



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PVS0119 Biology of Lactation, 10.0 credits

Syllabus approved

2015-02-18

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

Swedish

Prior knowledge

Pre/Postgraduate student in Animal Science or similar. See also "Additional information".

Objective, including learning outcomes

After completing the course, the student should be able to: -explain the physiology of the udder and of milk synthesis -explain the importance of genotype for milk

composition and milk quality and how milk quality and milk process ability is affected by feeding, management and milking routines -describe the interaction between biology and technology regarding milking -describe the most common pathogens and health problems that affect the lactating udder - describe and suggest different methods used to determine milk quality -on the basis of knowledge in biology of lactation assess and evaluate milking techniques, management routines related to milking and general management of lactating animals in order to optimise production, milk quality and animal health.

Content

The course covers udder anatomy, udder physiology, milk synthesis, milk ejection, udder health, management routines, milking techniques, milking equipment and genetic aspects on milk production. Milk composition is described as an effect of feeding-, milking- and management routines, breeding, milk chemistry and milk analyses. The course is comparative across different dairy species like cows, buffaloes, goats, sheep and camels. The first part of the course offers lectures, demonstrations and study tours covering the different topics included in the course. This period requires students' presence in Uppsala. During the second part of the course the students will write individual literature reviews and some of this work can be done away from Uppsala. In the end of the course the literature reviews are presented and discussed and student attendance is required for this part.

Requirements for examination

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.

Passed written and oral examination. Approved reporting of project work and approval of compulsory components of the course.

Additional information

The course is given in parallel with a MSc course but prerequisites, requirements for the course project and grading differs between the MSc and PhD level courses. It is recommended that the student has knowledge equivalent to 10 ECTS in animal physiology before taking this course.

Responsible research school Translational and Comparative Medicine

Responsible department

Department of Clinical Sciences