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MINISTER OF EDUCATION, SCIENCE AND SPORT OF THE REPUBLIC OF LITHUANIA

ORDER
ON THE APPROVAL OF THE DESCRIPTOR OF THE ANIMAL SCIENCES STUDY FIELD

15 May 2025 No. V-527
Vilnius

Pursuant to Article 53(11) of the Law on Higher Education and Research of the Republic of Lithuania:

1. I hereby approve the Descriptor of the Animal Sciences Study Field (attached).

2. I establish that higher education institutions must align their study programmes with the Descriptor of the Animal Sciences Study Field approved under Paragraph 1 of this Order by 1 September 2026.

3. I hereby declare Order No. V-773 of 14 May 2021 of the Minister of Education, Science and Sport of the Republic of Lithuania “On the Approval of the Descriptor of the Study Fields of Animal Husbandry and Fisheries” null and void.

Minister of Education, Science and Sport Raminta Popovienė

APPROVED BY
Order No. V-577 of 15 May 2025,
of the Minister of Education, Science and
Sport of the Republic of Lithuania.

DESCRIPTOR OF THE ANIMAL SCIENCE STUDY FIELD

CHAPTER I
GENERAL PROVISIONS

1. The Animal Sciences Study Field Descriptor (hereinafter referred to as the "Descriptor") establishes the specific requirements applicable to study programmes in the Animal Sciences study field (I04), which belongs to the study field group of Agricultural Sciences (I). The Descriptor regulates studies in this field to the extent that they are not regulated by the Descriptor of the General Requirements for the Implementation of Studies, approved by Order No. V-1168 of 30 December 2016 of the Minister of Education, Science and Sport of the Republic of Lithuania "On the Approval of the Descriptor of the General Requirements for the Implementation of Studies".

2. The Descriptor has been prepared taking into account Directive 2010/63/EU of the European Parliament and of the Council on the protection of animals used for scientific purposes, as well as the requirements of the accreditation system of the Federation of European Laboratory Animal Science Associations (FELASA).

3. The requirements of the Descriptor shall apply to first-cycle and second-cycle university studies delivered in either the full-time or part-time mode of studies.

4. Upon completion of university studies in the Animal Sciences study field, a Bachelor of Agricultural Sciences / Master of Agricultural Sciences qualification degree shall be awarded, corresponding to Level 6 / Level 7 of the Lithuanian Qualifications Framework and the European Qualifications Framework for Lifelong Learning, as well as to the first / second cycle of the Qualifications Framework for the European Higher Education Area. The qualification shall be certified by a Bachelor's / Master's diploma and a diploma supplement issued by the higher education institution.

5. Studies in the Animal Sciences study field may also be provided through double-major study programmes and interdisciplinary study programmes.

6. The Descriptor establishes no specific admission requirements for applicants to first-cycle studies.

7Admission to second-cycle studies is recommended for have completed university study programmes in study fields belonging to the groups of Life Sciences, Health Sciences, Agricultural Sciences, Physical Sciences, Engineering Sciences, Technological Sciences or Social Sciences and have obtained a Bachelor's qualification degree;

7.2. have completed professional higher education study programmes in study fields belonging to the groups of Life Sciences, Health Sciences, Agricultural Sciences, Physical Sciences, Engineering Sciences, Technological Sciences or Social Sciences and have obtained a Professional Bachelor's qualification degree, and who, in accordance with the procedure established by the admitting higher education institution, have completed additional studies of 60 to 90 credits intended to prepare them for Master's studies.

8. The objectives of studies in the Animal Sciences study field, taking into account the cycle of study, are:

8.1. to educate highly qualified specialists in Animal Sciences with knowledge of European Union and national legislation governing the fields of farm animals, companion animals, animals used in animal-assisted therapies, service animals, aquatic animals, exotic animals, captive wild animals and other animals (hereinafter referred to as "animals"), and to provide them with the scientific knowledge and competences underpinning these fields;

8.2. to provide knowledge of animal anatomy, physiology, behaviour, physiological and ethological needs, animal welfare and ethical aspects;;

8.3. to develop the field-specific and analytical competences required to ensure appropriate animal housing conditions and/or animal production technologies, animal welfare, nutrition, breeding and husbandry practices, as well as compliance with ethical, environmental and economic requirements;

8.4 to develop the ability to solve theoretical and practical problems in animal-related fields, to pursue further studies and research in the Animal Sciences study field and related fields, and to develop the generic competences necessary for professional practice and the advancement of these fields.

CHAPTER II
CONCEPT AND SCOPE OF THE STUDY FIELD

9. Animal Sciences is a field of science that studies the structure and functions of animal organisms, animal nutrition, husbandry, breeding and care, animal production and product quality, the use of animals for recreational activities, animal-assisted therapies and other purposes, ethical, environmental and economic aspects, animal welfare and protection, resource conservation, and strategies for ensuring biodiversity.

10. Animal Sciences encompasses the study of the structure and functions of animal organisms; animal breeding; animal nutrition; animal husbandry and care; animal production and product quality; the use of animals for recreational activities; the use of animals in the provision of complementary and alternative healthcare services; the use of animals in service and other activities; ethical aspects, animal welfare and protection; and the practical and theoretical methods for the development of these fields. These studies are based on fundamental sciences (general biology, morphology, physiology, anatomy, histology, embryology, biochemistry, genetics, etc.) as well as on the foundations of public health, veterinary medicine, environmental sciences and agronomy.

11. An Animal Sciences specialist shall:

11.1. possess the knowledge and competences required for independent professional practice in planning and organising animal-related activities, including the application of advanced technologies in these fields; and understand the broader socio-economic, environmental, animal welfare and animal protection context that may affect activities in the field of Animal Sciences;

11.2. be capable of conducting experimental research, analysing and critically evaluating new scientific knowledge, generating new ideas, and planning strategies for their implementation in animal-related activities;

11.3. apply knowledge in a variety of circumstances to ensure animal welfare and productivity, the quality and safety of animal products, compliance with environmental requirements, sustainable use of resources, biodiversity conservation and ethical principles; integrate professional knowledge with the fundamentals of business, management and social sciences; and understand the impact and significance of decisions within the context of the One Health concept and public well-being;

11.4. apply knowledge in accordance with occupational safety and health, ergonomics, occupational hygiene, fire safety, environmental protection and veterinary requirements;

11.5. organise and conduct experimental research, analyse and critically evaluate new scientific knowledge, generate new ideas, and plan strategies for their implementation when designing and carrying out animal-related activities.

12. The studies shall prepare students to independently maintain and further develop their professional competence through lifelong learning, to address future challenges and assume responsibility for the outcomes of their professional activities when solving professional problems in an interdisciplinary environment. Graduates shall possess broad erudition and be able to communicate effectively, fluently and persuasively, both orally and in writing, in at least one foreign language with specialists in their field and other stakeholders, discuss issues related to professional practice, disseminate ideas publicly and provide professional advice.

13. The principal areas of professional activity of an Animal Sciences specialist are:

13.1. to engage in activities characterised by a broad scope of content, including, but not limited to, investigating, analysing, assessing, planning, organising, controlling, managing and modernising processes related to activities in the field of Animal Sciences;

13.2. to carry out research, expert assessment and consultancy activities in the fields of animal sciences and feed production;

13.3. to ensure the safe production of animal products and/or the provision of safe services and/or the performance of service activities involving animals, applying appropriate methodologies while taking into account ethical, social, economic and environmental factors;

13.4. to implement legal requirements related to animal welfare and animal protection, environmental protection, and the quality of products and services;

13.5. to manage activities related to the production of animal-derived raw materials and the quality control of animal products, as well as businesses and/or activities involving companion animals, animals used in animal-assisted therapies, service animals and other animal-related activities;

13.6. to address issues related to animal welfare, environmental protection, sustainable and competitive production, the rational use of resources and biodiversity conservation in an ethical and professional manner.

CHAPTER III
GENERAL AND FIELD-SPECIFIC LEARNING OUTCOMES

14. Through studies in the Animal Sciences study field, students shall acquire and develop professional knowledge, as well as personal, social, research and field-specific competences.

15. The learning outcomes for different cycles of study specified in the Descriptor do not constitute the learning outcomes of a specific study programme or course unit. They shall be adapted, specified and aligned with the learning outcomes of the study programme being designed or delivered and shall contribute to the development of the content and implementation of the study programme. The learning outcomes of course units shall be formulated in such a way as to ensure the achievement of the learning outcomes of the respective study programme.

16. Upon completion of first-cycle university studies in the Animal Science study field, the following learning outcomes shall be achieved:

16.1. Knowledge and its application. A person:

16.1.1. has knowledge of the theories, concepts and principles of fundamental and applied sciences applied in fields of professional activity for the organisation and implementation of animal-related activities, including technology management and equipment maintenance, as well as the creation of environments necessary for recreational activities, aesthetic and social interaction needs, and animal-assisted therapy activities;

16.1.2. understands and creatively applies social, environmental, economic, legal and ethical principles and methods for planning and organising animal-related activities;

16.1.3. understands, applies and evaluates various concepts, theories and methods of physiology, anatomy, animal nutrition, genetics, welfare and ethics, as well as environmental, animal husbandry and veterinary requirements when planning and organising animal-related activities;

16.1.4. has knowledge of animal housing conditions and/or production technologies and their management principles, is able to select the most appropriate technical and/or technological means in accordance with national and international needs and apply them in various fields of professional activity; is able to perform technical equipment maintenance;

16.1.5. understands the possibilities for applying the results of fundamental and applied research in practice to improve animal housing conditions and/or production technologies and ensure animal welfare; applies, in accordance with ethical principles, design methods and approaches to animal-related business activities; selects appropriate conditions and/or technologies for animal

breeding, husbandry and the provision of a suitable living environment; and systematically addresses problems related to the management of animal business systems;

16.1.6. understands, organises and implements animal monitoring, disease prevention and animal care measures;

16.1.7. has knowledge of and, in professional practice, complies with occupational safety and health, ergonomics, occupational hygiene, fire safety, environmental protection, biosecurity, animal keeping and/or use, food safety and quality, and veterinary requirements.

16.2. Research skills. A person:

16.2.1. is able to conduct research and/or experiments under field conditions and in controlled systems, and to collect and analyse data required for solving scientific and practical problems, implementing innovations, and developing animal-related activities;

16.2.2. is able to carry out and analyse market research when planning the development of animal-related activities;

16.2.3. is able to select and apply methods for testing water and feed quality;

16.2.4. is able to process, store and prepare research material in accordance with bioethical requirements in laboratory and field conditions when conducting in vivo studies;

16.2.5. is able to properly evaluate and interpret data, apply the latest methods and tools for information collection, analysis and assessment, conduct research, and implement environmentally friendly technologies.

16.3. Field-specific competences. A person:

16.3.1. is able to assess animal resources, their status, and the principles of their management and utilisation, taking into account social, economic, political and legal systems in global, regional and local contexts;

16.3.2. is able to responsibly, sustainably and safely plan, organise and carry out animal-related activities, taking into account the assessment of risks to the environment and stakeholders and applying the relevant legal framework;

16.3.3. is able to plan, organise and implement the adaptation and application of animal breeding and husbandry conditions and/or animal production technologies, as well as the maintenance of technological processes and equipment for scientific research, development projects, studies and the introduction of innovations;

16.3.4. is able to assess the physiological condition of animals and to plan, organise and carry out animal behaviour monitoring, disease prevention and animal care activities;

16.3.5. is able to organise and carry out water quality and feed supervision and monitoring by selecting appropriate organisational and methodological measures and integrated technologies.

16.4. Social skills. A person:

16.4.1. is able to communicate effectively and work independently and/or in teams with specialists and the public in addressing tasks related to the organisation of animal-related activities, technology management, equipment maintenance, environmental development, project preparation and project implementation;

16.4.2. is able to express ideas fluently and persuasively, both orally and in writing, in Lithuanian and at least one foreign language, communicate effectively in professional and community settings when presenting activities and their results, and discuss current issues related to animal-related activities in professional and interdisciplinary environments;

16.4.3. demonstrates leadership and acts in accordance with the principles of professional ethics, citizenship and social responsibility;

16.4.4. understands the environmental, legal and sustainability aspects of decisions made in animal-related activities, as well as the responsibility for the results of his or her professional activities and their impact on the environment.

6.5. Personal skills. A person:

16.5.1. is able to study independently, improve and develop professional skills, and plan further personal development through formal and non-formal learning, in response to changes in professional practice in the field of animal sciences and advances in knowledge and technologies;

16.5.2. is able to independently identify and study the latest academic and scientific literature and make use of other contemporary sources of information and technologies;

16.5.3. is able to critically evaluate his or her own professional practice and that of colleagues, and understands the moral responsibility for the impact of his or her activities and their outcomes on society, economic and cultural development, public well-being and the environment;

16.5.4. is able to plan activities and manage workload, and to organise his or her work and learning processes.

17. Upon completion of second-cycle university studies in the Animal Science study field, the following learning outcomes shall be achieved:

17.1. Knowledge and its application. A person:

17.1.1. has knowledge of the latest research-based principles of biology, ecology, genetics, management, economics, animal welfare and protection, and environmental protection, as well as their application in animal-related fields; seeks to understand and evaluate theoretical and practical phenomena of professional activity from a comprehensive and systemic perspective in new and/or unfamiliar environments;

17.1.2. possesses up-to-date knowledge in animal sciences based on the results of fundamental and applied research, providing a basis for the development and/or application of original ideas in the context of research, or for the introduction of innovations in the practical activities of animal-related fields, while organising and developing businesses and/or other activities;

17.1.3. possesses systematic knowledge of classical and innovative approaches, grounded in scientific research and professional practice, related to animal breeding, genetic evaluation, analysis of animal genetic traits, marketing, management, human resource management and business development, and is able to apply such knowledge while critically evaluating policies related to animal-related activities in national and international contexts, and while addressing issues of business establishment and management, sustainable use and conservation of genetic resources in new or unfamiliar environments;

17.1.4. understands, is able to appropriately select and apply statistical analysis and modelling methods in animal-related fields when managing system efficiency, understands the capabilities and limitations of such methods, is able to interpret and predict research results, assess the status of resources, and identify monitoring approaches, sustainable use practices, and conservation measures and methods.

17.2. Research abilities. A person:

17.2.1. is able to organise research into the quantitative and qualitative productivity potential of the field of Animal Sciences; generate, analyse and critically evaluate scientific and practical ideas in animal-related fields; formulate arguments and assumptions; apply predictive models for assessing the efficiency of activities; introduce innovations; and conduct fundamental, applied and interdisciplinary research in national and international contexts;

17.2.2. is able to organise the search, collection and systematisation of relevant information; evaluate and use information obtained from various sources, including operational information required for planning and conducting research in animal-related fields, implementing innovations, making alternative decisions and assessing their potential environmental impact;

17.2.3. is able to integrate knowledge from fundamental and applied sciences, as well as innovative research methods and technologies, when evaluating the ecological and economic impacts of animal production and/or husbandry systems on the environment and making decisions for the management of complex situations;

17.2.4. is able to identify and analyse problems in the field of Animal Sciences, plan and propose solutions for addressing them by combining theoretical and practical knowledge, applying pragmatic insights and alternative approaches, and forecasting potential environmental impacts;

17.2.5. is able to investigate and improve animal nutrition processes and technologies;

17.2.6. is able to conduct market assessment and forecasting studies related to the development of animal-related activities.

17.3. Field-specific competences. A person:

17.3.1. is able to critically assess and address atypical and complex tasks related to animal-related activities by developing and implementing cross-sectoral/interdisciplinary innovations in the fields of animal breeding and husbandry and organising their socially responsible application;

17.3.2. is able to critically and comprehensively assess the complexity, interaction and interrelated nature of issues in Animal Sciences and other agricultural fields, as well as the implementation of solutions to such issues in an interdisciplinary context; is able to apply acquired knowledge, competences and skills in various areas of development of animal-related activities;

17.3.3. is able to appropriately select and apply the methods and approaches used in designing animal-related activities, determine suitable animal breeding and husbandry conditions, and systematically address issues related to activity management;

17.3.4. is able to appropriately select and effectively employ strategies from various fields related to animal-related activities; effectively apply acquired theoretical and practical knowledge and competences when organising animal breeding, selection and other programmes; improve disease prevention measures and technologies; and objectively assess decisions from environmental, legal, social, economic, ethical and sustainability perspectives;

17.3.5. effectively applies knowledge from other agricultural fields when planning, controlling, regulating, providing expert assessment and substantiating the use of natural resources, product production and other economic activities, while ensuring the integrated application of the principles of sustainable use and protection of natural resources in the development of animal-related activities;

17.3.6. is able to appropriately select and use laboratory equipment, experimental systems, technologies, information and data sources in order to properly plan and conduct scientific experiments; investigate and improve animal husbandry conditions and/or animal production technologies; critically evaluate the results obtained; and prepare conclusions and recommendations for the implementation of innovations in professional practice.

17.4. Social competences. A person:

17.4.1. is able to communicate effectively, fluently and persuasively, both orally and in writing, in at least one foreign language with specialists from various fields of Animal Sciences and other stakeholders; discuss current issues related to technological and/or business development, the development of professional activities, the organisation of experimental research and the implementation of innovations; disseminate ideas, prepare project reports, provide consultancy services and perform expert assessment in animal-related fields;

17.4.2. is able to organise and conduct scientific research both independently and in groups, including interdisciplinary teams; assess the effectiveness of group work; analyse the principles of team formation, delegation and management of tasks; and act in accordance with professional ethics and civic responsibility in national and international contexts;

17.4.3. is able to independently organise the preparation of practical activity plans and projects within a team and an interdisciplinary environment, lead their implementation, and assume responsibility for the results of professional activities and their impact on the environment and society;

17.4.4. is able to apply a holistic approach to professional decision-making, balancing costs, benefits, safety, quality, reliability, ethics and environmental impact; applies the principles of humanistic values and professional ethics; understands the environmental, legal, social, economic and sustainability implications of decisions; and applies this understanding when planning and implementing scientific research in various animal-related fields.

17.5. Personal competences. A person:

17.5.1. is able to think creatively, strategically and logically; formalise and model data and information; generate new ideas; independently formulate conclusions and rational arguments; and make decisions in complex and uncertain situations;

17.5.2. is able to demonstrate critical, systemic and strategic thinking skills when making innovative decisions based on the assessment of opportunities and consequences, while recognising

moral responsibility for the impact of their activities and their outcomes on social and economic well-being, animal welfare and the environment;

17.5.3. is able to critically evaluate and select qualitative and quantitative information and data from national and international sources for use, and to carry out assessments when faced with conflicting and/or insufficient information;

17.5.4. is able to independently initiate, organise and lead professional activities, perform leadership functions, pursue career development in a purposeful manner, continuously enhance professional competence through lifelong learning, and engage in work and communication in national and international environments;

17.5.5. is able to systematically develop essential personal qualities, including responsibility, initiative, creativity, innovativeness, discipline and motivation.

CHAPTER IV
TEACHING, LEARNING AND ASSESSMENT

18. The delivery of study programmes in the Animal Sciences study field shall be based on the latest scientific achievements and concepts and shall reflect links with other fields of science and study.

19. Study methods shall be effective and diverse, and independent study assignments shall be aligned with the learning outcomes of the study programme and motivate students. The time of students and academic staff, as well as material resources (libraries, laboratories, equipment, information technologies, computer laboratories and other resources), shall be used efficiently.

20. The study process shall promote the concept of lifelong learning, and students shall be prepared and encouraged to take responsibility for their own learning. The study programme, its curriculum and didactic system shall motivate students to make use of additional available resources and sources of knowledge, while encouraging academic staff to introduce innovations into the study process.

21. Academic staff shall understand the didactic concept of the study programme and possess competences that meet the requirements of the study programme. They shall be capable of designing a course unit (module) syllabus in accordance with the study programme to which the course unit (module) belongs, basing its content on the latest research findings. Academic staff shall understand the links between the course unit (module) taught and other study fields and scientific disciplines, adopt a multidisciplinary approach to problem-solving, be able to improve the content of teaching and learning, select appropriate student-centred learning methods and methods of assessing student achievement, and develop effective study methods.

22. The selection of teaching and learning methods must ensure opportunities for students to develop and acquire the intended competences. The following teaching and learning methods may be applied in the study process:

22.1. traditional and interactive lectures; lectures delivered by guest teachers (practitioners); study visits, seminars, practical classes and/or laboratory work; animal welfare assessment systems and their application; methods for the management and modelling of technological processes used in animal husbandry; analysis of methods for solving environmental protection problems; information search and synthesis assignments, report presentation packages; consultations and virtual learning arrangements where part of the studies is delivered through distance education;

22.2. epistemological methods intended to develop cognitive abilities and provide knowledge (for example, knowledge acquisition and transfer through academic practical sessions), as well as knowledge comprehension methods (for example, narration, discussion, illustration, demonstration, observation, collaborative learning and situation modelling). These methods shall be implemented through the lecture format;

22.3. activity-based methods intended to develop field-specific, social and personal skills (for example, discussion, research activities, individual or group assignments and projects, work with simulation models, and other methods). These methods shall be implemented through practical

classes, laboratory work and seminars conducted in small groups (including activities related to the design of projects in animal-related fields);

22.4. methods that stimulate independent learning (for example, reflection, case analysis, problem-solving, simulation, educational games, experiential learning, individual problem identification, and monitoring and self-monitoring methods);

22.5. independent study shall be primarily based on research-oriented methods (for example, information retrieval, reflection, analysis and synthesis of information, analysis of completed activities, application of a specific research method, data interpretation, and other methods);

22.6. monitoring and self-monitoring methods shall provide both academic staff and students with feedback on professional preparation. These methods shall enable students to conduct more in-depth applied research, implemented through course papers and the final thesis.

3. Study programmes, particularly at the second-cycle level, shall include research projects, preferably carried out in cooperation with potential employers or social partners, fostering the development of professional, personal, social, research and field-specific competences. The programme's didactic system shall both encourage and create opportunities for the application of analytical and practical skills. It is recommended that the results of research projects form the basis for the final thesis; however, each higher education institution and the developers of the study programme may determine how this aspect is addressed in accordance with the structure of the particular study programme.

24. The content of research projects in second-cycle studies shall be oriented towards solving scientific, technological and methodological problems, which may have an applied character. The didactic system of the study field shall ensure the development of student creativity, analytical and metacognitive abilities, enabling students to apply their knowledge in practice, identify tactics and strategies for problem-solving within the scope of available technical and/or technological resources, monitor and control the implementation of assigned tasks, and reflect on their activities through self-assessment of newly acquired knowledge and competences.

25. Student activities carried out during practical training (in first-cycle studies) or research projects (in second-cycle studies) in animal-related fields shall be related to and/or organised within institutions engaged in the application, development and advancement of such activities. Student training, cooperation between academic staff and workplace supervisors of practical training or research projects in the host organisation, the preparation of individual student assignments and assistance in their implementation, analysis of the processes of the host organisation, and participation in the assessment of students' reports are recommended components of practical training and research projects.

26. The studies shall ensure the preparation of future specialists in the Animal Sciences study field who meet labour market needs. Therefore, study programmes shall develop self-management and self-assessment competences that strengthen the link between theory and practice (for example, theoretical courses should be complemented by the development of practical skills) and promote the dissemination of good practice. Examples include students publicly presenting completed projects at conferences and during practical training, providing proposals for the improvement of practical training arrangements, and sharing their professional expectations and achievements; graduates sharing professional experience and providing suggestions for improving the study process; and social partners participating in discussions on the improvement of the content of professional activities.

27. The assessment of students' knowledge and competences shall be reliable and based on clearly defined and pre-announced criteria and shall take into account the conditions under which the work is performed and the resources available. Assessment criteria shall demonstrate the extent to which the level of knowledge and competences acquired by the student corresponds to the intended learning outcomes defined in the study programme. Students shall be provided with opportunities to participate in decision-making regarding the methods and criteria for assessing the achievement of learning outcomes, as well as the quantity and scope of assignments.

28. At the beginning of a course unit (module), the lecturer shall introduce students to the study objectives, assessment procedures and the student achievement assessment system approved by the higher education institution, indicating the assessment criteria and the weighting of the components of the summative assessment.

29. Student learning outcomes shall be assessed using a criterion-referenced ten-point grading scale. When assessing students' academic achievement, academic staff shall adhere to the principles of objectivity, clarity, impartiality, mutual respect and goodwill. Student participation in the assessment and self-assessment process shall be encouraged.

30. The assessment of student achievement may include cumulative assessment (a type of assessment used to aggregate and summarise student learning outcomes), panel assessment (a type of assessment in which students are examined by a panel of competent specialists in the field of Animal Sciences, including researchers, professional practitioners and representatives of social partners), diagnostic assessment (a type of assessment used to determine a student's initial level of knowledge and competences or readiness for a particular stage of studies), formative assessment (a type of assessment used to critically evaluate and adjust the learning process), and summative assessment (a type of assessment applied upon completion of a course unit, module or study programme in order to assess a student's or learner's knowledge, competences and values).

31. All skills and competences described in the learning outcomes shall be assessed using methods that demonstrate that students possess (have acquired) those skills and competences. Taking into account the specific nature and level of the study programme (first-cycle and second-cycle university studies), academic staff may choose from a variety of assessment methods, including oral or written examinations, tests, written in-class assessments, problem-solving tasks, problem analysis, colloquia, written assignments (literature reviews, reports, essays and similar work), oral and poster presentations, laboratory reports and their defence, practical training reports, their presentation and defence, individual or team project reports, their presentation and defence, research project reports, their presentation and defence, final theses, their presentation and public defence, learning portfolios, self-assessment, peer assessment and other methods, and shall be familiar with the methodological aspects of their application.

Students may also be assessed for participation in project activities and for scientific publications. In addition, the search for new integrated assessment methods shall be encouraged.

32.An important component of student achievement (learning outcomes) assessment is the provision of feedback to students regarding their achievement (learning outcomes) and the justification of assessment decisions, as well as the feedback provided by students to academic staff, with the aim of improving and enhancing the effectiveness of the study process and the quality of teaching. Students shall receive information on their completed work in a timely manner. Assessment shall be based on clear criteria and accompanied by constructive comments. Students shall be provided with opportunities to discuss all aspects of their studies with academic staff (assessors), including their final grade.To ensure the quality and accessibility of studies through the use of modern technological and communication tools, it is recommended that higher education institutions establish and implement approved procedures for electronic remote examination.

CHAPTER V
REQUIREMENTS FOR THE IMPLEMENTATION OF STUDY PROGRAMMES

33. The study programme shall be subject to continuous improvement and updating and shall reflect developments in science, applied technologies, and the relevant study field. The providers of the study programme shall ensure that newly emerging topics based on scientific achievements are incorporated into the study programme, enabling students to become acquainted with scientific and practical innovations during their studies and encouraging them to identify future development prospects within the study field.

Opportunities shall be provided for academic staff and students to participate in academic mobility activities, and international knowledge and experience shall be integrated into the study process. Students shall be ensured recognition of positive learning outcomes achieved during periods of academic mobility.

34. The objective of the study programme must be clear, and the learning outcomes must be achievable and reflect the distinctiveness, specificity and scope of the programm.

35. General requirements for the academic staff of study programmes in the Animal Science study field:

35.1. The foundation of study programmes is competent and qualified academic staff, who create the overall academic environment and serve as role models for students. They shall be selected and evaluated on the basis of the following criteria: practical teaching experience; interest in and active contribution to the development of effective and advanced teaching methods; level of research activity; ability to communicate fluently in at least one foreign language used for international cooperation; recognition within professional, academic and other communities; participation in professional development programmes and placements; and professional insight.

35.2. Academic staff must keep abreast of scientific developments and participate in research activities and project implementation. They must be able to provide appropriate guidance to students regarding study plans and career development, and must be familiar with and understand the criteria on the basis of which study programmes are accredited.

35.3. In first-cycle university studies, researchers must teach no less than 50 per cent of the credits of each study programme. It is recommended that study field course units be taught by academic staff with research experience in the relevant study field related to the course unit taught, as well as by specialists possessing practical experience (working in the field of Animal Sciences) or theoretical (research) experience in other fields of science.

35.4. In second-cycle studies, researchers must teach no less than 80 per cent of the credits of each study programme. The remaining share may be taught by practitioners who have acquired at least three years of professional teaching experience during the preceding seven years. Academic staff holding the position of professor must teach no less than 20 per cent of the scope of study field course units.

36. Requirements for the completion of studies in the Animal Science study field:

36.1. Study programmes shall be completed through the assessment of student competences demonstrated in the preparation and defence of a final thesis (project).

36.2. First-cycle studies shall be completed with the public defence of a final thesis. The final thesis shall be based on independent research and the application of knowledge and shall demonstrate competences corresponding to the objectives and learning outcomes of the study programme. Through the final thesis, the student shall demonstrate the level of knowledge and understanding attained, the ability to analyse the selected topic, evaluate previously conducted research by other authors, learn independently and conduct research, describe the research carried out, and formulate research conclusions and recommendations clearly and with proper justification in accordance with the requirements approved by the higher education institution.

36.3. The Master's final thesis shall be based on independent scientific research and the application of knowledge and shall demonstrate competences corresponding to the objectives of the study programme. Through the final thesis, the student shall demonstrate the level of knowledge and understanding attained, the ability to analyse the selected topic, evaluate previously conducted research by other authors, learn independently and conduct research, provide interpretations of research findings, describe the research conducted, and formulate research conclusions clearly and with proper justification (the inclusion of practical recommendations is recommended), taking into account the data obtained through scientific research and in accordance with the requirements approved by the higher education institution.

37. The final thesis assessment committee shall consist of competent specialists in the study field, including researchers, professional practitioners and representatives of social partners. It is

recommended that the chairperson of the committee be a representative of another higher education institution.

38. The number, equipment and layout of classrooms, laboratories and other facilities and spaces used for teaching and independent study shall be adequate for the needs of the studies and comply with occupational safety and health requirements as well as hygiene requirements.

39. Laboratory equipment and apparatus required for specialised teaching or research laboratories, as well as laboratory facilities, shall be consistent with the intended learning outcomes of the study programme. Laboratories shall be equipped with appropriate, high-quality instruments and devices. It is recommended that the university maintain practical training facilities and/or experimental centres or conclude long-term cooperation agreements with social partners.

40. The number of computers available in computer laboratories and teaching laboratories shall correspond to the needs of students enrolled in the study programmes. Computers shall be equipped with software for word processing, quantitative and qualitative data processing and analysis, as well as innovative educational software.

41. Libraries must hold copies of textbooks, books, methodological publications, journals and other literature in Lithuanian, English and other languages relevant to the course units taught within the Animal Science study field. The quantity of such literature must correspond to the needs of students. Libraries must be equipped with a sufficient number of computers with appropriate software (including internet access to international databases, literature catalogues and search systems), and their number must satisfy at least the minimum needs of users.

42. Information related to studies (timetables, study plans, descriptions of course units (modules) and other relevant information) shall be made available on the website of the higher education institution; all study materials must be accessible to students.

43. Opportunities to pursue studies must be provided for students with disabilities and/or special educational needs.

44. Requirements for practical training in the Animal Science study field:

44.1. Practical training is an integral and compulsory part of all study programmes, during which the knowledge, competences and skills acquired through the programme's core and specialised studies are consolidated, applied and further developed through professional practice.

44.2. The scope of practical training in first-cycle study programmes shall comprise no fewer than 15 credits. In second-cycle study programmes, it shall comprise no fewer than 5 credits. The place of practical training may be linked to the topic of the final thesis and may correspond to the types of workplaces for which graduates are being prepared.

44.3. Practical training shall be organised in accordance with the practical training procedures established by the higher education institution, which shall define the requirements for practical training, specific training tasks, expected outcomes and the assessment system, support provided to the student during practical training, as well as the criteria according to which the skills acquired by the student during practical training at the relevant level are identified and assessed.

44.4. A reflective approach to practical training assignments is recommended (keeping a diary, maintaining a logbook, preparing a reflective analytical review of experience gained during practical training in the training report, and similar activities).

44.5. Practical training supervisors and social partners should be involved in improving the content and organisation of practical training assignments and in the assessment of trainees.

44.6. Practical training programmes shall be designed to enhance students' professional experience by linking their academic preparation with professional practice competences. Practical training shall be organised in such a way that, throughout the study period, students progressively develop professional competences, advancing from the role of an observer to the independent performance of functions under the supervision of a practical training supervisor.

44.7. The higher education institution shall provide students with a list of potential practical training placements with which cooperation agreements have been concluded. Practical training may be undertaken in private and/or public organisations in Lithuania and abroad operating in the fields of production animals, companion animals, animals used in animal-assisted therapies, and aquatic

animal-related activities. Subject to approval by the higher education institution, a student may independently identify a practical training placement that meets the institution's requirements. Once a placement institution has been selected, a tripartite agreement shall be concluded between the student, the higher education institution and the practical training provider. Students may also undertake practical training abroad through student exchange programmes.

44.8. Upon completion of practical training, the student shall submit and present a practical training report, consisting of a written paper in which the tasks performed during the practical training period and the results obtained are presented and analysed.

45. From the very beginning of their studies, students shall be encouraged to participate voluntarily in various projects, engage in student scientific societies and other research activities, participate in seminars and conferences, prepare publications, and systematically and purposefully develop their personal and field-specific competences.

46. Academic support for students shall be provided in accordance with the procedures established by the higher education institution. In the first year of studies, it is recommended to include an "Introduction to Studies" course unit, providing knowledge about the specific features of the implementation of the study programme, its objectives, tasks, aims and learning outcomes, as well as student achievement assessment. Students shall also be advised on career opportunities.

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