

## Syllabus

### VM0008.1 Pharmacology and Toxicology, 16.5 credits

#### Farmakologi och toxikologi

Version 1 in Slukurs. Corresponds to version 1 in Ladok

#### Syllabus approved

16 November 2004

The version applies to students admitted from autumn 2005 to autumn 2010

The version is not a module version

#### Subjects

Veterinary Medicine

#### Education cycle

No specific cycle

#### Modules

| Title         | Code | Credits |
|---------------|------|---------|
| Single module | 0101 | 16.5    |

#### Advanced study in the main field

First cycle, has at least 60 credits in first-cycle course/s as entry requirements (G2F)

#### 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

Passed examinations from all courses of the 1st year, Practice in Animal Husbandry, Structure and Function of the Body Systems 2nd year, and General Mechanisms of Disease. Participation in Population Medicine.

## Objectives

Having completed the course, the students will:

- be able to evaluate fundamental pharmaco/toxicokinetic data
- have knowledge of desirable as well as adverse/toxic effects of drugs and other xenobiotics as well as understand the underlying mechanisms
- be able to evaluate different treatment alternatives from a pharmacological point of view
- be able write prescriptions according to veterinary legislation
- have knowledge of drug-, food- and environmental toxicology
- have knowledge of risk assessment, risk management and risk communication
- have knowledge of biological effects of ionising radiation.

The course will also give an introduction to theory of science and competence to scrutinize scientific articles.

## Content

- Principles for how drugs and other xenobiotics exert their effects on molecular and cellular levels and fundamentals for pharmaco- and toxicokinetics
- Principles for the fate of drugs and other xenobiotics in the organism (absorption, distribution, metabolism, bioactivation and excretion)
- Target organs for toxic effects
- Effects of drugs on different organ systems and effects of antiinfective drugs
- Intoxication in domestic animals
- Adverse and toxic effects of drugs and toxic effects (acute and chronic) of harmful substances in environment, feed and food
- Applications in food and environmental toxicology
- Fundamentals in radiobiology
- Principles of risk assessment including estimation of acceptable dietary intakes, maximum residue limits, and threshold limit values as well as withdrawal times

- How to write prescriptions of drugs according to legislation.

The course also includes more general parts, such as Science Theory and introduction to the veterinary profession.

- Introduction to theory of science
- Scrutinizing of scientific articles
- Written and oral reports
- Study tours
- Drug prescription

## **Implementation**

Lectures ca 100 h

Seminars and laboratory work ca 30 h

Study tour (study visit) ca 17 h

## **Examination**

### **Requirements for examination**

Individual assignments and written examination.

Passed examination, passed assignments and participation in compulsory course components.

- 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 Biomedical Sciences and Veterinary Public Health

**Supplementary Information**

*Finalized by:* Programnämnden för veterinärprogrammet

*Replacement course:* VM7014