

# Behavioural Ecology in natural and man-made environments

**Lecturer**

Claire DETRAIN (Coordinator)

**Course mnemonic**

BIOL-F4001

**ECTS credits**

5 credits

**Language(s) of instruction**

English

**Course period**

First term

**Campus**

Plaine

## Course content

Historical background and main trends in Behavioural Ecology.

Foraging and habitat selection.

Behavioural strategies of anti-predation.

Sensory channels, perception and information management.

Learning processes and their applications.

Social structure and hierarchy.

Domestication and animal welfare.

## Objectives (and/or specific learning outcomes)

1°) To get an overview of main concepts and current trends in behavioural ecology.

(2) To understand the ultimate and proximate causes driving the behaviour of animal species in their natural environment

(3) To detail the different types of learning, their characteristics as well as their applications to the management of wild and domestic species

(4) To familiarize students with the behavior and the specificities of domestic animals

(5°) to draw attention to man-animal relationships, to animal welfare and to the use of associated scientific tools.

As regards the learning outcomes, the student will be able to discuss the mechanisms and constraints that impact the behavioral strategies of animals in natural and domestic populations and to provide solutions for their management.

## Pre-requisites and co-requisites

### Required knowledge and skills

Knowledge and skills expected from a student possessing a Bachelor degree in Biology or Bioengineering

## Teaching method and learning activities

Lecture in-person and on video

Flipped classroom

### References, bibliography and recommended reading

Visual Support. with powerpoint slides and video recordings

Lecture notes and scientific papers

References to textbooks will be given during the lecture

## Other information

### Place(s) of teaching

Plaine

### Contact(s)

Pr Claire Detrain Batiment NO niveau 5 local 213 Campus de la Plaine

## Evaluation method(s)

Other and Oral examination

### Evaluation method(s) (additional information)

Oral exam with a written preparation of two main questions based 1°) on a slide and 2°) on a scientific topic covered during the lectures. Starting from the two main questions, the examination will cover other parts of the course to assess the ability of the student to provide an integrated overview of the course

### Determination of the mark (including the weighting of partial marks)

100% oral exam

### Main language(s) of evaluation

English

### Other language(s) of evaluation, if applicable

French

## Programmes

### Programmes proposing this course at the faculty of Sciences

MA-BIOR | **Master in Biology of Organisms and Ecology** | finalité Research/unit 2 and finalité Erasmus Mundus Joint Master Degree in

Tropical Biodiversity and Ecosystems - TROPIMUNDO/unit 1 and MA-IRBA | **Master in Agricultural Bioengineering** | finalité Professional/unit 2

### Programmes proposing this course at the Brussels School of Engineering

MA-IRBA | **Master in Agricultural Bioengineering** | finalité Professional/unit 2

