



Syllabus

BIo683.1 Fish and Wildlife Census Techniques, 15.0 credits

Inventering av fisk- och viltpopulationer

The course is given as course independent of study programme

Syllabus discontinued 24 November 2008

Version 1 in Slukurs. Corresponds to version 1 in Ladok

Syllabus approved

25 October 2006

The version applies to students admitted from autumn 2007 to autumn 2009

The version is not a module version

Subjects

Biology/Forest science

Education cycle

Second cycle

Modules

Title	Code	Credits
Single module	0101	15.0

Advanced study in the main field

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

BSc degree in Biology or in Forest Science with 60 ECTS in Biology or in Forest Management, or the equivalent.

Objectives

After the course the student will

- have sound knowledge, and be able to describe the use, of various fish and wildlife census techniques, including current rules and permit requirements
- be able to plan inventories, including problem formulation, personnel and equipment requirements, and statistical aspects
- be able to select and apply appropriate census techniques for managing fish and wildlife populations
- be able to treat, interpret, critically examine and present data collected by different census techniques
- be familiar with issues related to animal ethics, handling wild animals, and ethical permits for inventorying and sampling them.

Content

Students will acquire knowledge of general census techniques, laws and regulations through literature studies, lectures and exercises. They will also develop proficiency in planning inventories by applying selected methods in both timetabled and project work to obtain information on fish and wildlife populations at a landscape level. In a planning context, the students will obtain training and knowledge about different possible purposes of inventories (e.g. quantitative or qualitative), choice of methods, work loads and costs in relation to purpose, need for stratification, and statistical methods.

They will also learn to conduct inventories in the field using a selection of census techniques, including: gillnet sampling for lake populations of fish, electro-fishing for stream-dwelling fish populations, and distance sampling, pellet-group counting, and the Finnish 3-man chain line transect technique for wildlife populations. The use of telemetry and various types of radio transmitters to obtain information on migration patterns, population structures, etc. is also considered in depth. For compilation and analysis of data, emphasis will be placed on statistics, data quality and data presentation. Computer programmes commonly used to analyse data will

be demonstrated and applied to real data sets.

Within respect to animal ethics, current Swedish and European legislation concerning the handling of wild animals will be examined, and the role of central authorities in judging the relevance of inventory and animal experiments. Ethical problems like stress, anxiety, pain and suffering will be discussed. Methods for anaesthetising fish and wildlife, for taking specimens and injections will be demonstrated and training for performing them will be provided.

Implementation

- Timetabled activities

Lectures ca. 30 hrs

Field exercises ca.50 hrs (compulsory)

Examinations ca. 20 hrs

Literature seminar ca. 5 hrs (compulsory)

- Non-timetabled group activities

Project work ca.15 hrs

Exercises ca. 50 hrs

- Self-directed studies

Literature studies ca. 90 hrs

Preparation of seminars ca. 40 hrs

Total ca. 400 hrs

Examination

Requirements for examination

Assessment is based on performance in written examinations, presentation of project work and exercises.

Successful completion of the course requires: passes in the written examinations, satisfactory appraisals of project work and exercises, and participation in compulsory activities.

- If the student fails a test, the examiner may give the student a supplementary assignment, provided this is possible and there is reason to do so.
- If the student has been granted special educational support because of a disability, the examiner has the right to offer the student an adapted test, or provide an alternative assessment.

- If changes are made to this course syllabus, or if the course is closed, SLU shall decide on transitional rules for examination of students admitted under this syllabus but who have not yet passed the course.
- For the examination of a degree project (independent project), the examiner may also allow the student to add supplemental information after the deadline. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

Additional information

- The right to take part in teaching and/or supervision only applies to the course date to which the student has been admitted and registered on.
- If there are special reasons, the student may take part in course components that require compulsory attendance at a later date. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

Responsible department

Department of Wildlife, Fish, and Environmental Studies

Supplementary Information

Finalized by: Programkommitté skog och mark

Biology Area: Ecology

Replacement course: BI0557