



# **P000007, Primary production of animal source food - systems perspective and assessment of environmental sustainability, 3.0 Hp**

## **Syllabus**

Finalized by: GS-VMAS, 2025-03-28

Valid from: 2025H

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

Third cycle

### **Grading scale:**

Pass / Failed

### **Course language:**

Swedish

### **Entry requirements:**

Admitted to a postgraduate program. The seminars will also be open to researchers/supervisors at the faculty.

### **Objectives:**

On completion of the course, the student should be able to:

- Describe the basic concepts for plant production such as grain crops and leys, and generally explain the relationships between choice of crop, environmental impact and soil carbon storage
- Explain how biodiversity and soil erosion are affected by cropping and grazing

- Describe different aspects of how livestock production affect the environment and climate and discuss possibilities for mitigation of negative impact
- Describe circular food systems, including aquaculture, and discuss opportunities and potential risks with these systems
- Explain general principles of system analysis, describe different methods of sustainability assessment and identify challenges with different methods
- Assess the impact of the student's own research project related to future challenges and opportunities related to livestock production in the context of sustainability

### **Content:**

The course focuses on primary production of animal source food and how the complete system up to farm-gate affects the environment. Different topics will be covered by experts in the fields in eight lectures followed by discussions. Relevant literature will be provided for the students to read before each lecture. The course meetings will be spread over one complete semester. The examination consists of a written summary submitted to the course leader team where the students relate their own research project to the different themes and an oral presentation given in a group session with other students. Other students will contribute with asking questions and give their perspectives on each presentation. Online participation will be facilitated.

### **Modes of assessment:**

The oral presentation and written summary are required in order to pass the course. The course objectives will be evaluated by the students' written summary and the oral presentation as well as questions, both asked and answered, on the last course session. - 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 Applied Animal Science and Welfare

**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.