



FKF3280 Polymer and Fiber Science 4.5 credits

Polymer- och fibervetenskap

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 FKF3280 valid from Spring 2010

Grading scale

Education cycle

Third cycle

Language of instruction

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

Intended learning outcomes

The course aims at giving the student a broad overview of the synthesis, structure, characterization and properties of synthetic and natural polymers, including biofibers, and will also discuss current topics within the field. The course also aims at presenting polymer and fiber technology in a biomimetic context.

Course contents

The course is given as a part of the Biomime Research school at Biotechnology, but it can also be taken as a separate course. The course is mainly web-based, meaning that all the lectures are web-based (10 lectures in total) and that participation in the discussion sessions (4 in total) can take place either in person at KTH or through Skype or Adobe Connect. The course will cover basic concepts and some current topics of polymer and fiber science, from a biomimetic point of view. The course also entails 4 written assignments that will be handed in on Bilda and that are based on material from the lectures and the discussion sessions.

Specific prerequisites

B.Sc in Chemistry, Biology or Biotechnology.

Course literature

Passes from web accessible scientific books and pdf-files of scientific articles.

Examination

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.

Attendance to all discussion sessions (4 in total) and passed written assignments (4 in total)

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.