UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Advanced Stratigraphy and Regional Geology

2627-1-F7402Q036

Aims

Stratigraphic analysis of a sedimentary succession (eg Facies analysis). Knowledge and stratigraphic interpretation of the Italian sedimentary succession. Understanding the evolution of the Alps–Apennines orogenic couple

Contents

The Geology of Italy – The Lower and Upper Paleozoic. The Mesozoic (Triassic, Jurassic and Cretaceous). The Alps and the Apennines.

Detailed program

The Geology of Italy. Stratigraphic and geodynamic introduction. The sedimentary successions of the lower and upper Paleozoic (e.g. Sardinia and Carnia). The sedimentary rocks of the Mesozoic period (Triassic, Jurassic and Cretaceous) and their stratigraphic evolution with examples from Lombardy and central-south Italy. The stratigraphic and geodynamic evolution of the Alps and the Apennines through the relationships between tectonic activity, relief formation, drainage development, erosion distribution and long-distance sediment transfer during continental collision and orogenic growth.

Prerequisites

No prerequisites

Teaching form

Frontal lessons
PDFs of the course lessons will be uploaded to the e-learning site with the contents and topics covered, accompanied by an appropriate selection of in-depth bibliography and supplementary material to be searched online. Student participation in the discussion of the topics covered will be encouraged
to facilitate understanding of the topics covered through active and continuous discussion during the course.
Course lessons will be made available on a regular basis.

Exercises
Geological maps at different scales will be shown to train students analyzing the stratigraphic and geodynamic evolution of the Alps and the Apennines.

Campus activities
Two one-day (6h) field trips at the end of the course

Breakdown in hours/CFU of teaching (DE) and interactive (DI)
the structure in hours/CFU of the course teaching will be distributed as follows:
a) 14 lessons of 2 hours in presence, with Delivery Teaching (DE) which includes some steps of Interactive Teaching (DI) to involve students.
b) 6 2-hour laboratory activities in person, Interactive Teaching (DI)
c) 2 field trips (Campus Abroad) of 6 hours in person, Interactive Teaching (DI)
All activities a,b,c, are carried out in person.

Lectures in person, exercises and field trips will focus on the sedimentary succession of the Southern Alpine Domain.

Textbook and teaching resource

Scientific articles provided by the teacher during the lessons.
Resources online.

Semester

Semester 2°

Assessment method

There are no ongoing tests planned.
The skills assessed for the final test are those provided during the frontal lessons, of which the knowledge of the stratigraphic successions studied and those seen and analyzed during the excursions will be evaluated, together with the ability to connect the topics covered in lessons.
The evaluation criteria of the final exam include the general verification of the knowledge acquired during the

course and upon exit through it.
The final exam includes: a written test in which an open question will be presented and
an oral test in which an interview will take place on the topics covered in class and on the exam texts.

Office hours

Wednesday from 14.30 to 17.30 (to schedule an appointment: eduardo.garzanti@unimib.it)

Sustainable Development Goals

QUALITY EDUCATION