



Syllabus

TN0121.1 Plant Nutrients - Management and the Environment, 7.5 credits

Växtnäring - teknik och miljö

The course is given as course independent of study programme

Syllabus discontinued 16 November 2006

Version 1 in Slukurs. Corresponds to version 1 in Ladok

Syllabus approved

21 October 1999

The version applies to students admitted from autumn 2000 to autumn 2007

The version is not a module version

Subjects

Technology/Biology/Soil science

Education cycle

First cycle

Modules

Title	Code	Credits
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: 5 Swedish University Credits (SUC) in Mathematics, 20 SUC in Technology or 20 SUC in Biology or 20 SUC in Soil science.

Objectives

After passing the course, the student will know the value of plant nutrients in cultivation, the agricultural part of eutrophication and the flow of plant nutrients and heavy metals in agriculture. The students should be able to evaluate different fertilisers taking into account their content of plant nutrients, organic matter and environmentally disturbing compounds, as well as their handling properties. They should be informed about different methods of biological waste treatment and have good knowledge of composting on farm level. In a specific situation they should also be able to evaluate different alternatives for handling and spreading of organic fertilisers.

Content

Eutrophication and the part for which agriculture is responsible. Plant nutrient flows within the agricultural sector as well as on farm level. The value and function of plant nutrients in cultivation. Circulation of nitrogen, the mechanisms behind ammonia release. The influence of heavy metals and environmentally disturbing organic compounds on soil and plants. Techniques for storing and spreading liquid and solid manure. Important considerations when choosing a technique for handling and spreading, choice of crop and time period for spreading. Composting of organic waste on farm level. An overview other methods for biological waste treatment. Relevant regulations.

Implementation

Lectures ca 40 h

Exercises ca 15 h

Excursions ca 12 h

Examination

Requirements for examination

Written examination and written and oral project work report.

Written exams, passing written and oral project work reports and participation in mandatory parts of the course.

- 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 Energy and Technology

Supplementary Information

Finalized by: Programnämnden för JLT-fakultetens utbildning, Ultuna

Biology Area: Other Biology Courses

Replacement course: TN0074