



## Syllabus

### **Bio425.1 Laboratory Animal Science, 7.5 credits**

#### **Försöksdjursvetenskap**

The course is given as course independent of study programme

Syllabus discontinued 10 May 2007

Version 1 in Slukurs. Corresponds to version 1 in Ladok

#### **Syllabus approved**

12 April 2000

The version applies to students admitted from spring 1999 to spring 2006

The version is not a module version

#### **Subjects**

Biology

#### **Education cycle**

First cycle

#### **Modules**

<b>Title</b>	<b>Code</b>	<b>Credits</b>
Single module	0101	7.5

#### **Advanced study in the main field**

#### **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**

Swedish

## **Prior knowledge**

The equivalent of: 40 Swedish University Credits (SUC) of basic (A-level) and intermediate (B-level) courses in Biology, 15 SUC of Anatomy and Physiology (certificate showing accomplished course in Laboratory Animal Science, 1 SUC) and Fundamental and Applied Ethology 5 SUC.

## **Objectives**

After completion of the course the student will:

- Have good knowledge of the laws and ethical values regarding the use of animals for research purposes.
- Be able to account for the use of animals in biomedical and applied research as well as for development of products and in education.
- Be able to handle mice and rats and know the suitable sampling and injection techniques for the different species.
- Be able to describe the essential construction and organisation of a laboratory animal facility.
- Have knowledge of the breeding of laboratory animals and the transgenic techniques.
- Be able to account for how different environmental and nutritional factors affect the research animals and the experimental results.
- Have knowledge of different parameters used for evaluating pain, stress and well-being in animals.
- Understand the procedure of planning, ethical evaluations, performing and presenting a research project involving animals.

## **Content**

The course covers legislation, ethics, alternative methods, handling of mice and rats, research animal husbandry and breeding, experimental planning and techniques. This includes lectures, practical exercises, literature studies, planning of and accomplishing an animal experiment. The main focus of the course is the effects of environment and animal husbandry on the well-being of the research animal and the experimental results.

The course participants perform a laboratory project (equivalent to 1 SUC). The

students will study the literature, write an ethical application for animal experimentation and an experimental plan, whereafter they perform a scientific study under guidance of a supervisor. The students give an account of the project both as an oral presentation and as a written report presented as a scientific paper.

## **Implementation**

Lectures ca 30 h

Practical exercises and demonstrations ca 30 h (compulsory)

Educational visits ca 20 h (compulsory)

Project work (compulsory)

## **Examination**

### **Requirements for examination**

Written or oral examination and written and oral account of a project.

Passed examination and participation in the compulsory parts of the course.

- If the student fails a test, the examiner may give the student a supplementary assignment, provided this is possible and there is reason to do so.
- If the student has been granted special educational support because of a disability, the examiner has the right to offer the student an adapted test, or provide an alternative assessment.
- If changes are made to this course syllabus, or if the course is closed, SLU shall decide on transitional rules for examination of students admitted under this syllabus but who have not yet passed the course.
- For the examination of a degree project (independent project), the examiner may also allow the student to add supplemental information after the deadline. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

### **Additional information**

- The right to take part in teaching and/or supervision only applies to the course date to which the student has been admitted and registered on.
- If there are special reasons, the student may take part in course components that require compulsory attendance at a later date. For more information on this, please refer to the regulations for education at Bachelor's and Master's level.

**Responsible department**

Department of Anatomy, Physiology and Biochemistry

**Supplementary Information**

*Finalized by:* Programnämnden för JLT-fakultetens utbildning, Ultuna  
*Biology Area:* Other Biology Courses