



# **P000078, Cover crops in the Nordic countries –Soil C, N management and greenhouse gas emissions , 2.0 Hp**

## **Syllabus**

Finalized by: Finalized by: FUN, 2024-03-18, 2024-03-18

### **Level within study regulation:**

Third cycle

### **Subject:**

- Crop production science, Biology
- Soil Science

### **Grading scale:**

Pass / Failed

### **Course language:**

Swedish

### **Entry requirements:**

The attendants must be accepted as Phd students with a background in Soil Sciences, Soil Biology, Ecology, Agroecosystems, or similar

### **Objectives:**

The objective of the course is to give an insight into on-going research about cover crops in arable cropping systems, with focus on methodology for quantification and understanding

of processes related to carbon and nitrogen storage, nitrogen dynamics and greenhouse gas emissions. On completion of the course, the student will be able to:

- Explain the role of cover crops for soil C and N flows and storage in short- and long-term
- Explain and evaluate different methodologies used in research for e.g. C storage measurements, root assessments, measurements of gaseous emissions and leaching losses.

### **Content:**

The course will consist of on-line seminars and a 3-day physical meeting:

- On-line seminars of which 1 introductory seminar plus 4 seminars on different themes, including students preparations based on selected scientific papers. Each seminar is led by an expert of the field in collaboration with 2-3 of the students. Seminars are mandatory, but one can be replaced by an individual task if necessary
- Physical meeting will include oral presentations (by all students), workshop with researchers and practitioners, and field visits. The meeting is mandatory, but part of it can, if necessary, be replaced by an individual task in consultation with the course leader

### **Modes of assessment:**

Active participation in on-line seminars, performance of an oral presentation and participation in activities at physical meeting days - If a student has failed an examination, the examiner has the right to issue supplementary assignments. This applies if it is possible and there are grounds to do so.

- The examiner can provide an adapted assessment to students entitled to study support for students with disabilities following a decision by the university. Examiners may also issue an adapted examination or provide an alternative way for the students to take the exam.
- If this syllabus is withdrawn, SLU may introduce transitional provisions for examining students admitted based on this syllabus and who have not yet passed the course.
- For the assessment of an independent project (degree project), the examiner may also allow a student to add supplemental information after the deadline for submission. Read more in the Education Planning and Administration Handbook.

**Organisation:**

Department of Soil and Environment

**Supplementary information**

**Other information:**

- The right to participate in teaching and/or supervision only applies for the course instance the student was admitted to and registered on.
- If there are special reasons, students are entitled to participate in components with compulsory attendance when the course is given again. Read more in the Education Planning and Administration Handbook.