UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Landscape Ecology

2526-2-F7501Q046

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, active teaching methodologies. (6 CFU)

32 hour lectures, in person, Delivered Didactics
16 hour lectures in person, Interactive Teaching

The 48 hours in presence are organized so that 32 hours are to be considered as Delivered Didactics, and the remaining 16 interactive teaching (group discussions, personal or group presentations, ...).
Tentatively 8 hours of didatics are introdoctury to innovative teaching activities in the classroom based on the flipped classroom model.

Online and offline teaching materials

Slides and supplementary matherials (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
- Ecologican networks in agricultural landscapes
- Indicator and bioindicators at landscape scale
- Ecological footprint and ecosystem services at landscape level
- Habitat monitoring
- Landscapes and global change
- Mediterannean 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

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