



- · Faculté des sciences
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# Conservation biology (3BL2265)

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

# Objectifs:

The course introduces important theoretical concepts widely used in nature conservation and presents practical examples to illustrate these concepts. At the end of the course, students will understand the criteria used to evaluate the conservation status of species, understand how red lists are compiled and know how to design action plans to conserve particular species and to conduct research focusing on endangered species.

#### Contenu:

- This course presents an introduction to animal conservation in Switzerland and elsewhere: important concepts are discussed and the scientific background underlying conservation biology is presented.
- The concepts of keystone species, indicator species, umbrella species and flagship species are discussed.
- Strategies commonly implemented in species conservation and habitat conservation are detailed.
- An important part of the class deals with the IUCN (International Union for Conservation of Nature) criteria, which are used in most countries to compile "Red Lists of endangered species": How are species evaluated? What are the IUCN categories and what do they represent? How can distribution data be used to infer declines in species?
- During the practical part of the class, which will provide the basis for student evaluation, each student will focus on one endangered animal species. She/he will evaluate the species according to the IUCN criteria, list the known threats and possible conservation measures and design a research project focusing on the conservation of this species.

# Forme de l'évaluation:

Each student will compile a report on the conservation of one animal species, including the evaluation of its conservation status, a list of threats and conservation measures and a research proposal focusing on the conservation biology of this species. Each student will also give a short presentation on this research project. Both the report and the presentation will be graded and the average will determine the final grade for the course.

# **Documentation:**

Essentials of Conservation biology (Primack 2014, Sinauer) Principles of Conservation Biology (Groom et al., 2006, Sinauer) Fundamentals of Conservation biology (Hunter & Gibbs, 2007, Blackwell)

The course is based on these books, which can be found in the library. The purchase of these books by the students is not necessary.