

## UNIVERSITÀ DEGLI STUDI DI MILANO-BICOCCA

### **COURSE SYLLABUS**

# DEPThS: Field-based summer school on subduction forearc dynamics - second edition

2122-DEPThS-2E

#### **Title**

DEPThS: Field-based summer school on subduction forearc dynamics - second edition

#### Teacher(s)

Scientific committee: Marco G. Malusà (UniMiB) Stéphane Guillot (ISTerre Grenoble) Anne Paul (ISTerre Grenoble) Simona Ferrando (UniTo) Chiara Groppo (UniTo)

#### Teachers:

Marco G. Malusà (UniMiB) Suzanne L. Baldwin (Syracuse University) Anne Paul (ISTerre Grenoble) Simona Ferrando (UniTo) Alberto Resentini (UniMiB) Chiara Groppo (UniTo)

#### Language

#### **Short description**

Subduction zones are of primary importance for understanding the interactions between the Earth's surface and the deep levels of the planet and assessing the potential implications for the climate. The second edition of the international Summer School "DEPThS" aims to analyze the dynamics of subduction forearcs through a highly multidisciplinary approach, with particular emphasis on exhumation processes and the deep carbon cycle. The course is aimed primarily at PhD students in the various fields of Earth Sciences. It includes one day of classroom lectures in Milan and four days of field lessons based on geological observations along key transects across the Western Alps, one of the best-studied fossil subduction zones on Earth. Lectures will integrate petrological, tectonic, and stratigraphic evidence along the analyzed transects with the results of recent geophysical experiments on the deep tectonic structure of the Alps. Lectures will be held by geologists, petrologists, and seismologists from University of Milano-Bicocca, ISTerre Grenoble, University of Torino, and Syracuse University NY, who will interact all together with the students both in the classroom and in the field while hiking and discussing in front of intellectually stimulating outcrops in the breathtaking alpine landscape.

#### **CFU / Hours**

3 ECTS

#### **Teaching period**

1-5 July 2022

#### **Sustainable Development Goals**

**CLIMATE ACTION**