1. Objectives and content of the course

This course provides an introduction to the functioning and the basic principles required for the use of a scanning electron microscope (SEM). Emphasis will be on the main imaging techniques, such as secondary and backscattered electron imaging, as well as on chemical analysis through energy dispersive spectroscopy (EDS), and cathodoluminescence. Preparation of both geological and biological samples for scanning electron microscopy will be treated as well. The course comprises a theoretical part complemented by hands-on practical exercises.

At the end of the course, the students should be able to interpret secondary and backscattered SEM images, as well as images on cathodoluminescence and spectra obtained from EDS analyses.

Note
This course is strongly recommended for the students who will use this type of facilities during their master. For practical reasons, the course will be given on both sites (UNIGE: R. Martini; UNIL: P. Vonlanthen).

2. Pre-requisite:

Sedimentary, Environmental, and Reservoir Geology
Geochemistry - Alpine Tectonics - Ore Deposits

3. Dates 2017/2018: On October 5 and 6, 2017, from 9:15 am to 5:00 pm.