

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: VY009.3

Date: 2016-10-12

Decision by: Board of Education

Revision: 2017-12-14, 2020-02-26

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 2020

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 will educate students in veterinary medicine and animal health care for individual animals and groups of animals, for species in human care. The programme includes studying preventive health measures, euthanasia, slaughter, disease control, safe food production and veterinary public health work as part of the "One Health" concept. Food safety is an important component of the programme, covering livestock breeding and the production, distribution and handling of food products.

The programme includes a basic science part and a clinical part. During the basic scientific years, students will study the subject areas that are necessary to be able to understand the structure and functions of healthy animals. Instruction will then be given in the causes of sickness and diseases in animals and how they develop and manifest themselves, how medical products work, and the principles for choosing optimal medications. Students will initially learn about how genetics and the environment affect the health, behaviour, welfare, production and performance of domestic animals. Years 4 and 5 are clinical years in which students will receive training in assessing signs of sickness and disease. They will apply and critically evaluate the methods used to investigate, remedy, treat and prevent health problems in individual animals and groups of animals. The clinical courses include evaluations of the financial and ethical consequences of therapy and apply holistic approaches to issues related to animal welfare, disease control, sustainability and working in accordance with legislation.

The programme will also teach students how to develop a professional and scientific approach to their career. Students will learn about the responsibility of veterinary surgeons relating to communication with animal owners, colleagues, industry, public authorities and society in general. Throughout the programme, students will practise their written and spoken presentation skills, independent knowledge seeking involving source criticism and scientific analysis and synthesis. Students will also assess questions that link veterinary medicine to human medicine, biology, animal science and food science.

The programme is concluded with an independent project (degree project) of 30 credits in which the student both experimentally and theoretically applies their indepth knowledge, abilities and approaches to a relevant issue in the field of veterinary medicine.

The programme is mainly taught in Swedish. A large portion of teaching will take place in groups. Attendance is compulsory for a large portion of the timetabled teaching. Much of the recommended reading is in English.

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)
Scientific approach, 9 credits (Veterinary Medicine, G2F)
Laboratory animal medicine, 3 credits (Veterinary Medicine, G2F)
Food safety, 13.5 credits (Veterinary Medicine, G2F)
Clinical anatomy and introduction to clinical studies, 11.5 credits (Veterinary Medicine, G2F)

Year 4-5, clinical years

Veterinary propaedeutics, 18 credits (Veterinary Medicine, A1N) Clinical veterinary medicine, 95 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

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.

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.

The Veterinary Medicine programme (330 credits) includes 90 credits in the first cycle with progressive specialisation and 60 credits in the second cycle with specialisation within the main field of study veterinary medicine. This makes it possible for students who writes an additional 15 credits first cycle degree project to apply for a Bachelor's and a Master's degree with veterinary medicine as the main field of study.