

# UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

# **COURSE SYLLABUS**

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

2526-1-124R015

Titolo
Spatial variability of environmental variables and mapping methodologies

# Docente(i)

Chiara Ferré

# Lingua

English/Italian

#### **Breve descrizione**

#### **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.

Final evaluation: production of a thematic map using one of the methodologies learnt during the course

#### CFU / Ore

2 CFU - 16 Hours (Lecture)

## Periodo di erogazione

II semester

## **Sustainable Development Goals**