

- Faculté des sciences
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# Tropical ecology (3BL2202)

| Filières concernées | Nombre d'heures | Validation             | Crédits<br>ECTS |
|---------------------|-----------------|------------------------|-----------------|
| Master en biologie  |                 | controle<br>continu: 1 | 6               |

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

## Période d'enseignement:

• Semestre Automne

## Equipe enseignante:

Dr. Betty Benrey & Prof. Ted Turlings

### **Objectifs:**

This course will take place on the pacific coast of Mexico, a hot spot of biodiversity. It is designed to introduce students to the topical biodiversity of Mexico and to conservation efforts in the context of local cultural, agricultural, economic and social constraints. By conducting field experiments we will motivate students to observe and address questions about biological processes, develop ideas and test hypotheses using the scientific method. The main emphasis of the experimental work will be on plant-insect interactions in the context of two important crop plants that were initially domesticated in Mexico, bean and maize, which are the two main staple crops of the country. Yet, the course will also cover topics on tropical biology that are particularly relevant to the region, such as mangrove biodiversity, iguana behavior and ecology, and sea turtle conservation.

### Contenu:

Over a period of ten days (beginning of January) student will learn to ask simple questions about plant-insect interactions that do not need sophisticated equipment in order to be tested. They will develop hypotheses and test these in field experiments in natural and agricultural ecosystems. In addition, lectures and student presentations will cover topics that include Mexican biodiversity and historical biogeography, mangrove fauna and ecology, agroecology and plant domestication, as well as conservation of tropical biodiversity.

### Forme de l'évaluation:

control continue based on presentations and participation

### Documentation:

Will be provided in form of PDFs

### Pré-requis:

Solid background in biology WARNING: Students will have to pay their own travel to and from the field site. This can cost as much as CHF 2000.

### Forme de l'enseignement:

excursion with field experiments