



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

**PAS0020 Bio Fibre Technology with special focus on Plant Fibres,
9.0 credits**

Syllabus approved

2003-05-06

Subjects

Technology/Crop Production Science

Education cycle

Third cycle

Grading scale

Pass / Failed

The requirements for attaining different grades are described in the course assessment criteria which are contained in a supplement to the course syllabus. Current information on assessment criteria shall be made available at the start of the course.

Language

English

Prior knowledge

MSc in natural Science, basic courses in mathematics, physics and chemistry

Objective, including learning outcomes

Introduce PhD-students to the field of Bio Fibre technology with deeper focus on Plant Fibre Technologies

Content

The course will penetrate the scientific basis on the processing chain of annual fibre plants. The critical points of the chain from cultivation until manufacturing are promoted to PhD -students from the view of physics, chemistry and microbiology according. The course will focus on flax and industrial hemp, which are the main annual fibre crops cultivated in the Nordic climate.

The course will be divided into four parts. In the introduction part the course will deal with the cultivation including the harvesting and the storage technologies. The processing technology and the fibre properties will be the two main parts of the course. In these parts the defibrication technologies together with the physics and the surface chemistry of the Plant Fibres will be examined. The closing part on industrial products will include different manufacturing technologies for Bio Fibre composite products and markets for industrial products from business branches as the automotive, building materials, furniture, packaging and pulp and paper branches.

Requirements for examination

The examination consists of a theoretical part and a written seminar report. The examination is suggested to be internet based.

Additional information

Responsible department

Faculty of Landscape Architecture, Horticulture and Crop Production Science