



UNIVERSITÀ  
DEGLI STUDI DI MILANO-BICOCCA

## SYLLABUS DEL CORSO

### **Spatial Variability of Environmental Characteristics and Mapping Methodologies**

2324-1-124R015

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#### **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**

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