

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

2015-10-14

SLU ID: SLU.ua.2016.3.1.1-50

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

Utbildningsplan för husdjursvetenskap – masterprogram, 120 högskolepoäng

DECISION

Programme code: VM006 Date: 2015-10-14

Decision by: Board of Education at the Swedish University of Agricultural

Sciences

Revision: Revised by:

SLU ID: SLU.ua.2016.3.1.1-50 Applies from Autumn semester 2016

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 Animal Science – Master's programme the following entry requirements must be fulfilled:

- General entry requirements: Degree of Bachelor comprising at least 180 credits or a corresponding degree from a foreign country
- Specific entry requirements: Passed courses of at least 90 credits in one of the following subject areas:
 - Biology
 - o Animal Science
 - Agricultural Science, including at least 30 credits of Animal Science/Zoology
 - o Equine Science
 - Veterinary Nursing
 - Veterinary Medicine

In addition, knowledge equivalent to the course English 6 from a Swedish upper secondary school is required.

Grade requirements: In the course above, the applicant must have earned at least a Pass grade. This requirement is fulfilled by those who have an undergraduate degree from a Swedish university comprising 180 credits. For applicants from Nordic countries and some English-speaking countries, special rules apply.

The specific entry requirements as above can also be met by those who have obtained equivalent knowledge through a foreign degree or if equivalent knowledge has been obtained by other means.

For admission to the courses included in the programme, the specific entry requirements stipulated in each individual course syllabus must be fulfilled.

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

In accordance with the appendix to the Ordinance for the Swedish University of Agricultural Sciences, for a Degree of Master, the student shall fulfil the following requirements:

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.

DEGREE

a) Degree awarded on completion of the programme

The Animal Science – Master's programme aims at a Degree of Master of Science (120 credits) with a major in Animal Science, which is a general qualification. Other degrees may be awarded after completion of the programme, provided that the requirements for the degree are fulfilled. See local instructions.

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

b) Degree requirements

A Degree of Master of Science (120 credits) with a major 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)

A maximum of 15 credits may consist of approved courses at first-cycle level.

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

a) Programme description

The programme is intended to provide the students with a clearly profiled education in the main field of animal science, with a scientific approach. Through

its courses the programme offers both broad knowledge within animal science and a considerable degree of specialised knowledge in certain areas of the field. The programme has a scientific basis and the research at SLU is used to a high extent in the education, while at the same time the programme has ties to the business sector. The courses offered are based on scientific methods used in the field of animal science as well as on deeper insight into current research and development work.

The programme has a well thought-out content of general skills regardless of which courses the student chooses. The education starts with an introduction course with focus on scientific methods used in animal science research. During the programme elective courses are offered within the different areas of the main field. At the end of the programme the students are given the opportunity to train scientific skills in a research environment. The education is concluded by a degree project.

The programme is taught in English.

b) Courses in the programme

Year 1

Animal Science – a scientific approach, 15 credits (animal science/biology, AIN)

Nutrition physiology, 15 credits (animal science/biology, AIN)

Genome analysis, 15 credits (animal science/biology, AIN)

Animal welfare and behaviour, 15 credits (animal science/biology, AIN)

Production biology, 15 credits (animal science/biology, AIN)

Bioinformatics, 15 hp (animal science/biology, AIN)

Animal environment, welfare and housing, 15 credits (animal science/agricultural science, AIN)

Feed science and forage production, 15 credits (animal science/agricultural science, AIN)

Animal genetics – health, behaviour and welfare, 15 credits (animal science/biology, AIN)

Year 2

Animal nutrition – health, welfare and behaviour, 15 credits (animal science/biology, AIN)

Designing breeding programmes, 15 credits (animal science/agricultural science, AIN)

Research training and project, 15 credits (animal science/biology, A1F) Degree project in animal science, 30 credits (animal science, A2E)

Course syllabuses – detailed information is available on the SLU student web.

TRANSITIONAL REGULATIONS AND OTHER RULES

a) Transitional regulations

b) Other rules

OTHER INFORMATION

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

Through conscious choices from the offered courses and of the subject of the degree project, students are given the opportunity to create personal profiles on their studies and are able to immerse themselves in profile areas such as Ethology/Animal welfare/Animal environment, Nutrition/Production biology or Genetics/Breeding. A majority of the programme courses are included in one or more of these profile areas. The students can choose between following a recommended path of studies within one of the profile areas and combining courses from different areas.

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