Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PFS0027 Basic Inventory Methodology, 4.5 credits

Syllabus approved

2007-08-08

Subjects

Statistics, Computer Science and Systems Science

Education cycle

Third cycle

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

A basic course in statistics is recommended.

Objective, including learning outcomes

The participant should after the course have knowledge of common sampling and estimation techniques and the ability to estimate population characteristics of interest in forestry and natural resource management. The participant should also

have knowledge of different types of methods used in forest and natural resources inventories, including knowledge of these methods' possibilities and limitations.

Content

The course comprises basic sampling theory and basic applications in forest and natural resources inventory. In sampling theory, topics as simple random sampling, cluster sampling, unequal probability sampling, stratification, ratio estimation and multi-level sampling will be covered. The applications covered during the course concern forest inventory using subjective and objective methods, including examples of inventory using remote sensing techniques, and applications related to biodiversity assessments and long-term environmental monitoring. The course is based on a combination of lectures, individual studies and exercises.

Requirements for examination

Exercises and home examination.

Additional information

Lectures and excerises are scheduled week 41, 43 and 45.
To follow the course some basic statistical knowledge is recommended and before the course some material to refresh basic statistical knowledge will be sent out to the participants.

The course is given by an Environmental Certified Department (ISO 14001).

Responsible department

Department of Forest Resource Management