

**Board of Education** 

# Syllabus for the Veterinary Medicine programme, 330 credits

Utbildningsplan för Veterinärprogrammet, 330 högskolepoäng

# DECISION

Programme code:	VY013
Date :	2022-09-08
Decision by:	Board of Education
Revision:	
Revised by:	
SLU ID:	SLU.ua.2022.3.1.1-2283
Applies from:	Autumn semester 2023
Board responsible:	Programme board for education in
	Veterinary Medicine and Animal Science

# **ADMISSION AND ENTRY REQUIREMENTS**

To be admitted to the Veterinary Medicine programme, the following specific entry requirements apply, in addition to the general entry requirements:

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

or

- Biology B
- Physics B
- Chemistry B
- Mathematics D

There are several replacement options for the required courses.

A person who by virtue of education in Sweden or abroad, practical experience or some other circumstance has the potential to benefit from the study programme also meets the specific entry requirements.

There are specific entry requirements for each course included in the programme. These

are described in the course syllabus.

# **LEARNING OUTCOMES**

#### **General outcomes**

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

#### Outcomes for a Degree of Master of Science in Veterinary Medicine

In accordance with the annex to the Ordinance for the Swedish University of Agricultural Sciences, for a Degree of Master of Science in Veterinary Medicine, the student must meet 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

#### 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. Other qualifications may be awarded, provided the requirements for them are fulfilled. See the qualification requirements and SLU's system of qualifications.

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

#### **Degree requirements**

A Degree of Master of Science in Veterinary Medicine is obtained when the student has a full course portfolio of 330 credits, including all compulsory programme courses and 30 credits of independent project (degree project, A2E).

### CONTENT AND STRUCTURE

#### **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.

A certain part of the programme consists of external placements that are carried out in veterinary clinics around the country. Practical exercises on live animals, organs and dummies occur, as well as dissections and autopsies of various animal species. Physically strenuous elements occur in the training.

During the first year, 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. Propaedeutic clinical profiency is also taught. 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 in-depth 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.

The programme deals with various aspects of ecological, socio-economic and work environment-related sustainability perspectives.

In accordance with the SLU guidelines for equal opportunities, a well-functioning study environment is characterised by openness, equality and inclusiveness. This promotes a climate that draws upon the diverse backgrounds, lives, and skills of students and staff.

#### Courses in the programme

Main field of study: VM = Veterinary medicine Compulsory courses in **bold**.

Year 1

**Basic anatomy, tissue histology and biochemistry, 30 credits** (VM, G1N) **Advanced anatomy, histology and physiology, 30 credits** (VM, G1N)

Year 2

Animal husbandry and animal welfare, 9 credits (VM, G1F) Infection biology, 21 credits (VM, G1F) Immunology and basic pathology, 10 credits (VM, G1F) Veterinary pathology, 14 credits (VM, G1F) Veterinary genetics, 6 credits (VM, G1F)

Year 3

Pharmacology and toxicology, 14 credits (VM, G2F) Laboratory animal medicine, 3 credits (VM, G2F) Scientific research methodology, 13 credits (VM, G2F) Food safety, 15 credits (VM, G2F) Clinical proficiency 1, 15 credits (VM, G2F)

Year 4 Clinical proficiency 2, 12 credits (VM, A1N) Clinical veterinary medicine 1, 48 credits (VM, A1F)

Year 5 Clinical veterinary medicine 2, 60 credits (VM, A1F)

Year 6 Degree project in Veterinary Medicine, 30 credits (VM, A2E)

The courses offered may change during the programme. This may lead to a new version of the syllabus in which information on transitional regulations is provided. Decisions on the courses offered are taken well in advance of the next academic year.

Each course on the programme has its own syllabus that describes the course content and other specifics. Detailed information on when the courses are offered is available on the SLU student web.

# TRANSITIONAL PROVISIONS AND OTHER REGULATIONS

### **Transitional provisions**

**Other regulations** 

# **OTHER INFORMATION**

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

For more information on semester dates, examination, credit transfer and admissions to the latter part of programmes, see the Education Planning and Administration Handbook on the SLU student web.

#### **Possibilities for further study**

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