



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PVS0094 Comparative Lactation Biology II, 3.0 credits

Syllabus approved

2013-05-03

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 PhD or residency programme in biology, medicine, nursing, veterinary medicine, animal science, food science, nutrition and similar topics.

Objective, including learning outcomes

After completing the course the student shall be able to:

- Discuss basic principles of nutrition and lactation
- Describe and explain interactions between food/feed and the nutritional composition of milk in humans and animals
- .
- Discuss possibilities to manipulate the nutritional properties of milk
- Discuss effects of milk composition on the health of the milk consumer
- Discuss translational and comparative aspects of lactation research in general and the nutrient composition of milk in detail with people of varying background

Content

In comparative lactation biology concepts from human lactation science and animal lactation science are compared and used to bridge knowledge gaps and stimulate discussions in different areas.

The course covers basic digestion and uptake mechanisms and milk synthesis. Interventions on food/feed and results on milk product in regards to nutrients as well as other compounds of importance for the health of the milk consumer will be discussed. Aspects on milk and milk product composition in regards to food/feed composition will also be dealt with in detail during a two-day CoLact symposium "The importance of food/feed in relation to milk composition in humans and farm animals" that is included in the course. Effects of food choice/feed exposure for the lactating mother/animal will be discussed. The course requires students' presence in Loka Brunn during the whole course period 23-27th of September 2013.

Requirements for examination

Successful completion requires 100% attendance in the taught days Sept 23-27, active participation in discussions during lectures and exercises, and an oral and written presentation of a course assignment relating the contents to current topics in his/her own research.

Additional information

- 1) The course starts with literature studies on Sept 16 and finishes Oct 7 when a course project will be handed in. Students' attendance in Loka Brunn is required Sept 23-27 2013 when lectures and exercises are given.
- 2) The course is arranged within SLU's Research School in Translational and

Comparative Medicine (TCM) in collaboration with Örebro University/Campus Grythyttan, CRU (Centre for Reproductive Biology in Uppsala) and the Nordic researcher network "CoLact" (www.colact.net). Support for travel and accommodation costs will be available for course participants through CoLact.

3) If the number of registrations exceeds the number of students we can accommodate, students with research topics relevant for the course will be given priority.

Responsible department

Department of Clinical Sciences