



Faculty of Health, Science and Technology
Biology

Syllabus

Behavioural Ecology

Course Code:	BIGC15
Course Title:	Behavioural Ecology <i>Beteendekologi</i>
Credits:	15
Degree Level:	Undergraduate level
Progressive Specialisation:	First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

Major Field of Study:
BIA (Biology)

Course Approval

The syllabus was approved by the Faculty of Health, Science and Technology 2016-08-24, and is valid from the Spring semester 2017 at Karlstad University.

Prerequisites

Biology 60 ECTS cr including ecology 15 ECTS cr, with 45 ECTS cr completed including 12 ECTS cr in ecology, or equivalent.

Learning Outcomes

Upon completion of the course, students should be able to:

- define central concepts in behavioural ecology,
- give an account of basic theories and methods in behavioural ecology,
- interpret observed patterns in organism behaviour in relation to basic theories,
- describe and interpret variations in foraging, mating patterns, social patterns and life history patterns,
- give an account of evolutionary conflicts within a species and their importance for future behaviour,
- problematise how nature and nurture separately and combined shape behavioural patterns in organisms,
- predict behavioural effects occasioned by changes in the ecological environment,
- apply behavioural ecological models in the study of human behaviour,
- give an account of, critically review and summarise research reports, orally and in writing.

Content

The course deals with behaviour involving the the interaction of genes, the environment and ontogeny from an evolutionary perspective. In a series of lectures the basic concepts are defined and theories and methods are introduced, and illustrated with examples from individuals' different life stages. Students also study how genes and the environment together control individual behaviour and how evolution forms the behavioural patterns of populations.

All aspects treated are then problematised in seminars and specific cases are studied in-depth exemplified by various organism groups and ecological situations. Students also present research

articles and critically reflect on them and participate in the ensuing discussion. In a group assignment, students demonstrate their ability to use concepts, theories and methods in a written and oral presentation. This assignment consists of a laboratory study and/or a literature study.

Reading List

See separate document.

Examination

Assessment is individual and based on students' critical review and summary of research articles orally in seminars, and on a group assignment presented orally and in writing, demonstrating students' understanding and use of behavioural ecological theories and methods. Assessment is also based on an individual written exam.

Grades

One of the grades Fail (U), Pass (G), or Distinction (VG) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.