

Annex N

Subject Benchmark Statement of Animal Husbandry, I and II Cycles of Higher Education

VI and VII levels of the National Qualifications Frameworks (NQF)



Introduction

The Subject Benchmark Statement for Animal Husbandry establishes academic standards that define the minimum requirements for learning outcomes, as well as the teaching, learning, and assessment methods, resources, and other essential elements needed to achieve them in higher education programmes at the Bachelor's and Master's levels. This document is grounded in the National Qualifications Framework of Georgia, the European Higher Education Qualifications Framework, the European Qualifications Framework for Lifelong Learning, labor market needs, national and international standards, best practices, and relevant legislation.

This Subject Benchmark Statement sets forth the minimum requirements and provisions that all higher education institutions must comply with when implementing or planning to implement Master's programmes in Animal Husbandry. The content and structure of these programmes, as well as the teaching and assessment methods, are determined by each institution in accordance with Georgian legislation and related regulations. Meeting the minimum learning outcomes defined by the Subject Benchmark Statement is mandatory for all institutions offering Bachelor's and Master's degree programmes in Animal Husbandry. However, to promote innovation, diversity, and flexibility, educational institutions have the autonomy to design the detailed content of their programmes and select specific implementation methods, including the incorporation of additional learning outcomes. The purpose of this Subject Benchmark Statement is to support the development of higher education programmes in Animal Husbandry that align with both national and international standards. These programmes promote student mobility, facilitate progression to higher levels of study, support professional development, ensure international recognition of qualifications, and enhance the employability and competitiveness of graduates in both local and global labour markets.

- Familiarization with this Subject Benchmark Statement is recommended for the following groups: academic, invited, and administrative staff of higher education institutions involved in the development and implementation of educational programmes in Animal Husbandry;
- members of accreditation, authorization, and appeals councils who are involved in the process of evaluating educational programmes, determining their compliance with accreditation standards, and making relevant decisions;
- · individuals wishing to enroll in educational programmes in the field of Animal Husbandry;
- students interested in the knowledge, skills, and competences they will acquire upon completion of Bachelor's/Master's programmes in Animal Husbandry;
- employers seeking information on the competences of graduates of Bachelor's and Master's programmes in Animal Husbandry.

The approval of this Subject Benchmark Statement will provide grounds for amending the Classification of Fields of Study document, approved by Order №69/n of the Minister of Education, Science, Culture, and Sport of Georgia dated 10 April 2019. Specifically, it will enable the reclassification of the field of study "0811.2.3 Animal Husbandry" from the second to the first column. This change will allow higher education institutions to offer educational programmes in Animal Husbandry at all three levels of higher education: Bachelor's, Master's, and Doctorate.

The English title of this Subject Benchmark Statement is: Subject Benchmark Statement for Animal Husbandry.

The validity period of this subject benchmark statement is seven years.

II. Description of the Field of Study

The field of Animal Husbandry is defined by academic disciplines grounded in scientific and practical knowledge, focused on the production of high-quality and competitive animal products in line with modern technological demands. It aims to improve animal productivity, explore methods to enhance it, and ensure animal welfare to support food security. Animal Husbandry encompasses expertise in animal breeding and reproduction, balanced nutrition, management of care and housing systems, productivity enhancement, and the improvement of product quality.

e field of Animal Husbandry encompasses the selection and breeding of all types of foodproducing and domestic animals, including both high-intensity and local breeds and
populations. It also involves the optimal use of agricultural machinery and equipment in
animal care and management, as well as the implementation of modern methods for
comprehensive animal nutrition. To achieve these objectives, Animal Husbandry employs
scientific research, practical applications, laboratory techniques, and production trials. A
key objective of higher education in Animal Husbandry is to prepare highly qualified,
competitive, employable, and career-oriented specialists with Bachelor's or Master's
degrees, tailored to the specific priorities of different regions within the country. These
specialists must possess both theoretical knowledge and practical skills in the field. The
Bachelor's programme in Animal Husbandry provides knowledge of the fundamental
issues, principles, and methods relevant to the field, along with the ability to apply them in
practice. This includes understanding the planning and management of technological
processes within animal husbandry production, as well as their key specific characteristics.



The Master's programme in Animal Husbandry focuses on developing well-founded and systematic skills in planning and managing ongoing processes in the field, while also deepening research competencies.

The competencies acquired through Bachelor's and Master's programmes in Animal Husbandry prepare graduates to pursue further studies at the Master's or Doctorate level.

III. Learning Outcomes

The learning outcomes defined in the Subject Benchmark Statement for Animal Husbandry aim to develop the knowledge, skills, autonomy, and responsibility that graduates must demonstrate upon completing their Bachelor's or Master's studies. These outcomes represent the minimum standards that all higher education institutions are required to meet. Institutions may define additional learning outcomes within their programmes, taking into account best international practices and recent advancements in the field. They may also choose to present the learning outcomes in three distinct categories—knowledge and understanding; skills; responsibility and autonomy—either separately or in an integrated format.

3.1. Learning Outcomes of the Bachelor's Programme in Animal Husbandry

A graduate of the Bachelor's programme in Animal Husbandry:

- Describes the principles of animal disease prevention;
- Demonstrates knowledge of modern technological trends and innovative directions in animal husbandry;
- Uses terminology relevant to the field to prepare professional documentation;
- Makes decisions regarding the production of animal husbandry products considering animals' living environment and production technologies;
- Defines both detailed and general principles and parameters for planning and implementing technological measures for primary animal production;

- Within the scope of their competence, ensures selection, breeding, reproduction, care and maintenance of various species of animals, the preparation of food rations, the observance of the technology of pre-feeding food preparation, the production and primary processing of products (meat, milk, eggs, wool, leather and fur, etc.);
- Identifies existing problems during practical activities in animal husbandry, assesses risks, and develops solutions;
- Applies key requirements of food safety and ecological safety norms during animal husbandry production;
- Completes and presents, under supervisor's coordination, a research/practical project or thesis using modern information and communication technologies;
- Possesses the ability to search for, understand, and correctly apply literature in subject areas in practice;
- Within the scope of their competence, carries out development-oriented practical activities;
- Works both independently and in a team in the field of animal husbandry, conducting learning and professional activities in compliance with legal regulations, professional ethics, and principles of academic integrity.

3.2 Learning Outcomes of the Master's Programme in Animal Husbandry

A graduate of the Master's programme in Animal Husbandry:

- Demonstrates knowledge of issues and methodology related to the technology of livestock production;
- Demonstrates systematic knowledge of animal genetics, breeding, nutritional and behavioral issues;
- Describes in detail scientifically and practically validated schemes in the field of animal husbandry, possesses modern methods for improving the production of animal products, and develops ways for their effective implementation;
- Finds information on new achievements in the field of animal husbandry to address



specific tasks comprehensively;

- Demonstrates knowledge in basic and applied practical skills and fieldwork practice;
- Uses relevant statistical methods to record and analyse quantitative and qualitative data of production processes on farms;
- Produces a research-based paper, in compliance with the principles of academic integrity and using the latest research methods, and presents it before the academic and professional community;
- Coordinates the planning and implementation of activities in the field of animal husbandry;
- Collaborates with representatives of the field and demonstrates professional communication and coordination skills;
- Contributes to the development of professional knowledge and practice;
- Takes responsibility for their own and others' professional activities.

IV.Qualification to be Awarded

According to the Classification of Fields of Study approved by Order Nº69/n of the Minister of Education, Science, Culture and Sport of Georgia of 10 April 2019, the qualifications indicated in this section may be awarded in the field of Animal Husbandry.

The formulation of the qualification is determined based on the content, structure and goals of the educational program.

If a Bachelor's or Master's programme corresponding to the field of Animal Husbandry is focused on theoretical study of the field and the development of practical skills, the qualification may be formulated as follows:



Bachelor of Animal Husbandry

Master of Animal Husbandry

If the main objective of a level 6 or 7 educational programme in the field of Animal Husbandry is to develop scientific-research skills, the qualification may be formulated as follows:

Bachelor of Science in Animal Husbandry

Master of Science in Animal Husbandry

V. Teaching, Learning and Assessment

The teaching, learning, and assessment methods outlined in this Subject Benchmark Statement are recommendations grounded in the principles of student-centered learning.

The primary goal of education in Animal Husbandry is to develop specialists equipped with up-to-date knowledge and practical skills. To achieve the objectives and learning outcomes of Bachelor's and Master's programmes, and to effectively evaluate student progress, it is essential to employ teaching, learning, and assessment methods aligned with the programme's goals. Assessments should be multi-faceted, ensuring comprehensive evaluation of each course's objectives and learning outcomes. As students' progress from the Bachelor's to the Master's level, research-based teaching approaches should be adopted to foster the ability to independently plan and conduct research, scientific-production experiments, and laboratory work.



5.1. Teaching and Learning Methods

Teaching, learning, and assessment methods should be based on student-centered teaching principles and correspond to the goals and learning outcomes of the educational programme. In addition to developing field-specific skills, these methods should also foster the development of transferable skills. Assessment methods should include feedback from the programme staff to students, aimed at enhancing their knowledge, skills, and values.

Depending on the content and objectives of the programme, higher education institutions may apply selected or other methods from the list below. It is also permissible to use methods not explicitly indicated here under the paragraph "teaching-learning methods", provided they are specified in the syllabus of the respective course. Depending on the specificity of the programme, the teaching process may be conducted in classroom settings, field conditions, and practical sites.

Institutions implementing higher education programmes may apply the following and/or other methods in the teaching process:

Lecture;

Seminar;

Laboratory works;

Practical training;

Independent Work:

Teaching practice;

Individual or group project;

To ensure the high quality of Master's theses, within Master's programmes an instruction must be developed for the preparation, presentation, and evaluation of Master's research papers, setting out all necessary procedures in detail.

5.2. Assessment Methods

The assessment forms (interim and final) defined in the syllabus of each course of an educational programme may include components that evaluate a student's knowledge, skills, and competences.

Within the framework of academic freedom, the instructor of each course independently selects the evaluation methods, defines and clearly formulates the assessment criteria and their corresponding scores, all of which must be specified in the course syllabus. At the same time, the lecturer must have sound arguments for the selected assessment methods and criteria. Evaluation supports the enhancement of student motivation and the development of learning skills.

5.3. Development of Student's Practical Skills

Practical education is one of the important aspects of this programme. It enables students to test in real life the competences acquired in the academic environment and to further refine and develop them. The aim of practical lessons is to develop students' practical skills in applying the theoretical knowledge acquired within the educational programme to specific situations.

VI. Additional Information

6.1. Academic Staff

Bachelor's/Master's programmes in Animal Husbandry may be implemented by higher education institutions with the involvement of an adequate number of qualified academic staff and invited specialists, whose experience and competences ensure the stable and effective functioning and development of the programmes, as well as the achievement of the defined learning outcomes.

6.2. Material resources and infrastructure

Taking into account the specifics of Bachelor's/Master's programmes in Animal Husbandry, a higher education institution must possess teaching facilities equipped with the necessary technical means, which will provide academic and invited staff, as well as students, with the essential conditions for achieving the aims and learning outcomes of the educational programmes. Practical training must be conducted in laboratory, field, and production settings that meet appropriate standards.

6.3. Employment

A graduate holding a Bachelor's/Master's academic degree in Animal Husbandry may be employed in the following areas:

Animal husbandry farms and enterprises;



- Agro-consulting centers / companies;
- Animal breeding and other enterprises in livestock production;
- Associations of artificial insemination and animal reproduction;
- Cynological clubs; relevant services within the Ministries of Defense, Finance, Internal Affairs and State Security, the State Guard, and the Criminal Police;
- The Ministry of Environmental Protection and Agriculture of Georgia, and relevant LEPLs and N(N)LEs under its authority;
- Service area relevant to the trading network;
- Scientific-research institutes and corresponding profile laboratories;
- Primary processing enterprises and companies of livestock products;
- Governmental and non-governmental organisations with an animal husbandry profile;
- State/private research, consulting, and service agencies;
- International projects financed by donors;
- Enterprises producing animal feed;
- Educational institutions;
- etc.

6.4 This Subject Benchmark Statement of Higher Education in Animal Husbandry enters into force upon approval.

Within one year of the approval of this document, higher education institutions are required to bring their programme(s) in the field of "Animal Husbandry," as defined by the "Classifier of Fields of Study" approved by Order Nº 69/n of 10 April 2019 of the Minister of Education, Science, Culture and Sport of Georgia, into compliance with this Subject Benchmark Statement. An exception applies if the programme(s) must submit an accreditation application to the Centre within a period of less than one year.



In cases where an accreditation application must be submitted less than one year after this order takes effect, the educational programme included in the application must comply with the approved Subject Benchmark Statement for Animal Husbandry. Institutions are therefore obliged to ensure that any new educational programme(s) submitted for accreditation to the Centre meet the requirements of this Subject Benchmark Statement.

VII.Members of the Subject Benchmark Statement Development Group

7.1. Members of the document development group

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