



SLUkurs

Syllabus

**PVS0074 Large Animal Infectious Diseases: Part III, Parasitic Diseases,
4.0 credits**

Syllabus approved

2011-12-19

Subjects

Pathobiology/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

PhD-student or researcher involved in research on infectious diseases of large animal species

Objective, including learning outcomes

A study circle with focus on first critically reading selected current textbook literature that serves as a recent review of state of the knowledge. Once completed,

participants will conduct their own independent literature search and determine if new publications have appeared that add substantially to the scientific strength of the book chapter (i.e. if the book is to have a new edition, does this chapter need rewriting/updating).

Aim for course participants is tailored to the individual needs as background experience and research project will vary. However, this should provide an overview disease mechanisms and current medical understanding of selected parasitic pathogens in the large animal veterinary species (horses, large and small ruminants and pigs). Through completion of course assignments participants will gain first hand insight into strengths and drawbacks of use of current reference text-books versus electronic searches for the most current scientifically based medical information.

Content

Prior to each meeting course participants are to read the chapter/section in detail, with review of references (on CD). Additionally, each will search the topic electronically, and create a list of most recent publications that were not included in chapter/section.

The discussion sessions will be led by the graduate students enrolled, on a rotating basis, with contributions to the discussions by the course leaders. When possible, experts in selected topics will be invited to participate in discussions.

The major input from each participant will be to – prior to each session, highlight those publications from literature search that should be added to the chapter/section as they provide substantively increased understanding of the pathogenesis of the disease caused by the agent (i.e. clinical/laboratory diagnosis, mechanism of disease causation, spread, epidemiology of the disease) - and provide the rationale for their choice/s.

Requirements for examination

Each assignment will begin with a short (max 1-2 paragraph) review of the key disease states/signs caused by the parasite under study in their species of research, and relevance to Swedish/Nordic animal holding. While much of the course time will be committed to individual study and reading, the session periods with the group will allow discussion of the key aspects of pathogenic mechanisms/diagnostic methods for the parasite, and arrive at a consensus of which (if any) recent publications have added substance to our understanding of the pathogenesis of diseased caused by the agent, either at the laboratory diagnostic level, or clinical, animal/population level.

Course completion: Copies of the literature searches defining new publications, along with the highlighted key papers from the list, are to be submitted for each topic of this spring session to the course leaders.

Course credit: Post-graduate course credit (4 ECTS) granted for those submitting completed assignments from at least 8 of the spring topics; for those completing fewer of the assignments partial credit will be given based on the proportion submitted.

Additional information

Course leaders:

John Pringle, professor equine medicine, KV

Jean-François Valarcher Docent, associate professor ruminant medicine, SVA

Johan Höglund professor, parasitology: BVF

Session #:

1. Review of general mechanisms of parasitic infection in large animals, overview of lab diagnosis of parasitic infections
2. Tapeworm
3. Coccidians
4. Piroplasmidia
5. Coccidia II
6. Flukes
7. Pasture borne Nematodes
8. Lungworms
9. Ectoparasites
10. Resistance testing

The course is given by the research school Translational and Comparative Medicine

Responsible department

Department of Clinical Sciences