

- Faculté des sciences
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### Rock and earthquake mechanics (3GH2167)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en hydrogéologie et géothermie</b>	<b>Cours: 20 pg</b>	Voir ci-dessous	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:

Written 1 hour 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