Sveriges lantbruksuniversitet
Swedish University of Agricultural Sciences

SLUkurs

Syllabus

PVG0041 Quality assurance for laboratory work in PhD-projects, 2.0 credits

Syllabus approved

2018-10-01

Subjects

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, biology, medicine or related subjects, or admitted to other training program in veterinary medicine.

Objective, including learning outcomes

After completing the course the student should be able to:
- Perform their laboratory work with knowledge of quality assurance.
- Do a basic validation of a laboratory method, for example an ELISA, including determination of inter- and intra-assay variation, linearity and recovery and be able to interpret the results.
- Explain and evaluate relevance of limit of detection, limit of quantification, limit of blank of an assay.
- Describe how their study design and laboratory work should be planned to minimize the effects of inter/intra assay imprecision and/or limited linearity.
- Use common laboratory equipment in a correct way, for example use of pipettes and scales.
- 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 contains lectures, theoretical and practical exercises, as well as time 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 and theoretical exercises (25 h), laboratory exercises (6 h), group work (6 h), own work (8 h) and presentation/discussions (5h). Lab exercises are performed in small groups

Responsible department

Department of Clinical Sciences