



CORE FACILITIES

SC00020 Laboratory Animal Science, Compulsory web based course (LAS-R A1), 3 credits

Försöksdjurskurs, Obligatorisk webbaserad kurs inom försöksdjurskunskap (LAS-R A1), 3 högskolepoäng

Third-cycle level / Forskarnivå

Confirmation

This syllabus was confirmed by the Council for PhD Education at Sahlgrenska Academy on 2018-12-12, and is valid from Spring semester 2018.

Responsible Department

Core Facilities, Sahlgrenska Academy

Entry requirements

Admitted to postgraduate education.

The course is an elective course within the third cycle at Sahlgrenska Academy.

Learning outcomes

After completing the course the student is expected to be able to:

Knowledge and understanding

- Describe the requirements of Swedish legislation concerning scientific use of animals. Recitate the content of chosen parts of the legislation.
- Describe species-specific basic biology (anatomy, physiology, nutrition) breeding and genetics.
- Describe normal behavior of our most common laboratory animals, handling, husbandry needs, and enrichment.
- Recognize signs of discomfort, pain, suffering, and distress.
- Describe methods of anesthesia, analgesia, pain relief, injections, sampling, and euthanasia.
- Describe the basis of disease control and how to implement hygiene in animal housing and experimental work.

Competence and skills

- Perform basic handling of current species.
- If the current species is mouse and rat it includes to inject them ip and sc and euthanise them to understand the significance of further training.
- Discuss different attitudes towards animal experiments.

Judgement and approach

- Identify ethical issues in human-animal interaction, show empathy, and define clear humane endpoints when animals are used for scientific purposes.
- In every stage consider animal welfare, including replacement, reduction and refinement in the use of animals.
- Understand the importance of good experimental design and high scientific quality. This is important in order to publicly motivate and give legitimacy to the use of laboratory animals in biological and medical research.

Course content

The content that the course have to cover is defined in the law, Statens jordbruksverkets föreskrifter och allmänna råd om försöksdjur, SJVFS 2015:38. This includes:

- National law
- Ethics
- Basic and appropriate species-specific biology
- Animal behaviour, animal housing
- Species-specific experimental procedures
- Hygiene and infection prevention and control
- Recognition of species specific signs of discomfort, pain and suffering
- Anaesthesia, pain relief and euthanasia
- Endpoint and humane endpoints
- Alternative methods

Types of instruction

Webbased lectures, practical sessions.

Language of instruction

The course is given in English.

The web based part is given in English. The practical part is given in Swedish or English.

Grades

The grade Pass (G) or Fail (U) is given in this course.

Types of assessment

The theoretical web based part is examined through multiple choice questions within the web course. Questions are at the end of the moduls. 100% right answers are required. The practical

part is judged using a template where all elements have to be mastered.

A doctoral student who has failed a test twice has the right to change examiners, if it is possible. A written application should be sent to the Institute.

Course evaluation

Course evaluation is made in PingPong for the web based part of the course and with a template for the practical part of the course. The teacher responsible for the course compiles an analysis of the course evaluations and makes suggestions for the development of the course.

Other information

The syllabus was confirmed by the Council for PhD Studies on 2015-09-15 and was last revised on 2017-09-12 to be valid from spring semester 2018. It was entered into FUBAS in December 2018.