

Programme board for education in Veterinary Medicine and Animal Science SYLLABUS

# Syllabus for the Animal Science – Master's programme 120 credits

Utbildningsplan för husdjursvetenskap – masterprogram, 120 högskolepoäng

# DECISION

Programme code:	VM006.4
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Decision by:	Board of Education
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Revised by:	Programme board for education in Veterinary Medicine and Animal Science
SLU ID:	SLU.ua.2024.3.1.1-4106
Applies from:	Autumn semester 2025
Board responsible:	Programme board for education in Veterinary Medicine and Animal Science

# ADMISSION AND ENTRY REQUIREMENTS

To be admitted to Animal Science Master's programme, the following criteria must be met:

- General entry requirements: first-cycle qualification comprising at least 180 credits or a corresponding qualification from abroad.
- Specific entry requirements: specialisation comprising 90 credits in one of the following subjects/disciplinary domains: biology, animal science, equine science, veterinary nursing, veterinary medicine or agricultural science, including at least 30 credits of animal science/zoology.

The specific entry requirements can also be met by someone who has acquired the equivalent knowledge through a corresponding qualification from abroad or in some other way.

In addition, knowledge equivalent of English 6 is required. SLU regulations state that applicants may meet this requirement if they were awarded a first-cycle degree from a Swedish university, or have completed 120 credits at SLU.

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

# **LEARNING OUTCOMES**

#### **General outcomes**

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

#### **Qualitative targets**

The Annex to the Ordinance for the Swedish University of Agricultural Sciences stipulates that for the Degree of Master, the student shall have:

#### Knowledge and understanding

For a Degree of Master (120 credits) the student shall have:

- demonstrated knowledge and understanding in the main field of study, including both broad knowledge of the field and a considerable degree of specialised knowledge in certain areas of the field as well as insight into current research and development work, and
- demonstrated specialised methodological knowledge in the main field of study.

#### Competence and skills

For a Degree of Master (120 credits) the student shall have:

- demonstrated the ability to critically and systematically integrate knowledge and analyse, assess and deal with complex phenomena, issues and situations even with limited information
- demonstrated the ability to identify and formulate issues critically, autonomously and creatively as well as to plan and, using appropriate methods, undertake specialised tasks within predetermined time frames and so contribute to the formation of knowledge as well as the ability to evaluate this work
- demonstrated the ability in speech and writing both nationally and internationally to report clearly and discuss his or her conclusions and the knowledge and arguments on which they are based in dialogue with different audiences, and
- demonstrated the skills required for participation in research and development work or autonomous employment in some other qualified capacity.

#### Judgement and approach

For a Degree of Master (120 credits) the student shall have:

- demonstrated the ability to make assessments in the main field of study informed by relevant disciplinary, social and ethical considerations and also to demonstrate awareness of ethical aspects of research and development work
- demonstrated insight into the possibilities and limitations of research, its role in society and the responsibility of the individual for how it is used, and

- demonstrated the ability to identify the personal need for further knowledge and take responsibility for his or her ongoing learning.

### Independent project (degree project)

For a master's degree, the student must, within the course requirements, have completed an independent project (degree project) of at least 30 credits in the main field of study. The independent project may comprise less than 30 credits, but at least 15 credits, if the student has already completed an independent project at advanced level of at least 15 credits within the main field of study or the equivalent from foreign education.

#### Miscellaneous

For a master's degree with a particular focus, the specified requirements that the University of Agriculture determines within the requirements in this degree description shall also apply.

# DEGREE

#### Degree awarded on completion of the programme

The Animal Science – Master's programme leads to a Degree of Master of Science in Animal Science, which is a general qualification. Other degrees may be awarded, provided that the requirements for the degree are fulfilled. See the qualification requirements and SLU's system of qualifications.

Students who fulfil the qualification requirements will be provided with a degree certificate upon request. The degree certificate will specify the qualification as Degree of Master of Science in Animal Science (120 credits).

#### **Degree requirements**

A Degree of Master of Science in Animal Science is obtained when the student has a full course portfolio of 120 credits with the following requirements:

- at least 30 credits of courses with specialised study in animal science (A1N; A1F)
- at least 30 credits of degree project for second-cycle studies in the field of animal science (A2E)

In addition, the prior award of a Degree of Bachelor, Degree of Bachelor of Fine Arts, professional or vocational qualification of at least 180 credits or a corresponding qualification from abroad is required.

# **CONTENT AND STRUCTURE**

#### **Programme description**

This programme aims to provide the student with profiled and advanced knowledge of animal science. The programme has a scientific basis with close ties to SLU's research and society at large. Various perspectives are used to approach topical issues within animal science.

The programme's content has been designed to ensure students are able to practise their skills in critical thinking, written and oral communication, information literacy, working both

independently and in groups and the ability to identify and reflect upon relevant questions. These skills are transferrable and can be implemented in any other course a student may choose.

Teaching methods aim to stimulate lifelong learning, with student-centred learning at the heart of the programme. The programme begins with a joint introduction that provides a broad overview of the subject field and the scientific methods used in animal science. The range of courses offered enable students to specialise in ethology–animal, welfare–animal protection and nutrition–fodder. It is also possible to specialise in genetics–breeding, and participate in exchange studies. At the end of the programme, students are able to practise the specific skills in a research environment necessary for conducting a research project. The programme concludes with an independent project worth 30 credits that enables students to apply their acquired knowledge and prepare themselves for continuing academic study or their future career.

SLU works actively to integrate sustainability issues in all of its degree programmes. The programme's close ties to topical research and society at large provides students with the chance to develop the knowledge they need to reflect upon and work with various sustainability aspects within animal science.

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.

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The programme is taught in English.

#### **Courses in the programme**

Main field of study: Biology (BI) Animal science (HV) Agricultural science (LB)

Year 1

Animal Science – a scientific approach, 15 credits (HV, AIN) Animal welfare and behavior, 15 credits (HV/BI, AIN) Designing breeding programmes, 15 credits (HV/LB, AIN) Feed science and forage production, 15 credits (HV/LB, AIN) Animal nutrition and welfare, 15 credits (HV/BI, AIN) Animal genetics – health, behavior and welfare, 15 credits (HV/BI, AIN)

Year 2

Advanced animal nutrition, 7,5 credits (HV/BI, AIF) Biology of lactation, 7,5 credits (HV/BI, AIN) Advanced animal welfare and animal protection, 15 credits (HV/BI, A1F) Research training and project including laboratory animal science, 15 credits (HV/BI, A1F) Independent project in animal science, 30 credits (HV, 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.

During certain study periods (parts of the semester), SLU offers several program courses that the student can choose from. The student is guaranteed a place **on one of these** courses provided that the entry requirements are fulfilled and that the student has registered on time.

# TRANSITIONAL REGULATIONS AND OTHER RULES

#### **Transitional regulations**

#### *Revision of the syllabus*

Programme syllabus, version 2: Paragraph about equal opportunities added to Programme description. Adjustments of the course list. Students who were admitted to the programme according to earlier versions of the syllabus can continue to later parts of the programme without any special measures.

Programme syllabus, version 3: Administrative adaption to new guidelines for programme syllabuses at SLU. Adjustments of the course list. Students who were admitted to the programme according to earlier versions of the syllabus can continue to later parts of the programme without any special measures.

Programme syllabus, version 4: Revision of the Programme description. Adjustments of the course list. Students who were admitted to the programme according to earlier versions of the syllabus can continue to later parts of the programme without any special measures.

#### Other rules

# **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 Animal Science Master's programme and are awarded a degree have the possibility to continue their studies at doctoral level.

It is assumed that students admitted to the program have studied animal physiology.