



Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PVS0099 Host-Microbe interactions in the gut, 3.0 credits

Syllabus approved

2013-09-02

Subjects

Biology/Agricultural 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

PhD students in biology, veterinary medicine, animal science, medicine and similar.

Objective, including learning outcomes

To learn and understand basics in gut microbiology, mucosal immunology and infection biology of the gastrointestinal tract. The course is tailored for a broad audience and will include translational aspects.

After completing the course, the student should be able to:

- Describe different interactions between gut microbes and their mammalian hosts in health and disease
- Explain basics in the infection biology of some gastrointestinal diseases
- Provide a general description of the mucosal defense system

Content

The course covers topics such as gastrointestinal microbiology, infection biology and mucosal immunology. Gastrointestinal microbiology focuses on diversity and function of the gut microbiome and its influence on the mammalian host. Infection biology will focus on host-pathogen interactions in the gut with special reference to mucosal immune reactivity. Furthermore, the course will cover concepts such as probiotics and prebiotics. A project will be performed and presented during the course.

Requirements for examination

Successful completion requires 80% attendance, active participation in discussions during lectures and exercises, and completion and presentation of individual course projects.

Additional information

The course is arranged within SLU's Research School in Translational and Comparative Medicine (TCM; www.slu.se/tcm)

The course starts with lectures and exercises on Oct 14th and finishes on Oct 25th when the course assignment will be handed in. Students' attendance in Uppsala is required Oct 14-18 when lectures and exercises are given.

Responsible department

Department of Clinical Sciences