


UE Lithosphere dynamics (2024-2025)

 ECTS
6 credits

 Component
UFR PhITEM
(physique,
ingénierie, terre,
environnement,
mécanique)

 Semester
Automne

- > **Teaching language(s):** English
- > **Open to exchange students:** Yes
- > **Code d'export Apogée:** PAX7SRAA/PAX9SRAA

Presentation

Description

The objective of this course is to examine the behavior of the lithosphere and of the crust, at spatial scales ranging from the global Earth to the mountain range. An important part of the course is meant to place plate tectonics in the broad context of mantle convection. Similarly, the evolution of mountain ranges is understood within the general geodynamic framework. Surface deformation is explained by the cumulative effects of crustal and lithospheric tectonics, mantle convection, and surface processes. The development of the course is largely based on the analysis of Cenozoic tectonics, using multiple regional examples. A multidisciplinary approach is developed, in order to use analytical tools and geodynamic modeling to interpret observations from geophysical datasets or from the geological record.

Course parts

UE Lithosphere dynamics (2024-2025) - TD	Tutorials (TD)	14h
UE Lithosphere dynamics (2024-2025) - CM/TD	Lectures (CM) & Teaching Unit (UE)	28h

Useful info



Campus

➤ [Grenoble - University campus](#)