



Course syllabus

Faculty of Health and Life Sciences

Department of Biology and Environmental Science

4BI500 Fiskekologi, avancerad kurs, 7,5 högskolepoäng

Fish Ecology, Advanced Level, 7.5 credits

Main field of study

Biology

Subject Group

Biology

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved by Faculty of Health and Life Sciences 2014-12-08

The course syllabus is valid from autumn semester 2015

Prerequisites

Bachelor's degree including Biology 60 credits, incl. Ecology 15 credits, or corresponding course qualifications.

Objectives

Students are upon completion of the course expected to be able to:

- account for habitat use over the life cycle in economically and ecologically important fish species in the Baltic Sea and its drainage basin
- account for the importance of predation, competition, and trophic interactions for population dynamics
- describe and provide examples of how fish populations are affected by climate changes
- argue coherently about the influence of fish harvest and biomanipulations on populations and ecosystem functions
- perform standard fish ecology samplings and evaluate the results
- make estimates of population sizes using basic statistical methods
- plan and carry out studies individually, addressing issues in fish ecology and communicate the results both orally and in text

Content

The course is divided in two parts:

Module 1 Ecological theory 4 credits

- Life cycles and life history traits
- Behavioural ecology
- Migration, dispersal and distribution
- Populations, theory and practical applications
- Fish and climate change

Module 2 Project work and practical assignments 3.5 credits

- Fish population estimates, standardised gill net fishing, fish diet, statistical methods
- Project, specify the research question and plan the project, collect and analyse data, explore results and draw conclusions, oral and written presentation

Type of Instruction

Lectures, seminars, field- and laboratory exercises. Individual project work.

The participation in seminars, practical exercises and assignments is mandatory.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail.

Examination of Part 1 is usually based on one or more individual knowledge tests. A second examination will be offered within six weeks during the semester. Examination opportunities can be limited to five. Part 1 is assessed with the grades U, G and VG.

Part 2 is examined by evaluation of laboratory- and field assignments, by oral and written presentations of the project work. Part 2 is assessed with the grades U and G.

Examination criteria to pass the course are defined by the expected learning outcomes.

Course Evaluation

Upon completion, the course will be evaluated by filling out the evaluation form. The result of the individual evaluations are turned into a summary report that will be kept in the department administrative archives. The outcome of the evaluation of the previous year, as well as possible measures taken, will be discussed with the individual responsible for the educational program, as well as with incoming students at the start of the next course.

Other

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Mandatory literature

Wootton, R. J. 1998. Ecology of teleost fish. Kluwer Academic, Dordrecht. 386pp.
ISBN:0-412-64200-X

Identification literature, scientific articles and a compendium with instructions for field- and laboratory assignments will be provided during the course.