

- Faculté des sciences
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### Soil and water management (3BL2234)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en biologie</b>	<b>Cours: 30 pg</b>	Voir ci-dessous	3

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

#### Période d'enseignement:

- Semestre Automne

#### Equipe enseignante

P. Brunner, D. Hunkeler, S. Rasmann

#### Contenu

The course discusses challenges in the context of the water-soil- agriculture nexus. Specifically, the following themes are discussed:

- Quality and quantity of water resources
- Water consumption in agriculture
- Sustainable water resources management and agriculture
- Impact of fertilizer and pesticides on surface and subsurface water quality
- Introduction to sustainable management practices in agriculture
- biological aspects of soil fertility and agricultural production

#### Forme de l'évaluation

CA graded : 2 forms of evaluation will take place and are weighed according to the hours thought: For the part of S. Rasmann (biology, 30%) a report (e.g. <2,000 words, excluding references will have to be handed in.

For the parts on water quantity (Brunner) and quality (Hunkeler)-- 70% in total-- a written open book exam on the 5.11. will be carried out.

In case of an insufficient grade of the course, a written exam covering all aspects of the course will take place during the next exam session.

#### Documentation

PPTs on moodle

#### Pré-requis

A solid background in biology and basic chemistry

#### Forme de l'enseignement

Lectures for the water quality and quantity aspects. For the part of S. Rasmann, students will independently address research questions within the general domain of soil sustainability and the role of water.