



UNIVERSITÀ DEGLI STUDI DI TORINO

ID

VP148\_DIP\_BIOS

## Visiting Professor Program Academic year 2022/2023

**TEACHING COMMITMENT:** 12 hours

### COURSE TITLE

**Evolution of Behavior**

### TEACHING PERIOD

1st term

### SCIENTIFIC AREA

Zoology

### LANGUAGE USED TO TEACH

Italian/English

### COURSE SUMMARY

Evolution of Communication (6 CFU) What is Communication? Honest signals -ritualized signals, The sound wave, The phonation process, Comparative phonation, Birdsongs (Vocal learning, dialects, neurobiological mechanisms), Acoustic communication and sexual selection in amphibians, Vocal learners e non-vocal learners. Equipment and techniques for sound recording (History, approaches, methods), The study of the vocal repertoire, Singing primates, From vocalisations to language, Acoustic analysis (Hands-on), Chemical and tactile communication, Visual communication, Evolution of communication - seminar about Evolution of communication.

### LEARNING OBJECTIVES

Teaching contributes to the following training objectives of the master course:

- The acquisition of general and in-depth knowledge concerning the main theoretical and methodological achievements necessary to both proximate and ultimate causes of animal and human behavior emerging from scientific literature, including applied ethology;
- The acquisition of neurological and hormonal mechanisms underlying the development and display of behaviours, methodological approach to the reconstruction of evolution of behavior, evolution of communication system in social group and in reproductive systems of amphibians, birds, primates

and cetaceans. The acquisition of a multidisciplinary approach based on the integration of both naturalistic-descriptive and the experimental approaches including the analysis of acoustic structure of signals.

#### **TUTORSHIP ACTIVITIES**

N/A

#### **LAB ACTIVITIES**

N/A

#### **OTHER ACTIVITIES BESIDES THE COURSE**

A seminar addressed to PhD students on the evolution of rhythmic cognition

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#### **VISITING PROFESSOR PROFILE**

Ideally, the person suitable for teaching this part of the course should have a multidisciplinary background spanning the physical, mathematical, cognitive and natural sciences. In addition, the profile should have a solid foundation in bioacoustics and behaviour with an in-depth knowledge of comparative aspects of musicality, rhythm, linguistic aspects.

#### **CONTACT PERSON AT THE DEPARTMENT**

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