

UE Petrology field course

ECTS 3 cred

ECTS 3 credits Component UFR PhITEM (physique, ingénierie, terre, environnement, mécanique) Semester Automne

- > Teaching language(s): French
- > Open to exchange students: Yes
- > Code d'export Apogée: PAX7SRAH

Presentation

Description

This 5-day course (3 ECTS) takes place in the lvrea zone, in northern Italy. The objective is to study a Permian igneous system, exceptionally preserved, and its metamorphic surrounding. The observations made on the field can be extrapolated to understand the structure of the continental crust.

This course is based on an integrative approach. Students study different outcrops during the day. In the evening, they synthesize their field observations together with thin section descriptions and geochemical and thermodynamic data. This approach allows understanding, progressively during the fieldtrip, the igneous processes that operated within the magma chamber and the consequences of magmatism on the thermal structure of the lower continental crust. The work is evaluated from reports throughout the course.

For practical reasons, this fieldtrip is limited to 16 students. It is asked to follow the Petrology course to participate to the fieldtrip.

Additional information

Location(s) : Departure and return from Grenoble. Training course taking place in the lvrea area, in Italy Language(s) : French (English)

Targeted skills:

- Processes in igneous system and interaction with the surrounding rocks.
- Associated mineral deposits.





- Macroscopic and microscopic recognition of magmatic and metamorphic rocks
- Autonomy in the field, team work, field notebook, note taking, observations.
- Drawing and mapping of outcrops.
- Interpretation of mineral textures and paragenesis in metamorphic and magmatic rocks.

- Synthesis of data obtained on the field and data that can be acquired later in the lab (geochemistry, thin sections) in order to establish a plausible geodynamic scenario of the studied area, at the outcrop scale and at the regional scale.

Course parts

TERRAIN

Useful info

Terrain

30h

Campus

> Grenoble - University campus



