UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Open Source Software for Spatial Data Analysis (Intercurricular)

2223-94R-SCGA03

Titolo

Open source software for spatial data analysis

Docente(i)

Micol Rossini ; Biagio Di Mauro

Lingua

English

Breve descrizione

The aim of the course is to provide expertise in the use of open source software for data analysis. This will be done:

- explaining basic principles on digital images and statistical exploration;

- giving hands-on practice with tools and methods for satellite data exploitation;

- stimulating the exploitation of these open tools and methods in individual student research projects.

Examples of the use of open source software across a wide variety of disciplines, covering topics such as glacier

dynamics, landslide mapping, volcanic activity, global forest change, inland water monitoring, urban mapping, post fire recovery, flood mapping, will be provided.

Hands-on exercises will be developed using:

- Google Earth Engine: a cloud-based platform for planetary-scale geospatial analysis.

- QGIS for remote sensing applications.

- ESA Sentinel Application Platform (SNAP).

Evaluation: YES - with a final oral presentation

CFU / Ore

2 CFU - 16 Hours (Lecture)

Periodo di erogazione

II semester