UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Spatial Variability of Environmental Characteristics and Mapping Methodologies

2324-1-124R015

Title

Spatial variability of environmental variables and mapping methodologies

Teacher(s)

Chiara Ferré

Language

English/Italian

Short description

Aims

The aim of the course is to provide:

- knowledge on traditional and innovative mapping methods;

- practical skills in mapping of environmental variables;

- ability to interpret results.

Contents

- Spatial variability of environmental variables: causes (anthropic and natural) and effects;

- introduction to spatial data processing: traditional and innovative methods of assessing and mapping environmental variability;

- basic concepts of univariate and multivariate geostatistics and geostatistical data fusion techniques; computer session on variogram modelling and production of thematic maps; case studies on spatial variability assessment in precision farming;

- geomorphometric variables for production of thematic maps; case studies on soil thickness and soilscape.

Methods

Lectures, presentation of case studies and practical activities (PC sessions using specific software).

Expected outcome

Application of the investigated mapping techniques in research projects.

Evaluation: YES - through practical activities.

CFU / Hours

2 CFU - 16 Hours (Lecture)

Teaching period

II semester: April 2024 (22nd-24th) or June 2024 (after 10th)

Sustainable Development Goals