



- · Faculté des sciences
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# Methods in ecology (3BL2221)

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
Master en biologie	Cours: 2 ph	controle continu: 1	2

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

# Période d'enseignement:

· Semestre Printemps

### Equipe enseignante:

Edward Mitchell, Enrique Lara, Sergio Rasmann

### Objectifs:

The objective of this course is to give an overview of methods and concepts used in ecology, with a special focus on soil biodiversity and ecology. Students will acquire basic knowledge on the groups of soil organisms and methods used to study them, their function and how soil organisms interact with above-ground components of terrestrial ecosystems. These notions will be acquired through a combination of theoretical courses and excursions.

#### Contenu:

This course includes a theoretical part and excursions.

Theoretical part: The topics covered correspond to the course of the baster BGS "Réseaux trophiques et écologie des communautés du sol". This part of the course is therefore cross-listed between the two masters programs. The theoretical part of the course is given by Edward Mitchell and Enrique Lara.

Excursions: 3 excursions will allow students to discover contrasted ecosystems if the region of Neuchâtel (e.g. nutrient-poor dry meadows, peatlands, forests) and apply some of the methods discussed in the theoretical part of this course and the course "From cells to ecosystems". The excursions will be led by Edward Mitchell, Sergio Rasmann and Enrique Lara.

### Forme de l'évaluation:

The evaluation is based on individual reports handed in by students at the end of the first week of the June exams (for 2015: June 5th). The reports will cover a topic chosen by the student among a list provided by the professors. They will develop topics based on the courses, extra reading and observations during the excursions. The evaluation for Methods in ecology course will be based on the "methods" part of the report.

### Documentation

Powerpoint presentations, selected litterature and excursion guides

### Pré-requis

Participation to excursions is limited to students with good physical capacity (walking in uneven terrain, and uphill at standard speed - e.g. 400m elevation gain / hour). Students unsure of their capacity are required to contact Edward Mitchell before the excursions.

## Forme de l'enseignement:

This course includes a theoretical part and excursions. Students will apply concepts discussed in the courses during the excursions and will prepare a short essay based on their observations and interpretations.