UNIVERSITÀ
DEGLI STUDI DI MILANO-BICOCCA

COURSE SYLLABUS

Petrography Practical Sessions

2021-2-E3401Q014-E3401Q048M

Aims

The module Laboratory of Petrography (6 CFU) provides the fundamentals to understandi the origin and evolution of magmatic and metamorphic rocks. The aims of the course include:

- to learn how to classify (mineralogy and microstructures igneous and metamorphic rocks under the microscope;
- to learn the fundamantals of fieldwork and sampling of igneous and metamorphic rocks.

Contents

Description and classification of igneous and metamorphic rocks, with particular attention to the microstructural characterization, identification of the main igneous and metamorphic mineral phases under the optical microscope and application of phase diagrams to the studied natural samples.

Detailed program

Prerequisites

Students are expected to have attended teaching of Mathematics, Physics, Chemistry and Mineralogy.

Teaching form

The module Laboratory of Petrography is organised as: 7 hours of lectures on the optical properties of main mineral phases (1 CFU), 48 hours of laboratory classes on the recognition and description under the optical microscope of igneous and metamorphic rocks (4 CFU) and 10 hours of field work (1 CFU). Attendance at the laboratory classes is mandatory for at least 70% of the total. Participation at the excursion is mandatory, if there are no physical impediments. Support for practice activities is provided during tutoring hours.

Textbook and teaching resource

“Introduzione alla Petrografia ottica” Peccerillo A, Perugini, D. – Morlacchi Editore, Perugia (2003)

Suggested: “An Introduction to the Rock-Forming Minerals” Deer W.A., Howie R.A., Zussman - Mineralogical Society of Great Britain and Ireland

All slides presented will be available on the e-learning platforms (http://elearning.unimib.it/)

Semester

Second Semester (March -June)

Assessment method

To pass the laboratory of petrography the student must demonstrate to be able to write a report aimed at characterizing (classification, mineralogy and microstructural characters) with the optical microscope an igneous rock and a metamorphic rock chosen among those studied during the laboratory classes. 3 hours are foreseen for this test. The possibility of an intermediate (exemption) test during the laboratory classes is foreseen. He/she will also provide a report aimed at characterizing igneous and metamorphic rocks at the mesoscale studied during the 10 hours of campus abroad. Evaluation is provided in merit classes (A, B, C, D).

Office hours

Monday from 2pm to 6 pm, upon an appointment