



Course syllabus

Faculty of Technology

Department of Forestry and Wood Technology

1TS013 Virkeslära, 7,5 högskolepoäng

Forest Products, 7.5 credits

Main field of study

Forest and Wood Engineering

Subject Group

Forest Science

Level of classification

First Level

Progression

G1N

Date of Ratification

Approved 2009-07-24

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

The course syllabus is valid from autumn semester 2014

Prerequisites

NO VALUE DEFINED

Objectives

After completing the course students shall:

- Be able to recognize the most common wood species in Sweden, and have an understanding of the differences in their properties.
- Be able to describe the softwood cell structure and relate the importance of it for the technical characteristics.
- Understand the forestry value chain and processing and use of forest raw material.
- Be able to explain the use of the forest for timber and wood-based products and its impact on the environment.
- Have a basic understanding of the impact of silviculture on timber properties.
- Be able to discuss the concept of quality through the value chain, and discuss how the wood processing can be sustainable in view of the environmental and social requirements.
- Demonstrate the ability to in writing describe and critically discuss information about a problem related to forest products.

Content

The course includes the following:

- Identifying wood
- Tree, wood and fiber structure and anatomical characteristics
- The chemical, physical and technical characteristics of the wood fiber
- Storage, handling and durability issues of wood and timber
- Timber sorting and measuring
- Processing and use of wood products
- Pulp and paper processes
- Board manufacturing and use

Type of Instruction

Teaching consists of lectures, laboratory exercises and field trips.

For distance learning, access to Internet-connected computer is a must.

Some elements are mandatory. The compulsory elements shall be shown in the schedule.

Examination

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

Assessment of student performance is made by written and / or oral examination. The examination is based also on presentations of exercises and laboratory exercises.

In order to pass, the objectives of the course 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.

Credit Overlap

The course cannot be included in a degree along with the following course/courses of which the content fully, or partly, corresponds to the content of this course: Overlaps partially with the course 4TS003 The wood material, 7.5 credits.

Other

Some elements of the course may entail costs defrayed by the course participant.

Required Reading and Additional Study Material

Required reading

Nyländer, M., och Fryk, H. (2011) Timmer. Tierps tryckeri AB.

Hand out material.