



## Course syllabus

Faculty of Technology

Department of Forestry and Wood Technology

4TS100 Trämateriel och ytbehandling - Hus och hem, 7,5  
högskolepoäng

Wood material and surface treatment, 7.5 credits

**Main field of study**

Forest and Wood Engineering

**Subject Group**

Forest Science

**Level of classification**

Second Level

**Progression**

A1N

**Date of Ratification**

Approved by Faculty of Technology 2013-03-12

The course syllabus is valid from autumn semester 2013

**Prerequisites**

General entry requirements. Bachelor of Science within the field of technical subject. Applicants who do not have the formal requirements may be validated as qualified by the program directors by showing that they have relevant working experience.

## Objectives

After the course, the student shall:

- be able to explain wood chemistry and anatomy
- have an understanding of how wood properties affect water sorption and durability
- have knowledge of different paintsystems and their chemistry
- have basic knowledge about paint manufacturing, paint finishing and the NCS-system
- understand how the interaction between paint and wood affects the properties of the product
- have an understanding of the latest scientific research in the area
- be able to, within their own professional area, apply, deepen and share the skills acquired.

## Content

The course includes:

- basic knowledge of wood and some wood-based materials
- moisture in the wood (anisotropy, hygroscopicity, microbial attack)

- basic paint chemistry
- paint and color retention
- pigments
- application methods
- emissions
- health aspects and legislation.

## Type of Instruction

The course consists of lectures, tutorials, laboratory work, project work and studies. The course is offered via distance learning platform, and physical meetings. Access to a computer with Internet access is required.

## Examination

The course is assessed with the grades Fail (U) or Pass (G).

The examination usually takes place in special periods and can be written and oral.

Examination may also be based on submitted reports of labs and exercises.

To pass the course the objectives 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.

## Credit Overlap

This course cannot be part of a degree in combination with another course in which the content fully or partly correspond to the content of this course: For example The wood material, 4TS013 and Forest products, 1TS013 where the overlap are 3 credits.

## Other

The course is given in Swedish. Costs for travel, field trips etc. may occur.

## Required Reading and Additional Study Material

### Required reading

Esping, B., Salin, J-G., Brander, P.2005. Fukt i trä för byggindustrin. Stockholm: Trätekniska fakta om ytbehandling, BeckerAcroma, Scherwin-Williams Coatings AB  
Handbok för träfasader. Stockholm: SP trä

### Reference Literature

[www.traguiden.se](http://www.traguiden.se)

Tekniska anvisningar: Byggnadsmåleri, Statens fastighetsverk

Tekniska anvisningar: Trä som byggnadsmaterial, Statens fastighetsverk

Scientific articles provided by teachers.