



Course syllabus

Faculty of Technology

Department of Forestry and Wood Technology

4TS305 Virkets ytbehandling och kemisk modifiering, 7,5
högskolepoäng

Wood surface treatment and chemical modification, 7.5 credits

Main field of study

Forest and Wood Engineering

Subject Group

Wood Physics and Wood Technology

Level of classification

Second Level

Progression

A1N

Date of Ratification

Approved by Faculty of Technology 2015-05-13

The course syllabus is valid from spring semester 2016

Prerequisites

Technical degree equivalent to 180 higher education credits. In addition to this, students are also required to have read Science of forestry (1TS101), Forest products (1TS013) and Wood as an engineering material (1TS014) or The wood material (4TS003) or the equivalent.

Objectives

The students shall have knowledge about surface treatment and other chemical methods used on wood in order to change its properties. Moreover, the students shall have a broad knowledge over the latest research in the area. Also, the students shall be able to understand and discuss the methods in an environmental perspective.

Content

The course deals with the different methods used for wood surface treatment. Also, the wood quality and its effect on the result of the treatment is discussed. Included is also methods for modification of wood, as impregnation, acetylation and furfurylation. The education is connected to the latest research in the area. In addition, the environmental impact of the different methods are discussed.

Type of Instruction

A computer with access to the Internet is required.

Examination

The course is assessed with the grades A, B, C, D, E, Fx or F.

The examination can be both written and oral.

The grade A constitutes the highest grade on the scale and the remaining grades follow in descending order where the grade E is the lowest grade on the scale that will result in a pass. The grade F means that the student's performance is assessed as fail (i.e. received the grade F).

Course Evaluation

During the course or in close connection to the course, a course evaluation is to be carried out. The result and analysis of the course evaluation are to be communicated to the students who have taken the course and to the students who are to participate in the course the next time it is offered. The course evaluation is carried out anonymously. The compiled report will be filed at the Faculty.

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: 4TS005 Wood finishing and chemical modification, 7.5 credits

Other

Some parts in the course may entail costs defrayed by the course participant.

Grade criteria for the A–F scale are communicated to the student through a special document. The student is to be informed about the grade criteria for the course by the start of the course at the latest.

Required Reading and Additional Study Material

Course literature

Hill, C (2006) Wood modification - Chemical, thermal and other processes. John Wiley & Sons, Ltd.