

Applied Ethology

Programme course

7.5 credits

Tillämpad etologi

NBID71

Valid from: 2017 Spring semester

Determined by

Board of Studies for Chemistry, Biology
and Biotechnology

Date determined

2017-01-25

Main field of study

Biology

Course level

Second cycle

Advancement level

A1X

Course offered for

- Applied Ethology and Animal Biology, Master's Programme

Entry requirements

Note: Admission requirements for non-programme students usually also include admission requirements for the programme and threshold requirements for progression within the programme, or corresponding.

Prerequisites

A bachelor's degree with a major in the field of biology, including at least 5 ECTS credits in the field of physiology.

Intended learning outcomes

Behaviour is the primary means by which an animal interacts with and adapts to its physical and social environment. The behaviour is shaped by both evolutionary and ontogenetic processes and therefore has a close connection to genetics and physiology. Understanding the biology of behaviour is therefore an important basis for deeper insights into the adaptive capacities and the needs of animals. Consequently, it is also an important tool to for understanding animal welfare in captivity, and the biological basis for animal conservation. The student will be able to describe the mechanisms, function, phylogeny and ontogeny of behaviour systems, with a focus on the behaviour of domesticated animals and other animals in captivity. The student will develop a proficiency in finding, evaluating and compiling primary and secondary research literature on relevant topics. The student will improve her/his skills in both written and oral communication of results of relevant scientific data through literature searches in both written and oral form. Furthermore, the student will develop a critical assessment ability, allowing proper scientific judgement of scientific data on animal behaviour. The student will also develop a societal and ethical perspective on the use of ethology in assessment of animal welfare. The student will furthermore develop skills in the theory and practice of ethological methods. The student will be able to prepare, design, carry out, analyse and present scientific studies on animal behaviour. The student will develop a proficiency in formulating hypotheses and predictions and to design the recordings in accordance with those. The student will improve her/his skills in both written and oral communication of his/her results.

Course content

The course covers the following topics:

- History and context of applied ethology
- Behaviour genetics and animal domestication
- Personality theory
- Motivation, behaviour endocrinology and animal welfare
- Behaviour and conservation
- Design, analysis and presentation of ethological data

Teaching and working methods

The course is composed of seminars, formal lectures and literature studies, and practical exercises. The lectures are intended to give an overview and structure to the different topics outlined below. The literature studies of the text book are intended to add depth and detail to the topics. A large part of the work will be carried out through independent self-studies, alone or in groups. A part of the course is located at Kolmården Zoo, and the course also contains independent work in the form of practical research on a farm and in a zoo. Extra costs due to travelling and living must be paid by the student.

Examination

HEM1	Home examination	2.5 credits	U, 3, 4, 5
LAB1	Laboratory work	2 credits	U, G
UPG1	Seminar participation and submissions	3 credits	U, G

Grades on the whole course is determined by the grade on HEM1.

Grades

Four-grade scale, LiU, U, 3, 4, 5

Department

Institutionen för fysik, kemi och biologi

Director of Studies or equivalent

Agneta Johansson

Examiner

Per Jensen

Education components

Preliminary scheduled hours: 120 h

Recommended self-study hours: 80 h

Course literature

Regular literature

Books

Jensen, P (Ed), *The ethology of domestic animals* 2nd edition

Additional literature

Books

Barnard et al., *Asking questions in biology*
Recommended literature.

Common rules

Regulations (apply to LiU in its entirety)

The university is a government agency whose operations are regulated by legislation and ordinances, which include the Higher Education Act and the Higher Education Ordinance. In addition to legislation and ordinances, operations are subject to several policy documents. The Linköping University rule book collects currently valid decisions of a regulatory nature taken by the university board, the vice-chancellor and faculty/department boards.

LiU's rule book for education at first-cycle and second-cycle levels is available at http://stydokument.liu.se/Regelsamling/Innehall/Utbildning_pa_grund-_och_avancerad_niva.