



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

# SLUkurs

## Syllabus

**PVS0118 Infectious Disease Epidemiology, 4,5 credits, 4.5 credits**

## Syllabus approved

2015-02-17

## Subjects

Veterinary Medicine

## 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 or residency programme in Biology, Animal Science, Veterinary Medicine or a related subject.

## Objective, including learning outcomes

After completing the course the student shall be able to:

- from an infectious disease epidemiology perspective, motivate sampling strategy,

choice of analytic method and result interpretation from own projects/own results

- critically review own and other's research results with special emphasis on infectious disease epidemiology
- correctly use epidemiological nomenclature related to infectious diseases

## **Content**

The course is based on the book 'Modern infectious disease epidemiology', 2nd edition, Johan Giesecke, and selected manuscripts. The students will have to bring their own copies of the book. Relevant concepts related to infectious disease epidemiology will be discussed and also related to participants' own projects. The students may influence the content of the course depending on their own interest and the focus of their project. Examples of topics that will be included are:

- analytic vs. diagnostic sensitivity and specificity
- predictive values
- measures of frequencies and associations (prevalence, incidence, risk, relative risk, odds ratio)
- interpretation of serological results, including cut-off value
- routine surveillance, including case definition, active/passive surveillance
- conceptual understanding of multivariable analyses, including confounding and interaction
- association vs. causality

## **Requirements for examination**

Each student shall:

- participate actively at every meeting
- give a short introduction to at least one meeting and lead the discussion at that meeting
- give a short oral presentation at the last meeting of how the course content can be applied to own research project

## **Additional information**

The course is given within the Research Schools for Food and Feed Safety and Quality. It is open for all PhD-students with the prerequisites, but students from the Research School have priority. Maximum 15 students per course occasion will be accepted and the course will only be given if five or more students apply/enrol. The course will be given during the autumn 2015. Eight meetings will be held: Aug 28, Sept 11, Sept 25, Oct 9, Oct 23, Nov 13, Nov 27 and Dec 18. All meetings will

be held between 9:00-12:00. The course is equivalent to three week of full time studies.

The course is organized by the Centre of Global Animal Diseases.

The course will be held att Ultuna campus, but it will also be possible to follow the course through Skype or video link.

**Responsible department**

Department of Biomedical Sciences and Veterinary Public Health