

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

Geodynamics, earthquake physics and geothermics (3GH2203)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en hydrogéologie et géothermie	Cours: 56 pg	Voir ci-dessous	6

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

Période d'enseignement:

- Semestre Automne

Equipe enseignante

Prof. S. Miller

Contenu

Topics that will be covered in detail are:

- The dynamics of the solid earth
- The physics of flow
- Global heat flow
- The processes controlling volcanism and heat transport towards the surface
- Tectonophysics
- Geothermal energy exploitation in deep, shallow, and mid-range reservoirs
- The hydrologic cycle of the solid earth
- The physics of earthquakes
- Brittle and ductile rock mechanics

Forme de l'évaluation

Class participation.
Two hour, closed book final exam.

Documentation

Powerpoint presentations,
Published literature.

Pré-requis

None

Forme de l'enseignement

Lectures
In-class exercises
Evaluating/discussing publications