

- Faculté des sciences
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Soil Biodiversity (3CB2002)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en biologie	Cours: 28 pg	Voir ci-dessous	3

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

Période d'enseignement:

- Semestre Printemps

Equipe enseignante

Prof. Edward Mitchell & for the lab part Emilie Favre, Benjamin Ory & Arnaud Dano

Contenu

This course covers:

- Soils as a complex habitat for biodiversity
- The spatial and temporal patterns of soil diversity
- The diversity of soil organisms
- The functions of soil organisms
- The impacts of natural and anthropic factors on soil biology
- The use of soil organisms as bioindicators to assess soil quality and functioning

A practical part is included in which students will identify the main groups of soil organisms to assess the biological quality of a site (QBS approach).

Forme de l'évaluation

Continuous assessment (individual reports and group presentations)

Modalités de rattrapage

In case of insufficient grade a new report will be prepared for a subsequent exam period.

Documentation

lecture (pdf), scientific papers, other resources

Pré-requis

Basic knowledge in ecology, invertebrates and microbiology

Forme de l'enseignement

Lectures, field excursions and lab work (depending on the number of students and availability of teaching labs)

Objectifs d'apprentissage

Au terme de la formation l'étudiant-e doit être capable de :

- Use Different methods to observe and identify soil organisms
- Relate Soil organisms to ecosystem functions
- Describe The diversity and function of soil organisms
- Observe in the field evidence for soil organisms and their activity
- Explain How soil characteristics, vegetation and climate interact to determine the organisms present in soil

Compétences transférables

- Evaluate the limits of methods and sources of error in ecological research
- Interpret complex ecological data