



## Syllabus

**MVo111.1 Soil management, 7.5 credits**

### **Jordbearbetning/markfysikaliska grunder för växtproduktion**

The course is given as course independent of study programme

Syllabus discontinued 16 April 2009

Version 1 in Slukurs. Corresponds to version 1 in Ladok

### **Syllabus approved**

9 October 2003

The version applies to students admitted from spring 2004 to spring 2008

The version is not a module version

### **Subjects**

Soil science/Technology

### **Education cycle**

First cycle

### **Modules**

<b>Title</b>	<b>Code</b>	<b>Credits</b>
Single module	0101	7.5

### **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**

Swedish

## **Prior knowledge**

The equivalent of 20 Swedish University Credits (SUC) of basic (A-level) courses in Soil Science including 10 SUC in Basic soil science or 20 SUC in Technology including 10 SUC in Basic soil science and 5 SUC in Soil mechanics.

## **Objectives**

After the course the student should

- have a deepened knowledge about soil physical properties in relation to plant production
- be able to assess physical properties and appropriate tillage methods for different soil types, and the effect of the cropping system on long term soil productivity
- have good knowledge about soil tillage: theoretical background, effects on soil and crop, choice of tillage methods in relation to plant production and environmental effects
- be able to plan a sustainable soil management system at the farm level

## **Content**

The course starts with studies of soil physical properties, evaporation, root development and basic soil mechanics, effects of soil tillage on soil, crop and environment, soil compaction and soil structure.

The students will work in a farm project, to assess soil physical properties of some typical arable soils. They will also plan a soil management system considering economic outcome, soil productivity and the effects on the environment.

Soil tillage implements will be shown working in the field. The students will take part in seedbed preparation.

A project work will be carried out in connection to ongoing field experiments. The work will give practise in scientific methods and statistical analysis of data.

## **Implementation**

Lectures ca 25 h

Exercises ca 20 h (compulsory)

Project work corresponding to 35% of the course.

## **Examination**

### **Requirements for examination**

Written examination. Presentation of exercises and project.

Approved written examination, approved exercises and project.

- 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 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 Soil and Environment

### **Supplementary Information**

*Finalized by:* Programnämnden för agronomprogrammet

*Replacement course:* MV0060 (delvis)