

- Faculté des sciences
- www.unine.ch/sciences

Rock and earthquake mechanics (3GH2167)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en hydrogéologie et géothermie	Cours: 20 pg	écrit: 1 h	2

ph=période hebdomadaire, pg=période globale, j=jour, dj=demi-jour, h=heure, min=minute

Période d'enseignement:

- Semestre Automne

Equipe enseignante:

S. Miller

Objectifs:

The objective of this course is to understand the physics governing earthquake and aftershock generation, and the physical and (hydro)-mechanical properties of rock at different pressures and temperatures

Contenu:

Earthquake magnitudes, earthquake seismology, fluid flow, stress transfer, fracture mechanics, brittle and ductile rock mechanics.

Forme de l'évaluation:

Marked assignments and final written (or oral) exam.

Documentation:

Lecture notes in the form of Powerpoint presentations and papers published in international journals.

Pré-requis:

Physics, geology, hydrogeology

Forme de l'enseignement:

Lectures and exercises