



## Syllabus

### **BIO655.1 Plant Biotechnology and Molecular Breeding, 15.0 credits**

#### **Växtbioteknik och molekylär förädling**

The course is given as course independent of study programme

Syllabus discontinued 23 October 2007

Version 1 in Slukurs. Corresponds to version 1 in Ladok

#### **Syllabus approved**

28 February 2006

The version applies to students admitted from spring 2006 to autumn 2008

The version is not a module version

#### **Subjects**

Biology

#### **Education cycle**

Second cycle

#### **Modules**

<b>Title</b>	<b>Code</b>	<b>Credits</b>
Single module	0101	15.0

#### **Advanced study in the main field**

#### **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 equivalent of: 60 Swedish University Credits (SUC) of basic (A-level), intermediate (B-level) and advanced (C-level) courses in Biology including the courses Plant Cell and Molecular Biology 10 SUC and Plant Growth and Development 10 SUC.

**Objectives**

After the course the student will have advanced knowledge in biotechnological methodology and applications in plants, with special emphasis on forest biotechnology and forest tree breeding.

**Content**

Examples on technologies and applications are transgene technology and plants as production system for valuable substances. The course also covers the theoretical and practical aspects of breeding theory and provides introduction to molecular tools in marker assisted breeding required for an understanding of the potential of breeding in plant biotechnology. Moreover, the course illuminates ethical and juridical aspects and ecological considerations associated to transgene technology and plant biotechnology.

**Implementation**

Lectures, lessons, discussions and seminars ca 75 h.  
Laboratory work and practices ca 150 h.

**Examination****Requirements for examination**

Presentations of laboratory work and seminar tasks, and written examination.

Approved laboratory reports, seminars and written examination. Compulsory participation in laboratory work, practices and seminars.

- If the student fails a test, the examiner may give the student a supplementary assignment, provided this is possible and there is reason to do so.
- If the student has been granted special educational support because of a disability, the examiner has the right to offer the student an adapted test, or provide an alternative assessment.
- If changes are made to this course syllabus, or if the course is closed, SLU shall decide on transitional rules for examination of students admitted under this syllabus but who have not yet passed the course.
- For the examination of a degree project (independent project), the examiner may also allow the student to add supplemental information after the deadline. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

### **Additional information**

The course is given as a part of the International Course Package in Plant and Forest Biotechnology.

The course is given by UPSC (Umeå Plant Science Centre) i.e. The Department of Forest Genetics and Plant Physiology at SLU in cooperation with The Department of Plant Physiology at Umeå University.

- The right to take part in teaching and/or supervision only applies to the course date to which the student has been admitted and registered on.
- If there are special reasons, the student may take part in course components that require compulsory attendance at a later date. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

### **Responsible department**

Department of Forest Genetics and Plant Physiology

### **Supplementary Information**

*Finalized by:* Programkommitté skog och mark

*Biology Area:* Other Biology Courses