

- Faculté des sciences
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### **Biodiversity and agriculture: a transdisciplinary perspective (3BL2281)**

Filières concernées	Nombre d'heures	Validation	Crédits ECTS
<b>Master en biologie</b>	<b>Cours: 28 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 Printemps

#### **Equipe enseignante**

Prof. A. Aebi

#### **Contenu**

Objectives : The objective of this course is to mobilize different disciplines to describe biological, agronomical and social aspects of a transition towards a pesticide-free agriculture.

Content: We will work on real case-studies. Students will have to choose a Swiss crop known to be « dependent » on pesticides such as sugarbeet or oil seed rape. They will have to write a literature review on the pathogens and pests affecting the crop and list all the alternatives to pesticides available in Switzerland. Students will summarize their findings by mobilizing the theoretical framework of Integrated pest management (IPM). From a social science point of view, students will be given the opportunity to confront their findings with agronomists. The data gathered during the course will be summarized in a fact sheet mobilizing the Actor-Network-Theory, highlighting the social context and the role of actors (human and non-human). Guidance sessions to help student in their projects are planned.

Expectations: This course follows an unusual format (several exercises to be done in groups), and therefore requires great amount of autonomy and responsibility from students. Presence is compulsory (apart for obvious reasons such as sicknesses). It is not possible to work alone in this course. Each student is expected to join a working group. Deadlines for the submissions of exercises and the factsheet are strict. Courses and meetings begin at 14h15.

#### **Forme de l'évaluation**

Evaluation mode: Control continu noté. Students will be evaluated on their active participation to the course and on the quality of their fact sheets (one factsheet per group).

Deadline for the submission of the factsheet: 3rd of June 2024

Failures and resubmissions. If the first essay fails to fulfil our success criteria, an improved version (second attempt) will be asked for the 19th of August 2024. Note that the obtained grade will be inserted in IS-Academia at the following exam session.

Evaluation criteria: Autonomy, rigor and creativity in the research; Punctuality in the submission of exercises and fact-sheets; Mobilization of the theoretical background discusses during the semester

#### **Pré-requis**

none

#### **Forme de l'enseignement**

Course, homework in groups