



Sveriges lantbruksuniversitet  
Swedish University of Agricultural Sciences

**Programme board for education in  
Veterinary Medicine and Animal Science**

## Programme syllabus for the Veterinary Medicine programme

**330 credits**

Utbildningsplan för veterinärprogrammet, 330 högskolepoäng

### **DECISION**

Programme code:	VY009.2
Date:	2016-10-12
Decision by:	Board of Education
Revision:	2017-12-14
Revised by:	Programme board for education in Veterinary Medicine and Animal Science
SLU ID:	SLU.ua.2016.3.1.1-3818
Applies from:	Autumn semester 2017
Board responsible:	Programme board for education in Veterinary Medicine and Animal Science

### **PRIOR KNOWLEDGE AND OTHER ENTRY REQUIREMENTS**

In order to be admitted to the Veterinary Medicine programme, you must fulfil the field-specific entry requirements A13 in addition to general entry requirements:

- Biology 2
- Physics 2
- Chemistry 2
- Mathematics 4

Grade: For the above courses, the minimum grade requirement is a Pass.

There are several replacement options for courses requiring these field-specific entry requirements.

The specific entry requirements can also be met if you have obtained the equivalent knowledge and skills from a Swedish school under the current or a previous system. The requirements are also considered to be met if the equivalent knowledge and skills have been obtained by other means.

For access to the courses included in the programme, the specific entry requirements stipulated in each individual course syllabus apply.

## OBJECTIVES

### a) General objectives

The general objectives for first- and second-cycle courses and programmes are specified in the Swedish Higher Education Act (Chapter 1, Sections 8–9).

### b) Objectives for a Degree of Master of Science in Veterinary Medicine

In accordance with the appendix to the Ordinance for the Swedish University of Agricultural Sciences, for a Degree of Master of Science in Veterinary Medicine, the student shall fulfil the following objectives:

For a Degree of Master of Science in Veterinary Medicine the student shall have demonstrated the knowledge and skills required to work autonomously as a veterinary surgeon.

#### *Knowledge and understanding*

For a Degree of Master of Science in Veterinary Medicine the student shall have

- demonstrated knowledge of the disciplinary foundation of the field and insight into current research and development work as well as the links between research and proven experience and the significance of these links for professional practice,
- demonstrated both broad and specialised knowledge in the field of veterinary medicine,
- demonstrated insight into the conditions applying to animal management, its function and interaction with the environment and society, both nationally and internationally, and
- demonstrated knowledge of economics, organisation and statutory provisions that are of significance for the field of veterinary medicine.

#### *Competence and skills>*

For a Degree of Master of Science in Veterinary Medicine the student shall have

- demonstrated the ability to diagnose the most frequent illnesses and injuries of animals autonomously and to undertake appropriate medical and surgical treatment in basic veterinary medicine,
- demonstrated the ability to initiate and undertake measures in preventive veterinary care,
- demonstrated the ability to identify problems and take the measures needed to comply with social requirements regarding cruelty to animals, the control of infectious diseases and food safety,
- demonstrated the ability to account in speech and writing for interventions and treatment outcomes with those concerned and to document them in accordance with the relevant statutory provisions,
- demonstrated specialised skills in discussing new data, phenomena and issues in the field of veterinary medicine with various audiences on a disciplinary basis and also to review, assess and use relevant information critically,

- demonstrated the capacity for teamwork and collaboration with various constellations, and
- demonstrated the skills required to take part in research, development and evaluative activities or to work autonomously with other specialised tasks in the field of veterinary medicine and so contribute to the development of the profession and professional practice.

### *Judgement and approach*

For a Degree of Master of Science in Veterinary Medicine the student shall have

- demonstrated the ability to adopt a holistic view in his or her professional practice and make judgements on the basis of a disciplinary approach while taking into account aspects relating to the health of human beings and animals as well as economic, environmental and ethical considerations
- demonstrated the ability to adopt a professional approach to animals and their owners
- demonstrated the ability to identify his or her own limitations in professional practice autonomously, and
- demonstrated the ability to identify the need for further knowledge and undertake ongoing development of his or her skills.

## **DEGREE**

### **a) Degree awarded on completion of the programme**

The Veterinary Medicine programme leads to a Degree of Master of Science in Veterinary Medicine which is a professional qualification.

Students who fulfil the qualification requirements for the Degree of Master of Science in Veterinary Medicine (330 credits) will be provided with a degree certificate upon request. The degree certificate will specify the qualification as Degree of Master of Science in Veterinary Medicine (330 credits).

### **b) Degree requirements**

A Degree of Master of Science in Veterinary Medicine is obtained when the student has a full course portfolio of 330 credits with the following requirements:

- 180 credits in the main field of Veterinary Medicine at first-cycle level with progressive specialisation (G1N, G1F, G2F)
- 150 credits in the main field of Veterinary Medicine at second-cycle level (A1N, A1F), including 30 credits of independent project (degree project, A2E)
- all compulsory programme courses

## **CONTENT AND STRUCTURE**

### **a) Programme description**

The programme is intended to provide a broad and specialised, theoretical and practical education. The students are provided with a veterinary holistic view of basic animal healthcare for both individuals and groups of animals, preventive healthcare, disease control and safe food production in order to promote public health.

The programme initially includes education that is necessary to understand the structure and function of healthy animals. Later on, tuition is given on how various

factors in the animals and their surroundings can cause health disorders, and on the structure, classification, biology and spread possibilities of pathogenic organisms. The preclinical studies also includes studies of how pharmaceuticals and other foreign substances exert their effects, including harmful effects.

During the clinical years (year 4-5) the students are trained to assess the signs that indicate disease in individuals and groups of animals, as well as to apply and critically evaluate the methods used to examine, remedy, treat and prevent disease in individual animals and in populations. An important part of the education provides knowledge of safe foodstuffs including breeding of farm animals and production, distribution and management of all foodstuffs. How breeding, feeding, husbandry and environment can impact on animal welfare and health is also part of the education.

During most of the clinical courses the students are trained to evaluate economic and ethical consequences of therapy, to apply a holistic approach in matters relating to animal welfare, disease control and to work in accordance with existing legislation.

The education also aims to make the students develop a professional and scientific approach in their professional capacity. The students are made aware of the responsibility for communication with animal owners, colleagues, industry, government and society in general that the veterinary professional capacity implies. Written and oral presentations, independent search for knowledge and the ability to analyse and synthesise are trained during the education. The students also make assessments of issues that relate veterinary medicine to human medicine, biology, animal science and food science.

The programme includes independent projects presented orally and in writing. At the end of the third year, the students receive training in scientific writing and critical examination and may apply their knowledge, abilities and approach to a veterinary issue in an independent project (literature study). The programme is concluded with an independent project (degree project) of 30 credits in which the student both experimentally and theoretically applies their advanced knowledge, abilities and approach to a scientific issue in the field of Veterinary Medicine.

The programme is taught in Swedish. A large part of the training is done in groups, and of the scheduled education time a major part is compulsory.

## **b) Courses in the programme**

*(compulsory courses in bold)*

### Year 1

**Basic veterinary anatomy, 8 credits (Veterinary Medicine, G1N)**

**Basic medical biology, 20 credits (Veterinary Medicine, G1N)**

**Structure and function of the body systems, 32 credits (Veterinary Medicine, G1N)**

### Year 2

**General mechanisms of disease, 32 credits (Veterinary Medicine, G1F)**

**Veterinary pathology, 14 credits (Veterinary Medicine, G1F)**

**Pharmacology and toxicology, 14 credits (Veterinary Medicine, G2F)**

Year 3

**Population medicine, 16 credits (Veterinary Medicine, G1F)**

**Animal welfare, legislation and epizootiology, 7 credits (Veterinary Medicine, G2F)**

**Food safety, 13.5 credits (Veterinary Medicine, G2F)**

**Introduction to laboratory animal medicine, 3 credits (Veterinary Medicine, G2F)**

**Scientific approach to Veterinary Medicine, 9 credits (Veterinary Medicine, G2F)**

**Clinical anatomy and clinical propedeutics, 11.5 credits (Veterinary Medicine, G2F)**

Year 4-5, clinical years

**Clinical Veterinary Medicine, 104 credits (Veterinary Medicine, A1N)**

**Clinical pathology, 4.5 credits (Veterinary Medicine, A1F)**

**Food safety and meat inspection 4.5 credits (Veterinary Medicine, A1F)**

**Veterinary public health with applied epidemiology and epizootiology, 7 credits (Veterinary Medicine, A1F)**

Year 6

**Degree project in Veterinary Medicine, 30 credits (Veterinary Medicine, A2E)**

Placement courses

Agriculture in practice - Animal husbandry 1, 7.5 credits (Agricultural Science/Animal Science, GXX)

Agriculture in practice - Animal husbandry 2, 7.5 credits (Agricultural Science/Animal Science, GXX)

The range of courses may change over the course of the programme, which may lead to a new version of the syllabus in which information on transitional regulations is provided.

For each course in the programme, there is a course syllabus which stipulates the specifics of the course. Detailed information on when the courses are offered is available on the SLU student web.

## **TRANSITION REGULATIONS AND OTHER RULES**

### **a) Transitional regulations**

Students admitted to the Veterinary Medicine Programme the autumn semester 2016 or earlier can apply for a Degree of Science in Veterinary Medicine according to the degree requirements that are specified in this programme syllabus if the requirements are fulfilled. An individual study plan shall be drawn up in each case.

### **b) Other rules**

The Courses Agriculture in practice - Animal husbandry 1, 7.5 credits, and Agriculture in practice - Animal husbandry 2, 7.5 credits, may not be part of the Degree of Master of Science in Veterinary Medicine. It is however possible to transfer some of the credits as part of the course Population medicine.

## **OTHER INFORMATION**

### **General regulations for first- and second-cycle courses and programmes**

For more information on semester dates, examination and credit transfer, see the Regulations for education at Bachelor's and Master's level available on the SLU student web.

### **Possibilities for further studies**

Students who complete the Veterinary Medicine programme and are awarded a degree have the possibility to continue their studies at doctoral level.