

# SLUkurs

## Syllabus

**PVSo149 Beef and lamb production systems and their impact on meat quality, 4.0 credits**

## Syllabus approved

2017-10-19

## Subjects

Animal Science

## Education cycle

Third cycle

## 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

Admitted to a postgraduate program in animal science, biology, veterinary medicine, food science, nutrition, nursing, or related subjects, or to a residency program in veterinary science.

## **Objective, including learning outcomes**

After completing the course students should have an understanding of Nordic beef and lamb production systems in an international perspective, with an emphasis on animal, environmental and economical sustainability and meat quality, so that they can narrate and discuss this topic. All parts of the production system, from land use, feed production and nutritional characteristics, animal growth, management and meat quality will be included. Animal health, productivity, and welfare are important aspects of sustainable production and will be illuminated. The economical basis for sustainable production as well as the effect of ruminant production on the environment are relevant aspects that will be discussed. The impact of possible climate changes on the sustainability of Nordic beef and lamb production and its role in international ruminant production will be covered.

After completing the course the student should:

- be able to account for the major factors imposing constraints on the sustainability of different production systems for beef cattle and sheep; including theories related to nutrient partitioning and growth capacity, predicting the impact on animal production and welfare as well as on the environment,
- be able to discuss the major areas of concern in issues related to feed production, ruminant nutrition and husbandry and their impact on the environment, animal health, and meat quality.
- be able to describe results of studies about animal productivity, health, environmental and economic sustainability in different production systems.
- have gained knowledge about differences in production systems in different regions of the Nordic countries and in other countries.

## **Content**

The course integrates various disciplines, such as animal nutrition, animal welfare, animal husbandry, animal health, meat quality, economics and environmental load and impact on sustainable beef and lamb production under Nordic conditions in an international perspective. The course will deliver a holistic understanding of beef and lamb production systems in the Nordic countries with an international perspective by using interdisciplinary research in teaching. Teachers are senior researchers or scientists within agricultural universities, and they are chosen as they are experts in the topic they are teaching. Lectures are balanced with workshops in topics of individual student's interest. The course will consist of lectures, group work, cases, excursions, student presentations and reports.

**Requirements for examination**

Student preparation before lectures and workshops by reading articles given by the teachers. Mandatory participation in lectures and workshops. Presentations and active participation by students in workshops. Approval of report completed within a month after the course week.

**Additional information****Responsible department**

Department of Animal Environment and Health