



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

# SLUkurs

## Syllabus

**PFG0022 Biology and biotechnology in forest production systems, 7.5 credits**

## Syllabus approved

2007-02-01

## Subjects

Biology

## 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

The course is for PhD students with a background in biology, and (for parts of the course) chemistry.

## **Objective, including learning outcomes**

After the course, the participants should have: knowledge about strategies to optimize tree growth and wood formation in efficient production systems, and how the raw material can be used in future biorefineries.

## **Content**

The course will cover; tree growth optimization (basic theory and study visits), wood structure and development and biosynthesis of wood and wood fibers, somatic embryos and clonal experiments, plantage forestry, biorefineries and new wood based materials.

The course will be given at Umeå Plant Science Centre.

## **Requirements for examination**

Participation in lectures, and exercises

## **Additional information**

Course Organiser

Torgny Näsholm and Björn Sundberg, UPSC, Department of Plant Physiology, Umeå University

Teachers

Björn Sundberg/Torgny Näsholm, UPSC, SLU Umeå

Sune Linder SLU, Alnarp

GeoffreyDaniel, SLU, Uppsala

Ulrika Egersdotter Virginia Polytechnic Institute and State University

Invited lectures from scientists from UPSC and KTH.

Industrial perspectives from research leaders at Ö-vik industries.

## **Responsible department**

Department of Forest Genetics and Plant Physiology