judgements***

To be able to evaluate different land management scenarios, to be able to evaluate scientific papers

***Communication skills***

To be able to expose principles and theories of landscape ecology learned during the course

### ***Learning skills***

To be able to read and understand scientific papers and technical documents dealing with landscape ecology

## **Methodologies**

Lesson in person and e-learning, active teaching methodologies.

16 hour lectures, in person, Delivered Didactics

20 hour lectures in person, Interactive Teaching

12 hour e-learning lectures, Delivered Didactics

The 36 hours in presence are organized so that 16 hours are to be considered as Delivered Didactics, and the remaining 20 interactive teaching (group discussions, personal or group presentations, ...).

The 12 hours scheduled in e-learning lectures, Delivered Didactics are introductory to innovative teaching activities in the classroom based on the flipped classroom model.

## **Online and offline teaching materials**

Slides and supplementary materials (paper and exercises) discussed in classroom

## **Programme and references**

### ***Short programme***

Meaning of world landscape, Landscape models, Landscape analysis, Planning and management of landscapes

### ***Detailed programme***

- Introduction
- Meaning of landscape
- Landscape ecology and ecological theory
- Landscape models
- Landscape systems at global level
- Landscape systems in Europe
- Landscape systems in Italy
- Patch Matrix Corridors Ecotones
- Ecological networks in agricultural landscapes
- Indicator and bioindicators at landscape scale
- Ecological footprint and ecosystem services at landscape level
- Habitat monitoring
- Landscapes and global change
- Mediterranean landscapes
- Mountain landscapes

- Urban landscapes
- Landscapes and infrastructures
- Restoration ecology at landscape scale

**References:**

Padoa-Schioppa E - \*Storia ecologica dell'Europa \*- il Mulino 2023

Scientific paper provided during the course and linked in the website of the course

**Assessment methods**

Oral examination

The exam will evaluate the ability to understand scientific papers provided and the suggested book in order to connect them with topics of landscape ecology explained during the course.

Mark range: 18 - 30/30

Ongoing tests during the course for students attending the course.

It will be possible to arrange individual and group presentations during the innovative teaching hours which will precede the oral test part which precedes the discussion on the textbook.

Even for the ongoing tests, the clarity and precision of the presentation will be assessed and a grade out of tenths (18-30/30) will then be proposed.

**Office hours**

Monday at 16.30 after appointment by e-mail

**Programme validity**

One academic year

**Course tutors and assistants**

Claudia Canedoli

Noemi Rota

**Sustainable Development Goals**

NO POVERTY | ZERO HUNGER | GOOD HEALTH AND WELL-BEING | QUALITY EDUCATION | CLEAN WATER AND SANITATION | AFFORDABLE AND CLEAN ENERGY | INDUSTRY, INNOVATION AND INFRASTRUCTURE | REDUCED INEQUALITIES | SUSTAINABLE CITIES AND COMMUNITIES | RESPONSIBLE CONSUMPTION AND PRODUCTION | CLIMATE ACTION | LIFE BELOW WATER | LIFE ON LAND | PEACE, JUSTICE AND STRONG INSTITUTIONS | PARTNERSHIPS FOR THE GOALS

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