

UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Geological Mapping 2

2526-3-E3401Q010

Aims

The aim of the course is to prepare students to face geological surveys and cartography in areas characterised by complex structural settings.

Knowledge and Understanding: learning the fundamentals of the geological-structural survey in geologically complex areas with detailed data collection of stratigraphic and structural features.

Applying Knowledge and Understanding: make a geological-structural map of the study area accompanied with the analysis of data collected in the field.

Making judgements, communication skills, learning skills: verify the robustness of existing geological data in the study area, write illustrative notes of the area communicating the basic geological and structural features in a simple but scientifically correct way.

Contents

48 hours of field activities (Campus Abroad) in presence, INTERACTIVE TEACHING (4 CFU)

The course consists of six to eight days of geological field survey, during which small groups of students, together with their teacher, learn the techniques of geological and structural field mapping. This will be done on geological units of the bedrock (cover and basement rocks) characterized by complex deformations. Mapping of surface deposits is also carried out.

Detailed program

The course is aimed at teaching advanced techniques for geological field mapping, with particular reference to geological and structural aspects. Each student will have to map geological units of any type (sedimentary cover, crystalline basement volcanic and surface deposits), affected by complex deformations. Field surveys will

preferentially consider selected areas from the Alps or the Apennines, with the possibility also of foreign areas.

Prerequisites

STRUCTURAL GEOLOGY, FIELD GEOLOGY AND MAPPING and SAFETY IN THE FIELD exams.

Teaching form

Field geological mapping (Interactive Teaching in the field), implementation of presentations and reports based on collected data. The activities in the field will last 6-8 days (48 hours of effective teaching).

Textbook and teaching resource

Scientific papers, topographic maps, geological maps, etc. All the materials will be provided by the teachers on the base of the selcted area for the geological mapping.

Semester

Summer, between the end of June and the first part of September.

Assessment method

OPEN QUESTIONS and PROBLEMS: Evaluation of fieldwork, oral presentation, and personal written report. Guidelines are available for the preparation of the final report.

Office hours

All days in office hours or by appointment fixed by email.

Sustainable Development Goals

QUALITY EDUCATION