



# KF2020 The Chemistry of Pulping and Bleaching 7.5 credits

Massaframställningens kemi

This is a translation of the Swedish, legally binding, course syllabus.

If the course is discontinued, students may request to be examined during the following two academic years

## Establishment

Course syllabus for KF2020 valid from Autumn 2007

## Grading scale

A, B, C, D, E, FX, F

## Education cycle

Second cycle

## Main field of study

Chemistry and Chemical Engineering

## Specific prerequisites

## Language of instruction

The language of instruction is specified in the course offering information in the course catalogue.

## Intended learning outcomes

After the course has been passed, the student will be able to

- Collect scientific information into a written report and to give an oral presentation of the material
- Draw and describe the reaction mechanisms for reactions of wood polymers and extractives respectively during pulping and bleaching
- Draw and describe the reaction mechanisms for the post-yellowing reactions occurring with mechanical and chemical pulps
- Understand and predict how the hierarchical structure of wood and pulps is affected by pulping, bleaching and post-yellowing
- Critically evaluate the effects on fiber properties and mill environment of changes in process and raw material
- Describe structure and properties of cellulose-, hemicellulose- and lignin derivatives as well as other chemicals from wood
- Predict changes in structure and properties of wood polymers and pulps in the pulping process line

## Course contents

### Examination

- SEM1 - Seminar, 1.5 credits, grading scale: P, F
- TEN1 - Examination, 6.0 credits, grading scale: A, B, C, D, E, FX, F

Based on recommendation from KTH's coordinator for disabilities, the examiner will decide how to adapt an examination for students with documented disability.

The examiner may apply another examination format when re-examining individual students.

### Ethical approach

- All members of a group are responsible for the group's work.
- In any assessment, every student shall honestly disclose any help received and sources used.
- In an oral assessment, every student shall be able to present and answer questions about the entire assignment and solution.