Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PVG0034 Basic laboratory quality assurance for PhD-projects, 1.5 credits

Syllabus approved

2016-11-13

Subjects

Animal Science/Biology

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 program in veterinary medicine, animal science or to a residency or other training program in veterinary science.

Objective, including learning outcomes

After completing the course the student should be able to:
-Explain how a basic validation of a laboratory method, for example an ELISA,

including determination of inter- and intra-assay variation, linearity and recovery should be performed and
be able to interpret the results.
-Describe how their study design and laboratory work should be planned to minimize the effects of inter/intra assay imprecision and/or limited linearity.
-Explain and evaluate meaning and relevance of limit of detection, limit of quantification, limit of blank.
-Use pipettes in a correct way for accurate measurement of substances, including cleaning and control weighing.
-Write a good standard operation procedure (SOP) and "Lab Diary" and describe the purpose and effects these routines may have on their laboratory work.

Content

The course is planned to include about 4 days with 4 hours of lectures and in total 2-3 practical exercises. One day will be used for preparing and discussing lab quality aspects in the student's own lab work.

Requirements for examination

Active participation the laboratory training exercises and a minimum 80% of the other course activities. Approved presentation of QA aspects of their own PhD laboratory work.

Additional information

The course is composed of lectures (20 h), laboratory exercises (6 h), own work (10 h) and presentation/discussions (5h). Lab exercises are performed in small groups

Responsible department

Department of Clinical Sciences