



## Course syllabus

Faculty of Technology

Department of Forestry and Wood Technology

2TS911 Skogsproduktion, 7,5 högskolepoäng

Forest Growth and Yield, 7.5 credits

### **Main field of study**

Forest and Wood Engineering

### **Subject Group**

Forest Science

### **Level of classification**

First Level

### **Progression**

G2F

### **Date of Ratification**

Approved 2013-08-19

Revised 2014-06-30 by Faculty of Technology. Review of objectives, contents and prerequisites.

The course syllabus is valid from spring semester 2015

### **Prerequisites**

60 credits Forestry and Wood Technology or similar.

## Objectives

The student should after the course be able to:

- explain how forestry operations such as planting, precommercial thinning, thinning, ditching, fertilization and tree species selection affect forest growth and yield, and how this in turn can be translated into large and small scale forestry with regard to social and ethical issues.
- explain the various models of how individual trees and stands grow and be able to analyze different models construction, suitability, strengths and weaknesses, opportunities and constraints.
- finding materials in scientific literature related to national or international forestry issues and evaluate this based on relevance, validity, utilities and ethics.
- Starting from a problem to collect, analyze, and evaluate forest data. Orally present a work and critically examine and discuss the works of others. describe the historical development of forest growth and yield research in Sweden.

## Content

The course comprises the following elements:

- History of forest growth and yield research
- Prerequisites of forest growth and yield
- Concepts, relationships and laws
- Models and modeling in forest
- Growth limiting factors and production stressors
- Intensive management
- Growth potential of the site and its variation
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- Growth potential of the site and its variation
- Transfer and effects of forest growth and yield measures in forest management
- Present national och international research issues

### Type of Instruction

The course is distributed as distance learning supported by ICT, the Internet and meetings. The meetings may consist of lectures, guest lectures, laboratory exercises, field trips, excursions and seminars.

### Examination

The course is assessed with the grades U,3,4 or 5.

Assessment of student performance is made through assignments, presentation of projects and exams. Assessment can be both written and oral. In order to pass, the expected learning outcomes should be achieved.

### Course Evaluation

A course evaluation will be carried out and compiled after the course is completed. The compilation will be presented to the current board as well as to the students and filed by the coordinating department.

### Other

Some elements of the course may entail costs defrayed by the student. On the assignment given only ratings Fail and Pass.

### Required Reading and Additional Study Material

Compendium 200 pages

Film

Material provided by the department.