

LIETUVOS SVEIKATOS Mokslų universitetas



EAEVE Self Evaluation Report, 2021

Lithuanian University of Health Sciences Veterinary Academy, Faculty of Veterinary Medicine KAUNAS

Based on the Standard Operating Procedure (SOP) 2019 as amended in September 2021

28 February – 04 March 2022

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INTRODUCTION

In 2010, the Parliament of the Republic of Lithuania (LR) reorganized the Lithuanian Veterinary Academy and Kaunas University of Medicine by merging them into the **Lithuanian University of Health Sciences** (hereinafter – LSMU, University). LSMU is the largest institution of higher education and research of health specialist education in Lithuania (LT), the only one in which veterinarians are trained. There are seven faculties and four research institutes at LSMU, and 168 structural subdivisions operate to ensure the unity, social, cultural, and other needs of science, studies, and clinical and veterinary practice. The University community consists of 28,128 individuals. LSMU has 2,808 employees, 7,470 students, residents, and doctoral students, 1,098 of them study at the **Faculty of Veterinary Medicine** (hereinafter – **VEE**). The University is the founder of five public institutions. Two of them, the LSMU Center of Practice and Experimentation (PMBC) and the LSMU Baisogala Center of Animal Husbandry, conduct practical veterinary studies. The LSMU governing bodies are formed according to the principle of parity and representation of all the main areas of the University's activities, which guarantees the unity and uniqueness of science, studies, human and animal health care at the regional and national levels.

VEE is the second largest faculty among seven other faculties of the University. VEE has an 85-year tradition of teaching Veterinary Medicine (hereinafter - VM). The VEE autonomy is assured in the process of implementing specific programmes necessary to ensure the quality of studies. The VM study programme is one of the most popular programmes in LT based on the secondary school graduates' study programme preferences. The number of state-funded places is determined annually by the LR Government. This number has risen up to 114 undergraduate places per year for more than 610 entrants in recent years. Considering the growing need for specialized veterinarians, in 2006, the LR Government passed a decision granting LSMU VEE the right to execute the VM residency studies. Also, VEE still executes the Veterinary Food Safety and Food Science programmes covering public health and agriculture studies. The VM studies are unique, and VEE strives to meet the highest quality standards. Therefore, VEE draws up consistent and effective plans, takes actions, evaluates the achieved results, with the active participation of all university stakeholders (students, lecturers, staff, administration), defines and sets criteria for progress, performs graduate career monitoring, and the surveys of external partners and alumni. The regularly performed accreditation of the ongoing programme by the European Association of Veterinary Educational Institutions (EAEVE) and the National Center for Ouality Assessment in Higher Education (SKVC), is one of the essential links in the quality assurance chain. VEE has been a member of EAEVE since 2002.

The international and national experts visited VEE and evaluated the quality of the VM study programme. The evaluation results were as follows: SKVC 2011 (accredited), EAEVE 2012 (not approved), EAEVE 2015 (conditionally approved), EAEVE 2019 (approved), EAEVE Quality Assurance (hereinafter – QA) 2019 (accredited). Considering the recommendations of the experts, many organizational, functional, structural, and QA changes have been made since the first EAEVE visitation in 2012. The structure and content of the VM curriculum are being consistently updated following the EU Directive 2005/36 / EC as amended by Directive 2013/55 / EU, the standards of the National and EU System of Evaluation of Veterinary Training (ESEVT) and the given recommendations of the experts. The quality assurance implementation cycles in the ten interrelated areas and the progress made are presented in this report.

The following summary presents the main improvements that have been made since the last EAEVE visitation in 2019:

- 1. A new student-centred, integrated VM curriculum, based on the ECCVT Day One Competencies (DOCs) and learning outcomes since the 2020 September has been implemented. Feedback given by the EAEVE evaluation team in 2019 has been included the revised and updated curriculum.
- 2. A digital Clinical Rotation Logbook has been implemented.
- 3. The study programme has been finalized with an OSCE exam since 2020.
- 4. The features and options provided by Moodle have been used to the maximum in the studies.
- 5. Student representatives have been included in the Biosecurity and Biosafety Committee.
- 6. A mandatory Biosecurity and Biosafety training for the academic and support staff has been implemented.
- 7. New modern diagnostic equipment for the VEE Veterinary Teaching Hospitals (hereinafter VTHs) has been purchased.
- 8. The large and small animal isolation facilities have been newly installed.

- 9. The student changing rooms have been renovated in the Large Animal VTH.
- 10. A laundry providing work clothes washing for the students and located in the VEE territory has been opened.
- 11. The VM Simulation Center (hereinafter VMSC) has been relocated to new premises equipped with digital technology to provide self-learning opportunities. The Center is being increasingly integrated into the VM Curriculum.
- 12. The renovation of the VA library has been completed. The entrance to the building has been adapted for the disabled.

13. A new strategy of the Faculty of Veterinary Medicine is currently being prepared by VEE. *For further details please see Standard 1.7.*

Since the last evaluation in March 2019, two years have passed. The 2020 COVID-19 pandemic has slowed down some of the planned strategic work. However, the LSMU Council made necessary decisions and created the conditions for starting the development of a new VTH for Small Animals and the infrastructure renovation of the Large Animal VTH. The related contract works have been already begun.

Another ongoing strategic project is the modernization of the PMBC practical training base. The PMBC development and expansion were discussed in the LSMU Council in 2021, and the preliminary decision on this matter is planned for January 2022.

Version and date of the ESEVT SOP which is valid for the Visitation.

The Standard Operating Procedure (SOP) 2019 as amended in September 2021, adopted by the EAEVE General Assembly in Torino on September 30, 2021.

AREA 1. OBJECTIVES, ORGANIZATION AND QUALITY ASSURANCE (QA) POLICY

Standard 1.1: The VEE must have as its main objective the provision, in agreement with the EU Directives and ESG recommendations, of adequate, ethical, research-based, evidence-based veterinary training that enables the new graduate to perform as a veterinarian capable of entering all commonly recognized branches of the veterinary profession and to be aware of the importance of lifelong learning. The Establishment must develop and follow its mission statement which must embrace all the ESEVT Standards.

Description of the mission statement and the objectives.

The Mission of the VEE published in the Strategic Development Guidelines (hereinafter – the Guidelines) of VEE (*Annex 1*) is the development of a healthy and sustainable environment for animals and humans through educated specialists in the veterinary medicine, food science, and food safety fields, orientated to research, practice, and innovations and is in line with the LSMU Mission. The aim of VEE is to implement the principle of unity of studies, science, and practical activities by training highly qualified veterinarians, applying the studies based on research and evidence and technologies so that the competencies acquired by graduates meet the expectations of employers and the strategic objectives of the state; and to create conditions for and promote the growth of professional competence of academical staff and veterinarians through continuing education. Highly qualified staff, appropriate infrastructure, and equipment, as well as the implemented study QA policy, are a guarantee for the implementation of this objective, ensuring the transfer of knowledge and practical skills, as well as science-based teaching and practical activities.

Description of how the VEE ensures that the provided core curriculum enables all new graduates to perform as a veterinarian capable of entering all commonly recognised branches of the veterinary profession.

A six-year integrated VM study programme with the structure and content based on the EU Directive 2005/36/EC as amended by the <u>Directive 2013/55/EU</u>, <u>Descriptor of the Study Field of Veterinary</u> (DSFV), <u>Qualification Requirements for the Professional Standard of Veterinarians</u> and the requirements of the ESEVT SOPs, Annex 2. The programme provides high-quality, research- and evidence-based, ethical veterinary studies. The graduates acquire general and specific knowledge and skills in animal production, pathology, epidemiology, food safety, quality, public health and veterinary management, and specialized clinical skills while studying clinical sciences and practicing with all common domestic animal species. Theoretical knowledge and practical skills are strengthened during the clinical rotation, clinical practice and the practices of production and companion animals, food hygiene, public health. The knowledge and skills acquired are affirmed by the intermediate and final Objective Structured Clinical Examination (OSCE) examinations. The prepared and defended master thesis proves that the graduate has developed scientific,

creative, and critical thinking. The learning outcomes are regularly updated and supplemented, considering the changes in the list of subjects and learning outcomes defined in the above-mentioned legal acts, to ensure the relevance of the curriculum based on professional competencies and skills that meet the needs of the State, society, and the labor market. All necessary conditions have been created to implement the study programme and achieve the intended results, including the essential infrastructure and qualified personnel, excellent access to scientific information, well-prepared documents regulating the studies. The participation of the internal and external stakeholders representatives, external evaluation agencies, the representatives of the State Food and Veterinary Service (SFVS) and the Association of Veterinarians of Lithuania (LVGA) also significantly contribute to the quality management of the curriculum and study process. All above shows that the VM curriculum proposed by VEE ensures the ability of graduates to perform as a veterinarian capable of implementing the One Health principle in their professional activities such as diagnosing diseases and treating sick animals, applying preventive measures, performing disease and food control, passing on knowledge to others, solving complex veterinary problems, using skills and knowledge on-site, in social and independent activities. VEE ensures that the graduates maintain research-based professional competence and/or continue the studies in the VM residencies and/or doctorate and motivates them to keep improving through lifelong-learning programmes. The employment data shows that the VM graduates are employed in all commonly recognized branches of the VM profession (Annex 2).

Standard 1.2: The VEE must be part of a university or a higher education institution (HEI) providing training recognised as being of an equivalent level and formally recognised as such in the respective country. The person responsible for the veterinary curriculum and the person(s) responsible for the professional, ethical, and academic affairs of the Veterinary Teaching Hospital (VTH) must hold a veterinary degree. The decision-making process, organisation and management of the VEE must allow implementation of its strategic plan and of a cohesive study programme, complying the ESEVT Standards.

The VEE is the part of the LSMU, which is the largest higher education school for health science specialists in LT, providing the studies at the 6th, 7th, and 8th <u>International Standard Classification of Education Fields of Education and Training</u>. VEE is the only HEI in LT that trains veterinarians.

Official name of the University: (LSMU) Lithuanian University of Health Sciences	Official name of the VEE: Faculty of Veterinary Medicine
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Phone: +370 37 327201	Phone: +370 37 362686
E-mail: rektoratas@lsmuni.lt	E-mail: veterinarijos.fakultetas@lsmuni.lt
Website: <u>https://lsmuni.lt/en/</u>	Website: https://lsmuni.lt/en/structure/veterinary- academy/faculty-of-veterinary-medicine/about-faculty/
Head of the University: Rector Rimantas Benetis , Ph.D. in Medicine, Professor	Head of the VEE: Dean Vita Riškevičienė , Ph.D. in Veterinary Medicine, Professor
University is under official authority of the Ministry of Education, Science and Sports of the RL (LR MESS)	Establishment is under official authority of the Lithuanian University of Health Sciences (LSMU)

Organisational chart (diagram) of the VEE with a brief description of the decision-making process.

The organizational and management charts of LSMU is provided in *Annexes 3* and *4*. The founder of LSMU is the Parliament of the LR. LSMU is supervised by the LR MESS and other institutions authorized by the Government and the Ministry in accordance with the LR Law on Higher Education and Research (LR LHER). LSMU consists of the **Medical Academy** with five faculties and three research institutes and **Veterinary Academy (VA)** with two faculties: Veterinary Medicine (**VEE**) and Animal Sciences, and Research Institute of Animal Sciences. The University is the founder of LSMU **PMBC** and **Baisogala Center**, etc. LSMU has collegial management bodies – the **Council**, the **Senate**, and the sole governing body – the **Rector**, who is elected and appointed by the Council. Every year the Rector submits the annual report of the University to the Council. The Rector is assisted by the **Chancellors** of VA and MA, the **Vice-Rectors** for the Studies, Research and Clinical Medicine, and the **Director of Administration and Finance**. The Rector's orders are mandatory for all LSMU employees and students. The governing bodies are formed following the principles of parity and representation of all the critical areas of the University's activities –

studies, research, human and animal health care. The collegial deliberative body **Rectorate** headed by the Rector deliberates upon the organizational and academic issues and the activities of the University Units. The Rectorate gives recommendations and assists the Rector in the implementation of resolutions of the Council and Senate. The current LSMU management structure covers all stages of studies and research. There is a very straightforward decision-making structure enabling the management of University activities and following the quality of the studies. The issues related to planning the University activities and administration, the distribution of resources, the implementation and QA of study programmes, and research activities are discussed collegially considering the complexity of the issues. These issues are resolved during the meeting sessions of the **Faculties**, **Rectorate**, **Senate**, **and Council** as provided for in the <u>Statute</u> of the University. The Rectorate deliberates upon, and the Senate, representing the University community and students, approves the prepared regulatory documentation. Students can also initiate and prepare some procedures. All documents are endorsed, supported, and the academic community is well informed about their content.



Fig. 1. Organizational and management chart of VEE

Decisions considering the VEE management and activities are made following the principles of collegiality, personal responsibility, and cooperation between administration, academic staff, researchers, students, and external stakeholders. The activities and the policy of VEE (Fig. 1) are under the supervision of the VEE self-governing institution – the VEE Council (Table 1.2.1), and all administrative and representing responsible parties according to the LSMU Statute and the Regulations of VEE are managed by the Dean. The LSMU Senate, based on the VEE Council advice, elects the Dean. The Dean, acting in conjunction with the VEE Council, implements the Resolutions approved by the University Council and Senate and the Rector's orders, prepares ordinances, and, if necessary, initiates the issuance of the Rector's order. Two vice-deans, a VEE international student coordinator and two representatives of the Dean's office staff assist the Dean in coordinating the study QA of the VM programme, reporting, study administration, and other VEE activities. The decrees of the Dean are mandatory for all VEE employees and students. The Dean reports annually to the VEE Council and the Rectorate on the VEE activities.

List of departments/units/clinics with a very brief description of their composition and management (further information may be provided in the appendices).

VEE consists of seven units presented in **Fig. 1.** All VEE Departments, Veterinary Teaching Hospitals (hereinafter – VTHs), Centers and the Institute (hereinafter – Units) organize and conduct the theoretical and practical studies and scientific activities, train scientists and specialists, organize professional development. VEE also has a functional Animal Welfare Center. In addition, the VTHs provide veterinary practice services. It thus provides a clinical study base for students and residents, for the formation of their practical skills, for the diagnosis and treatment of animal diseases, consulting veterinarians and livestock specialists, and farmers. The centers and laboratories of the Units carry out scientific activities are reported to the VEE Council annually. The instructions of the authority are mandatory for all Unit employees of the VEE. The management and activities of the structural Units are defined by the Regulations approved by the Resolutions of the Senate.

The list of the VEE units with a brief description of their composition, the study subjects taught, and their management is presented in *Annex 5*. The study subjects included in the curriculum of the VM programme

are also taught in the units of other University faculties, and they are presented in *Annex 6*. The Dean, the Vice-deans, the Coordinator of international students, the person responsible for the veterinary curriculum, the heads of VTHs, departments, the institute, laboratories, and the VMSC hold a higher education degree in veterinary sciences.

List of the councils/boards/committees with a very brief description of their composition/function/ responsibilities and implication of staff, students and stakeholders (further information may be provided in the appendices).

Table 1	1.2.1.	List o	of the	LSMU	councils ,	/ boards /	committees /	commissions /	working groups
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Name	Composition, Established, Function, Report to					
UNIVERSITY LEVEL						
Council	Eleven members : 5 representatives of the lecturers and researchers employed at the University (2 of them are academic employees of VEE), 1 student representative, 5 members outside the University staff. Members are elected by the representatives of the lecturers and researchers, a student is appointed by the Student Union (SU), and members selected from the candidates of outside the University. Function: Managing body of the University, makes decisions on the University's strategy, operational, financial and future plans, elects the Rector of the University. Reports to the community of the University.					
Senate	49 members: the Rector and the Chancellors of VA and MA are ex officio members, 36 representatives of the University academic employees (11 of them – employees of VEE), 10 student representatives. The Senate forms the <u>Senate College</u> to (re)solve organizational issues. The permanent and temporary <u>Senate Commissions</u> are created to determine and (re)solve the various general and complex problems. Members are elected by the University staff with academic degrees, students are appointed by Student Union (SU), 3 ex officio members. Function: Managing body of the University academic affairs. Reports to the academic community of the University					
Legal and Ethics Commission	7 members: 5 professors from different University Units (1 of them – employee of VEE) and 2 student representatives. Established at the Senate. Function: Investigates and considers the violations of the Provisions of the Code of Ethics for the LSMU community members. Reports to the Senate.					
Commission for Monitoring and Study Quality Assurance (CMSQA)	19 members: The Vice-Rector for Studies, an executive secretary, the Chair of the Study Center (SC), an SC employee appointed by the chair of SC, the representatives delegated by the authorities of the University faculties: 2 of them are the academic employees of VEE, other representatives are from the Center of Postgraduate Studies (PGSC), International Relations and Study Center (IRSC), Research Affairs Department, Career Center, and 3 student representatives delegated by SU. Approved by order of the Rector. Function: Coordinates monitoring, assessment and improvement of the study QA at the University level. Reports to the Vice-Rector for Studies.					
LSMU Admission Commission	Members: Rector, The Vice-Rector for Studies, an Executive Secretary, the Deans of the establishments, a lawyer and a student representative. Approved by order of the Rector. Function: Implements the Students Admission Procedures. Reports to the Rector.					
University Doctoral Admission Commission	Rector, the Vice-Rector for Research, the Vice-Rector for Studies, the Vice-Rector for Clinical Medicine, the Chancellor of VEE, the Chairpersons of the Doctoral Committees, the Head of the Research Center and a Ph.D. student representative. Approved by order of the Rector. Function: Performs Admission to Ph.D. Study Programme in different research fields. Reports to the Rector.					
Residency Committee	Members: Vice-Rectors for Clinical Medicine and for Studies, the Chancellor of VA, the Dean of PGSC, the Deans of the VEE, Medicine and Odontology faculties, and the representatives of the Residency students. Approved by order of the Rector. Function: Organizes the Admission to Residency Studies and (re)solves all the issues framed in the Regulations. Reports to the Rector.					
LSMU Committee for Recruitment and Assessment of Professors and Senior Researchers	12 members: The Rector, the Vice-Rector for Research, the Vice-Rector for Studies, the Vice-Rector for Clinical Medicine, the VA Chancellor, 2 professors from different University Units, 4 representatives of external stakeholders from other LT and foreign universities and a student representative. Approved at the Senate. Function: Selects the candidates for a position of professor and/or senior researcher. Reports to the Rector.					
LSMU Coordinating Commission for Students with Disabilities	14 members: a chairperson is a representative of the Department of Bioethics, 1 representative of SC, a psychologist, 7 representatives of the University faculties (2 of them are academic employees of VEE), 3 representatives of the Rehabilitation Clinic, 1 student representative. Approved by order of the Rector. Function: Coordinates the study process of the students with special learning needs, provides consultations and assistance in obtaining the intended state funding/financial support. Reports to the Vice-Rector for Studies					

Name	Composition, Established, Function, Report to
Student Support Commission	Vice-Rector for Studies, the Deans of all University faculties, a student representative, an Economist, a representative from SC. Approved by order of the Rector. Function: Manages and processes student applications for financial aid grants, considers them, and makes decisions. Reports to the Vice-Rector for Studies
Arbitration Committee for Resolving Disputes Between Students and Administration or Other Employees	Members are 3 representatives of administration appointed by the Rectorate and 3 student representatives delegated by SU. Approved by order of the Rector. Function: Manages the student appeals of disagreements against the decisions made and/or punishing measures applied. Reports to the Rector.
Board of the Bioethics' Center	12 members: the head of the Bioethics department, 3 researchers working in the field of ethics delegated by the department of Bioethics, 7 members delegated by the deans of the University faculties (1 of them is an academic employee of VEE), and 1 student representative. Approved by order of the Rector. Function: Performs an ethical evaluation of scientific and student research. Reports to the Vice-Rector for Studies.
Labor Council	11 members from the University staff (2 of them – employees of VEE). Elected by the LSMU staff. Function: Represents the interests of employees. Reports to the staff of the University
VA and VEE LEVEL	
VEE Council	15 members: The Dean is an ex officio member, 10 representatives of the academic staff and researchers of VEE and 1 representative of the external stakeholders, 3 VM student representatives. Election: Academic staff and researchers are elected by the academic staff of VEE, students are delegated by SU, 1 representative of the external stakeholders is elected by the VEE academic staff, 1 member is ex officio. Function: Supervises the VEE policy and activities. Reports to the VEE academic community .
Committee for Biosecurity and Biosafety of VEE	11 members: 6 academic employees from VEE, 1 representative of the Faculty of Animal Sciences, 2 VM students, the representatives of the LSMU Staff Health and Safety Department (SHSD), and the LSMU Accommodation Service. Established by order of the Rector . Function: Supervises the implementation process of the Biosecurity and Biosafety SOPs at VEE. Reports to the VEE Dean and the Chancellor .
WG for the Preparation of the VEE Guidelines and their Implementa- tion Plan	10 members: The Dean, 6 representatives of the VEE Units, 3 student representatives. Approved by decree of the Dean. Function: Prepares the VEE Guidelines, their implementation plan, and the descriptions of monitoring indicators. Reports to the Council of VEE.
Quality Assurance (QA) Working Group	12 members: Dean's office, the Chairperson of the Study Programme Committee, the Heads of the VEE Units. Approved by decree of the VEE Dean. Function: Monitors the Implementation of the Strategic Plan, collects information and prepares the VEE Report. Reports to the Dean of VEE.
VM Study Programme Committee (SPC)	10 members: a chairperson, 6 academic staff employees from the different VEE Units, 3 student representatives and a representative of the external stakeholders. Approved by order of the Rector on the recommendation of the Dean. Function: Develops, manages, assesses and improves of the Curriculum of the VM study programme. Reports to the VEE Dean and the Vice-Rector for Studies.
VA Committee for Recruitment and Assessment of Lecturers and Researchers of VEE	12 members: 4 professors and senior researchers of VEE delegated by the VEE Council, 3 professors and senior researchers of other LSMU faculties, 4 researchers from other LT universities delegated by the request of the Rector, and 1 student representative. Approved at the Senate. Function: Selects the candidates for a position of an associate professor, lecturer, assistant and researcher. Reports to the Rector.
Doctoral Committee of Veterinary Sciences	9 leading researchers of VEE . Established at the Senate. Function: Assures the Quality of Ph. D. Studies of Veterinary Sciences. Reports to the Vice-Rector for Research.
Commission of Residency	Members are the Head of the VTH and/or department, a Residency Coordinator(s), the Residency Advisors and a Representative of the Resident Students. Approved by order of the Rector. Function: Assures the Quality of Residency Studies and renewals/updates of the residency study programme. Reports to the Dean of PGSC.

Temporary commissions, committees, working groups are formed at the LSMU Senate, by order of the Rector, at the VEE Council, or by the Dean's decree. Complying the <u>LSMU Study Regulation</u> (LSMU SR), these managing groups examine the individual issues upon the receipt of a student's appeal regarding the assessment of study achievements. The Dean's decree forms the Appeal Commission to explore a specific request for appeal.

Description of the formal collaborations with other VEEs.

VEE, developing the internationality of studies and research, cooperates with foreign universities and research institutes that host the studies and research in the field of veterinary medicine (Annex 7). More than 30 inter-institutional agreements have been signed with the foreign universities of Murcia, Madrid, Bern, Hanover, Kagoshima, Latvia University of Life Sciences and Technologies, Estonian University of Life Sciences for part-time studies and internships, and for the lecturers' visits for teaching and professional development purposes. The co-operation agreements have been concluded with the universities of Central Asian countries (Kazakhstan, Tajikistan), where the VEE lecturers exchange and share their experiences. The VEE Units invite lecturers from foreign HEIs for teaching visits to exchange professional knowledge and experience. VEE is a member of the Baltic Network of Agricultural, Forestry, and Veterinary Universities (BOVA). This action ensures close co-operation with the VEE of Estonian and Latvian universities. BOVA plans and organizes short intensive master's and doctoral studies, general courses for lecturers, promotes the development of subjects and professional networks, joint study programmes, and the implementation of collaborative research (including the projects funded by the EU funds). The VM students have the opportunity to participate in the international intensive courses at all of the universities listed above. VEE cooperates with the LT state institutions (SFVS, the National Food and Veterinary Risk Assessment Institute (NFVRAI), etc.) and business enterprises (53 co-operation agreements have been signed). This cooperation provides student internships, financial support, participation in students' career planning, etc. The VEE team of researchers also cooperates with the researchers from other Lithuanian universities (the Kaunas University of Technology and Vytautas Magnus University). In the fields of studies and research, at LSMU, there is also a close co-operation with the faculties of Animal Science, Medicine, Public Health and Nursing. The Academic Mobility Division of LSMU International Relations and Study Center (IRSC) coordinates and administers programmes and projects which allow VEE to invite lecturers from foreign higher education institutions for teaching visits at LSMU.

Name and degrees of the person(s) responsible for the veterinary curriculum and for the professional, ethical, and academic affairs of the VTH.

Person responsible for the	Aistė Kabašinskienė , Ph.D. in	Vice-Dean for the VEE studies
VM Curriculum	Veterinary Medicine, Associate Professor	Head of SPC VM
Persons responsible for the	Birutė Karvelienė , Ph.D. in Veterinary	Head of Dr. L. Kriaučeliūnas Small
Professional, Ethical and	Medicine, Associate Professor	Animal VTH
Academical Affairs of the VTH	Arūnas Rutkauskas , Ph.D. in Veterinary Medicine, Associate Professor	Head of Large Animal VTH

Standard 1.3: The VEE must have a strategic plan, which includes a SWOT analysis of its current activities, a list of objectives, and an operating plan with a timeframe and indicators for its implementation.

Summary of the VEE's strategic plan with an updated SWOT analysis.

The Guidelines of VEE and their implementation Plan (hereinafter – the Plan, *Annex 1*) following the <u>LSMU Strategic Guidelines</u>, <u>Directions</u>, and necessary conditions for 2017-2021 were drafted by the Working Group for the Preparation of the VEE Guidelines and Their Implementation Plan. The Dean formed the Group and discussed with the VA Chancellor, VEE academic and student communities, and external stakeholders. The Strategic Directions reflect, in detail, all areas of the VEE activities: teaching, research, animal health care, internationality, and formation of the unified and socially responsible community. The priorities in teaching, research, animal health care have been clearly defined and set as the VEE Strategic Objectives. The tasks and measures formulated to achieve the strategic objectives are consistent with each other. The examples of the description of the indicators for each strategic objective are presented in *Annex* 8.

The VEE Guidelines define the necessary conditions for achieving the strategic objectives (**Table 1.3.2**). The necessary conditions include a consolidated individual and teamwork of all community members, community wide access to advanced IT, a reduced burden of administrative work on the study and research units, accelerated decision-making by the use of advanced IT, attracted financial and other types of support by using both the internal and external sources, and the increased effectiveness of marketing and communication.

Table 1.3.1. Strategic Directions, Objectives and Tasks of the VEE Strategic Development

I. Strategic direction: INTERNATIONALLY COMPETITIVE GRADUATES

1. **Strategic objective**: To prepare veterinary surgeons, food science and food safety internationally competitive specialists with high level of general and disciplinary competences, ready for lifelong learning, working for the good of society and retaining bonds with the VEE.

TASKS:

- to ensure further attraction of gifted, talented and motivated graduates to the VEE;
- to keep improving the quality of studies on a regular basis; provide the students with general competences and specialist skills of the highest level;
- to ensure that education competences and specialist skills of the academic staff meet the needs of the students;
- to develop the system of lifelong learning.
- II. Strategic direction: ANIMAL HEALTH TECHNOLOGIES AND INNOVATIONS BASED ON SCIENTIFIC KNOWLEDGE
- 2. **Strategic objective**: To develop and apply in practice health technologies and innovations through fundamental and applied biomedical and agricultural research at highest levels of excellence.

TASKS:

- to improve the management of research; enhance resource-use efficiency;
- to encourage inter-institutional, inter-sectorial and international cooperation through high quality research in the priority areas of smart specialization;
- to nurture young talents and create the conditions for their scientific careers;
- to consolidate and enhance the human potential for research and development and guarantee high qualifications in the area of smart specialization;
- to promote commercialization of scientific innovations.

III. Strategic direction: INTERNATIONALLY RECOGNIZED AND VALUED VEE

3. **Strategic objective**: To develop and expand international relations and collaboration with foreign partners and VEE alumni in the areas of studies, science and practice.

TASKS:

- to enhance the internationality of the VEE community;
- to develop strategic partnerships in education and research with international partners;
- to promote and expand relationship with VEE alumni in LT and over the world.

IV. Strategic direction: HEALTHY HUMAN AND HEALTHY ANIMAL

4. **Strategic objective**: To exploit the potential of Veterinary Hospitals to ensure enhancement of animal health and care and implementation of high quality VM studies. To target the VEE potential of research and practice to ensure enhancement of human health through production of high quality and safe food.

TASKS:

- to develop healthy VEE community;
- to participate in policy making on animal health and welfare;
- to ensure a wide range of top-quality services of veterinary diagnostics, treatment and disease prevention.
- V. Strategic direction: CONSOLIDATED, CREATIVE AND SOCIALLY RESPONSIBLE COMMUNITY OF THE VEE
- Strategic objective: To foster a professional, motivated, creative and socially responsible community of the VEE which contributes to achieve the objectives and tasks of VEE which are integrated into strategic objectives of the University.
 TASKS:
- to consolidate the VEE community, to enhance the relationships of community members;
- to develop a creative and initiative-showing VEE community;
- to develop a socially responsible and open VEE community.

Table 1.3.2. Necessary conditions to reach the objectives of the strategic development

1. Highly qualified employees

Objective: To enlist highest competence staff for realization of strategic objectives of the VEE through creation of attractive working environment and increase of general and professional competences.

Task:

• to improve working skills and general competences of the staff.

2. Infrastructure and IT systems meeting the needs of the staff and students

Objective: To develop the infrastructure and IT systems meeting the needs of the staff, students and administration. **Tasks:**

- to develop an up-to-date infrastructure facilitating scientific research, studies and practical work;
- to develop IT skills in the community.

3. Efficiency and quality of decisions and processes

Objective: To increase the efficiency and quality of decisions and processes. **Task**:

• to increase the efficiency of VEE management and administrative processes.

4. Economic (financial) sustainability

Objective: To ensure continuity of VEE activities under unfavorable conditions.

- Task:
- to ensure economic sustainability of the VEE using the internal and external resources for implementation of the main VEE activities and to create conditions for implementation of complementary activities and for maintenance and development of infrastructure.

5. Effective marketing and communication

Objective: To increase the recognition of the VEE and to create its image in LT using modern marketing and communication means.

Tasks:

- to increase recognition of the VEE and to create the image of the VEE as one of the highest levels of excellence in Lithuania and abroad;
- to analyze the demand for specialists meeting the employers' expectations and to make a long-term prognosis;
- to popularize the existing study programmes, scientific research and animal health care services in Lithuania and abroad.

The Guidelines evaluated by SWOT reveal the distinctiveness of VEE and the challenges encountered in the implementation of the VEE strategic objectives in the complex structure of the University (**Table 1.3.3**). When updating the Guidelines and the Plan, VEE evaluates, considers, and works on removing specific potential and detected threats and weaknesses. The performed evaluation is high-quality and proper, allowing management, reduction, and elimination of the evaluated threats and weaknesses.

Table 1.3.3. SWOT Analysis (last updated 2020-10-13, Minutes No VF10-18)

STRENGTHS

- Competitive and high-demand study programmes in the market;
- The only establishment preparing veterinary surgeons in Lithuania;
- VM study programme complies with the requirements of the EU Directives 2005/36/EU and 2013/55/EU and ESEVT DOC.
- Multidisciplinary cooperation between the academic staff and the units;
- High percentage of the VM study programme graduate (both Lithuanian and international) job placement and/or employability within twelve months after the graduation;
- VEE research laboratories are equipped with modern and up-to-date research equipment, and their infrastructure has been renovated;
- Substantial national leadership within the research activities defined as a VEE strategic priority in the area of research;
- International visibility/publicity of the research activities in the fields of Veterinary Microbiology, Virology, Parasitology, Food Safety and Quality;
- Excellent access to learning and scientific publications via the LSMU library and information resources;
- Large Animal Hospital which is the only hospital in Lithuania providing full-scale health care services for large animals and assuring opportunities for the development of practical competencies of the students;
- Center of Animal Welfare which is a member of the Baltic Animal Welfare Network and has an expert membership in the EU Animal Welfare Platform, generating a scientific approach to animal welfare and related activities in Lithuania;
- Close collaboration with the Lithuanian SFVS, economic agents, and other external stakeholders;
- Student involvement in the integration process of research, teaching, and practical activities;
- Updated VM curriculum with the interdisciplinary integration of introductory/general subjects and fundamental subjects of the study field in veterinary sciences;
- Fully implemented IT for the studies, practice, and evaluation processes;
- Clear and transparent distribution of the intended VEE funds for the studies and master theses implementation among the units;
- Updated and installed clinical diagnostic equipment.

OPPORTUNITIES

- Identification and attraction of the best and most motivated graduates to pursue the career at VEE;
- Wide use of the available network to increase, and strengthen the internal, national and international collaboration;
- Increasing strategic partnerships with the leading foreign universities in VM and agricultural sciences;
- Maximum potential use of the EU generated Nemunas Valley funds for excellent studies and scientific environment;
- Development of cooperation with industry for the joint projects focused on food sciences, animal health and productivity, and student practical training;
- Need and necessity of new knowledge in veterinary research determined by high importance of emergence and re-emergence of zoonotic diseases;
- Strategic development of infrastructure corresponding to the VEE strategic priorities in studies, research, and practice;

- Construction and equipment of a new modern Veterinary Teaching Hospital with the infrastructure intended for assurance of the VM study process and practical training;
- Growing satisfaction of the VM students regarding the integrated curriculum with their studies.

WEAKNESSES

- Low salaries of veterinarians causing the young and prospective high competence veterinarians to leave VEE;
- Lack of additional funds raised (international projects, earned funds from various services, etc.).
- Strong dependency on the funding for studies limiting and restricting the number of teaching staff to be employed;
- Lack of the European, internationally recognized specialized veterinarians diplomates;

THREATS

- Disruption of the government appropriations and competitive funding for the construction of a new Veterinary Teaching Hospital due to the pandemic; the only current funding source is from the funds earned by the University;
- Prolonged preparations for the project design and construction of a new Veterinary Teaching Hospital;
- Postponed renovation of the Large Animal Hospital infrastructure;
- Insufficient motivation for the young talented people to seek academic, research, and practical careers at the University;
- Small and declining national population due to emigration and low birth rate;
- Lack of partners from businesses with the financial capability to support basic and applied research;
- Intensifying competitive conditions created by a rapidly growing private veterinary business employing well-trained VEE VM graduates is attracting more and more patients.

A new LSMU strategic plan for 2022–2026 and its implementation guidelines will be in effect from January 1, 2022. Currently, the preparation of a new VEE strategic plan for 2022–2026 is underway. The upcoming strategic plan of VEE is based on the new LSMU strategic plan, in which the VEE community and students were actively involved in submitting their suggestions/proposals.

Summary of the VEE Operating Plan with timeframe and indicators of achievement of its objectives.

The Operating Plan for implementing the Guidelines provides the specific tasks and their implementation measures, assessment indicators (qualitative and quantitative), intended outcomes, implementation terms, responsible persons, and implementers. During the implementation of strategic Direction I, "Internationally competitive graduates", VEE communicates with students, prepares the programme presentations and selfanalysis, improves the content of the study programme, and works the introduction of new forms of the studies, etc. For the implementation of Direction II, "Animal health technologies and innovations based on scientific knowledge", national and international research projects have been prepared and performed. Moreover, the Clarivate Analytics Web of Science (CA WoS) publications have been published, the process for selecting and preparing doctoral students has been strengthened, a partner search has been carried out, etc. Foreign visiting lecturers are invited, and student/lecturer mobility is encouraged to implement Direction III, "Internationally recognized and valued VEE". The implementation process of Direction IV, "Healthy human and healthy animal", ensures biosecurity requirements and allows participation in coding the VTHs infrastructure improvement workflows. It also creates conditions to raise staff qualifications, renew the VTHs equipment, and increase the number of patients and procedures performed by a student, etc. In terms of implementing Direction V "Consolidated, creative and socially responsible community of the VEE", the Establishment Units present annual reports on the activities such as special targeted events, seminars, and organized conferences. The indicators specified in the Plan, their concepts, calculation methods, units of measurement, sources of information, and terms are defined and explained in the Description of the Indicators for Monitoring the Implementation Plan of Strategic Guidelines. The results of the strategic Plan indicators are summarized annually and presented in the annual VEE report, which the VEE Council respectively discusses. If the planned indicator has not been achieved, the QA Working Group revises the Plan and initiates necessary plan adjustments.

Standard 1.4: The VEE must have a policy and associated written procedures for the assurance of the quality and Standards of its programmes and awards. It must also commit itself explicitly to the development of a culture which recognizes the importance of quality, and QA, within their VEE. To achieve this, the VEE must develop and implement a strategy for the continuous enhancement of quality. The development and implementation of the VEE's strategy must include a role for students and other stakeholders, both internal and external, and the strategy must have a formal status and be publicly available.

Description of the global policy and strategy of the VEE for outcome assessment and QA, in order to demonstrate that the VEE: has a culture of QA and continued enhancement of quality.

The quality of studies, research, decision-making, University administration, and communication is integral to the LSMU quality culture. It is a closed the Plan-Do-Check-Adjust (PDCA) cycle of a culture of

continuous improvement and positive change (**Fig. 2**), fostered based on the values enshrined in the University's mission, University <u>Statutes</u>, ESG 2015, <u>LSMU Guidelines for the Strategic Development for 2017–2021</u>, LSMU Study QA Manual (*Annex 9*) (in LT), and followed by the principles of social responsibility and partnership. Study quality evaluation and analysis are performed at various University levels – from an individual lecturer and unit to SPC, the VEE Council, and the University bodies such as the Commission for Monitoring and Study QA (CMSQA),SU, the Rectorate, the Senate.

VEE, in the frame of general QA system, applies the following fundamental principles of QA in the study process: 1) Transparent <u>documents governing the VM studies</u>; 2) Involvement of students and external stakeholders into the process of decision-making; 3) Evidence-based decisions using the data obtained from the study process; 4) Feedback from and to the academic community on the results of quality evaluation and continuous improvement. For the implementation of the principles mentioned above, such essential components related to the study process are used:

- Well-functioning and effective study programme;
- Properly-established facilities with necessary equipment;
- Assurance of the academic staff competence;
- Student-orientated study process.

The VEE QA policy complies with the internal QA system and participates in the external monitoring and evaluation of QA. The University confirms and approves the policy by a general accreditation, and <u>Center</u> for <u>Quality Assessment in Higher Education</u> (SKVC) accredits each study programme separately and EAEVE – the VM programme only.

-) operates cyclical, sustainable and transparent outcome assessment, QA and quality enhancement mechanisms;

LSMU has worked for five years on overall strategic planning with all activities at the University, including the study process (*Standard 1.3*). Enhancing the study process for better study programme results and intended learning outcomes and a more favorable learning environment for students is always among at least one of the strategic objectives. Making a plan of the intended further actions, including quality-orientated activities and qualitative and quantitative indicators, is an essential step forward in monitoring the progress and evaluation of the final results. The detailed reports referring to the Guidelines and providing an annual assessment of the achievements are published annually (for the Reports of the Rector, click the link https://lsmuni.lt/lt/apie-universiteta/svarbus-dokumentai/). The key facts are also presented in the Rector's annual presentation, which is public to the academic society. Currently, the University is in the final stage of adjusting the Plan for 2017–2021 and the new Guidelines for 2022–2026 have been prepared and approved. The data on the achievements from the previous period is being considered for further planning. All University staff and students have been asked to contribute to the strategic planning process by collecting and submitting ideas/opinions and additional comments on developing a future strategic plan. These actions have been executed by inviting public consultations via the website and explicitly asking for a personal contribution to the University's organizational structure.

On the operational level, the QA loop cycles of the studies are shorter, typically lasting for one year except for the external evaluations of the programmes performed within the term set by an evaluating agency. The main body responsible for the quality of the study programme is SPC. The SPC members follow the procedures of the <u>SPC Regulations</u>, which obligates them to act accordingly to the annual plan of actions and apply the PDCA model respectively. In terms of the internal SPC planning, the following aspects are referred to 1) strategic planning at the University and VEE levels; 2) activity results of the University level – CMSQA; 3) operational data obtained from the study process. SPC plans and encourages quality-orientated changes in the study process at the Unit and academic staff level; afterwards, it monitors and evaluates the results with further advising if necessary. SPC is in direct communication with the study subject lecturers. The SPC written analytical reports on the performance of the study programme are presented to the VEE Dean and the Vice-rector for Studies and are available publicly.

Academic staff are introduced to the <u>Regulations of Study QA</u> and obligated to follow them. Student representatives, external stakeholders, and alumni are members of all formal bodies related to the studies with a full voting right. In addition, student feedback on the programme is collected both at the University level and SPC. All study quality-related reports, both internal and external, are published on the LSMU website and timely renewed after each evaluation.

-) collect, analyse and use relevant information from internal and external sources for the effective management of their programmes and activities (teaching, research, services); -) informs regularly staff, students and stakeholders and involves them in the QA processes.

The results of internal and external QA of the studies and research activities are used to effectively manage the VEE teaching, research, services, and the VM study programme. **Internal sources:** the internal study QA system is based on measuring the opinions of students, lecturers, graduates, employers, and other participants in the study process. The obtained data on QA is used to improve the quality of organization of the study process, the study programmes, academic staff, infrastructure, administration activity, and all this is described in the LSMU Study QA Manual (*Annex 9*). The University uses and ensures a system for collecting information about the studies, namely study programmes and subjects, study results and their assessment, the competence of lecturers, study resources, study quality evaluation results, the opinions of students, graduates and external partners on the studies and employability (<u>Procedure for Organizing Feedback on Study Quality at LSMU</u>).

In implementing a Strategic Development Plan, the University's academic and non-academic departments organize the regular surveys of opinions from students/graduates, academic and support staff, employers, and stakeholders at different levels and analyze data according to the nature of surveys and their deadlines: 1) Students can express an opinion on the quality of studies, assessing different indicators determining the quality of studies. Students express their opinion by participating in the management process of the University, VEE activities, and the study programme, being council, commission, committee, and working group members; 2) Graduates can express their opinion on the study preparation quality and their readiness as specialists for the labor market and on the future career opportunities; 3) Teaching staff can express an opinion about the study process and a need for competence development; 4) Staff can express an opinion on satisfaction with the working environment and conditions; 5) Employers can express their opinion on the readiness of the graduates for the labor market. The data obtained from the surveys can be used by the University, the VEE Units, and SPC. SPC also organizes other surveys related to the improvement of study quality, motives for choosing the VM study programme, the effectiveness of the curatorial system, the quality of internships and clinical rotation, and the entire study programme. Survey forms are approved by CMSQA. SPC analyzes the results of surveys on study quality evaluation conducted at the University and VM programme levels and provides suggestions on improving study quality to the VEE administration, heads of the Unit, lecturers, and students.

External sources: SKVC is a full member of the European Association for QA in Higher Education registered in the European QA Register for Higher Education. SKVC is responsible for external study quality evaluation, consults, and advises teaching staff and administration representatives on the QA issues of the studies. Only SKVC accredited study programmes can be operated officially. EAEVE is one of the memberorganizations forming the European Coordinating Committee for Veterinary Training, a full member of the European Association for QA in Higher Education, which conducts quality evaluation and accreditation of the VM programmes in Europe and around the world. The Government Strategic Analysis Center (STRATA) performs monitoring, evaluation, and other related activities in the areas of research, studies, and innovation. The **Research Council of Lithuania** (LMT) implements the analysis activities, the evaluations of research activities, doctorate programmes, and funding of competitive research programmes. Information about the finalized evaluations and complete analysis reports is published on the LMT website. The conclusions of the SKVC, EAEVE, STRATA and LMT experts are also public. Following their recommendations, the quality of the studies and research activities of the University and VEE is improved. SFVS consults and advises VEE in the implementation of clinical studies, veterinary food safety, and biosafety activities. Among the SFVS actions which are intended to ensure the study quality at VEE, there are: appointing its representatives to the permanent and temporary committees and student assessment commissions, assigning internships to the VM students, advising students on career issues, conducting an external audit of the compliance with biosafety requirements in VEE. The advertisements for the practice's vacancies are posted on the SFVS website. SFVS decides on a need for the VM residency studies and provides relevant information to the LR Ministry of Agriculture (LR MA). LR MA coordinates research progress in agriculture, funds the applied research activities, posts the research reports on its website, allocates funding, and sets the number of places for the VM residency studies. The State Studies Foundation (SSF) is a state budgetary institution that administers students' financial support. As a partner, the University participates in the SSF project designed for accessibility of education and improvement of study conditions

and quality for students with special needs. The principles for quality and its integral components are presented in the LSMU website (in LT and EN, <u>http://www.lsmuni.lt/en/activities/quality-assurance/components-and-principles-of-quality-assurance</u>). Feedback on the evaluation and improvement of study quality is provided to the academic community, students, and potential employers. The results of the study quality evaluation are presented and available to the governing bodies of the University and VEE (which accordingly make decisions on improving the quality), to the University academic community, and the representatives of employers in the LSMU weekly *Ave vita* and on the LSMU website. The SPC and VEE Dean meetings with students contribute to the quality evaluation and actions taken in response to these evaluations. A public presentation of information stimulates the academic community's interest in the quality of the studies, a more responsible approach, and develops an overall culture of quality.

-) closes the loop of any QA Plan-Do-Check-Adjust (PDCA) cycles.

The loop of PDCA (**Fig. 2**) cycle at any level is considered to be closed, referring to the results of the final evaluation of performance indicators that were respectively set for each improvement objective and defined in the Plan. Depending on the PDCA level and where a particular objective has been established and approved, the results of goal achievements are presented at the LSMU Senate, the VEE Council, and SPC. The results are analyzed and presented by the body responsible for coordinating the implementation of the Plan. Regarding the level of achievements, and based on the decision of an appropriate body responsible for a particular PDCA cycle, the cycle shall be closed by approving the results. Alternatively, if a specific objective has not been achieved, the QA loop is subject to modification. The actions that are taken to make necessary changes include: revising the previous Plan, its presentation to the University Senate, the VEE Council, SPC, or any of the committees, e.g., a description of the closing of the last PDCA cycle with the objective "To Prepare Internationally Competitive Veterinary Surgeons" for the measure "Preparation of a New VM Curriculum" when preparing the Guidelines and the Plan at the SPC level, can be found in the Minutes No. VF10-05 of the VEE Council, 2020-02-25. The new VM curriculum was approved and submitted for further implementation.



Fig. 2. PDCA Cycle Loop for QA

-) is compliant with ESG Standards.

By the procedures implementing the Provisions of QA defined by the <u>LSMU SR</u>, the Principles of ESG2015 are followed and implemented into the study process. The national Regulations of Higher Education (including the national accreditation of study programmes and HEIs by SKVC) have been adjusted, following the ESG2015 Principles. VEE also follows the ESEVT Regulations, which are compliant with ESG2015.

Standard 1.5: The VEE must provide evidence that it interacts with its stakeholders and the wider society. Such public information must be clear, objective and readily accessible; the information must include up-to-date information about the study programme, views and employment destinations of past students as well as the profile of the current student population. The VEE's website must mention the ESEVT VEE's status and its last Self Evaluation Report and Visitation Report must be easily available for the public.

Description of how the VEE informs stakeholders and the public on: -) its objectives; -) its education, research and teaching activities; -) employment destinations of past students; -) profile of the current student population.

Dissemination of information is ongoing among various external and internal targeted audience groups, emphasizing the key LSMU and VEE strategic objectives and their implementation and study QA. The University's website is the primary means to communicate information to the academic community and other interested parties, including prospective students. Within the VEE, the data is disseminated at the public meetings of the LSMU Senate, VEE Council, and through the Dean's Office meetings with the heads of the VEE Units, teaching staff and students.

The Guidelines and the Plan, the annual reports on the University activity, the Resolutions and Minutes are available on the LSMU website, and they are published in the LSMU weekly *Ave vita*. The annual report on the University activities is issued in a special publication and submitted to the Committee of Education and Science at the LR Parliament, LR MESS, and all University Units. The Guidelines and the Plan, including the annual reports on <u>VEE activities</u>, are published and available for the academic community, stakeholders, and society on the LSMU website, Section VEE. The latest quantitative and qualitative information about the study programmes and the qualifications gained is published on the LSMU website (in <u>LT</u> and <u>EN</u>). The documents regulating the VM studies are regularly updated and published on the LSMU website (in <u>LT</u> and <u>EN</u>).

Dissemination of research results in articles, presentations and conferences is an essential indicator of research activity at VEE, reflecting and proving the implementation of the strategic plan. The relevant data is available to the general public and society through the annual LMT reports. Information about educational, scientific and research activities/results, educational and other publicizing events organized by and at the University is available on the websites of LSMU and other interested parties (social partners, organizations, institutions, future employers) and published in the national press. Data on career monitoring and graduate employment are included in the Rector, and the VEE Dean reports. Success stories of the VEE alumni are publicized and posted on the social networks of the LSMU, VEE, and the Career Center, which releases information about job vacancies, organizes the Career Days event, and the meetings with alumni and future employers. The external Career Management Information System accounts for the career results of the graduates from the LT universities within 6 and 12 months after the study completion and releases this information to the society. The objective indicators of the state information systems, state or departmental registers show the position of the graduates in the labor market, the nature of employment, etc. VEE conducts the career monitoring of graduates working abroad, who have studied in EN at LSMU, by surveying these graduates (Annex 2). Some graduates' informal career monitoring is performed through alumni activities and direct communication in various university events.

Information about the current internal student population has been collected and stored in the LSMUSIS system. It is provided to society in the form of reports and official announcements presented during the festive events. This information is also submitted annually to the LR MESS Register of Students, including the state institutions which carry out the labor market research.

Description of how to access to the ESEVT VEE's status and to the last ESEVT Self Evaluation Report and Visitation Report on the VEE's website.

The final decision of the European Committee of Veterinary Education (ECOVE) and reports on the EAEVE accreditation process are published and are publicly available on the LSMU website, Section <u>VEE</u>.

Standard 1.6: The VEE must monitor and periodically review its activities, both quantitative and qualitative, to ensure that they achieve the objectives set for them and respond to the needs of students and society. The VEE must make public how this analysis of information has been utilized in the further development of its activities and provide evidence as to the involvement of both students and staff in the provision, analysis and implementation of such data. Any action planned or taken as a result of this data analysis must be communicated to all those concerned.

Description of how (procedures) and by who (description of the committee structure) the strategic plan, the organisation, the activities and the QA policy are decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

In preparing the University Guidelines and the Plan, the VEE academic community, students, and external partners provide suggestions relevant to the development of the University and VEE activities. The Guidelines and the Plan for the University's strategic development are considered by the Senate and approved by the LSMU Council on the proposal of the Rector, as provided for in the Statute. The VEE Guidelines and the Plan following the LSMU strategic guidelines, directions, and necessary conditions are drafted by the Working Group for Preparation of the Guidelines, considering the suggestions/proposals of the academic and student community and external stakeholders. The prepared Guidelines and the Plan are approved by the VEE Council and are published on the LSMU website.

Monitoring procedures of the implementation of the Guidelines are governed by the University Statute, current Regulations of the Senate and the LSMU Council, and the VEE Regulations. The Dean monitors the implementation of the Plan. The decisions made on the Plan tasks are discussed in the VEE units. The information about the situation regarding the performance of the Plan and objectives achieved by the set assessment criteria is provided to the QA Working Group by responsible persons indicated in the Plan. The outcomes on implementation indicators and completed objectives are based on the information gathered from the units, as provided in the Plan. The obtained data allows the QA Working Group to prepare and the Dean to submit the annual report on the VEE activities to the VEE Council in an open meeting of the Council with the participation of the LSMU administration representatives and the VEE activities are in line with the Guidelines and the Plan, the results achieved, and their impact on the quality of the University's activities. If any results do not meet the planned objectives and assessment criteria, eliminating the causes of incompliance shall be commenced, and a new planning stage is started. The annual report on the VEE activities is available for the public on the LSMU website, Section VEE.

The Working Group for Preparation of the Guidelines regularly revises the Guidelines and the Plan and submits suggestions to the VEE Council for further revision and update. Any changes in the Guidelines and the Plan shall be initiated by the responsible persons, implementers, the VEE academic community and students, and external stakeholders. In case of the emergence of unplanned strategic priorities, the QA Working Group, the Dean, and the VEE Council analyze the objectives set up in the Guidelines and evaluate new demands. Depending on the importance, they communicate the information to the responsible bodies: the VA Chancellor, the Director for Administration and Finances, and/or the LSMU Vice-Rector for Studies. The results on implementing the VEE Guidelines and the Plan are necessarily submitted for the Rector's annual report, which is considered by the Rectorate and Senate and approved by the LSMU Council. The Rector and the LSMU Council continue the analysis of objectives set up in the Guidelines, control the implementation of projects, evaluate new demands and make a list of recommendations for the improvement. The priority projects are selected and included in the Guidelines for a Strategic Development of the University. Monitoring of quality policy activities is ensured in all segments of LSMU complying the requirements set out in the documents regulating them (LSMU Study QA Manual (Annex 9), Regulations of Study QA, Regulations of SPC, LSMU SR, Regulations of the Doctoral (Ph.D.) Studies in the field of Agricultural Sciences, Description of the Procedures for Implementation and Supervision of the VM Residency Study Programme, Procedure for Competition Organization and Assessment of Lectures and Researchers). The documents describe the activity monitoring, reviewing, and disseminating procedures and indicate the responsible persons and/or commissions.

Standard 1.7: The VEE must undergo external review through the ESEVT on a cyclical basis. Evidence must be provided of such external evaluation with the assurance that the progress made since the last ESEVT evaluation was linked to a continuous QA process.

Date of the last ESEVT Visitation and description on how the deficiencies have been corrected and how it has been used to enhance quality.

In October 2012, at LSMU VEE, the EAEVE experts, during their Visitation, detected the five major deficiencies. In April 2015, during the Re-visitation, the experts found that VEE had taken appropriate actions. The Establishment had eliminated four weaknesses except the requirement regarding Physical Facilities and concerning safety and biosecurity procedures, was not met. Because of which ECOVE granted LSMU VEE with the status "Conditionally approved." Following the expert recommendations expressed during the VEE Evaluations in 2012 and 2015. By 2019, VEE had taken proper actions and performed other practical organizational, functional, structural, and QA changes. As a result, this major deficiency in VEE had been eliminated.

After re-evaluating the improvements made in 2019, the experts confirmed that the major deficiencies and other minor deficiencies detected in 2015 had been eliminated effectively. ECOVE granted VEE with the status "Approved." In addition the experts have proposed eight suggestions for further improvement of VEE. **The following actions have been taken in response to the experts suggestions:**

- 1. Biosecurity Committee has been updated by adding two student representatives, who participate in activities of the committee.
- 2. To ensure efficient use of resources, members of the Biosecurity Committee are involved in main building, repair and purchase activities at VEE where biosecurity is relevant, i.e. designing of the new Small animal VTH, isolators, etc.
- 3. Biosecurity and Biosafety audit reports are published at LSMU website.
- 4. The Large Animal Isolation Unit and the floor of the necropsy room in Pathology Centre were renovated according to the recommendations. The Small Animal Isolation Unit was moved to newly renovated building, which proper facilities.
- 5. The Isolation Unit was renovated and two stables were installed.
- 6. Members of Biosecurity Committee were included into the group responsible for designing of the new Small animal VTH. Currently the design of the new hospital is under implementation and members of the Biosecurity Committee are included in these activities.
- 7. Students are provided working clothes and footwear for practicals and clinical rotations at the Small and Large VTHs, also Pathology centre, and these clothes are washed at the local laundry facilities on VEE campus.
- 8. The laundry facilities have been moved to new building and are upgraded to meet needs of VEE.

In 2019, an additional report accompanying the Re-visitation report was presented, and it covered the QA aspects of the eleven Standards within SOP 2016. The experts report concluded that no more major deficiencies had been identified. Based on this fact, ECOVE granted LSMU VEE with the status "Accredited." The experts detected seven minor deficiencies. The following actions have been taken in response to the expert recommendations for the improvement of those minor deficiencies:

- 1. SWOT analysis for the VEE strategy was updated (2020-10-13, Minutes No VF10-18) and is used on each ESEVT Standard (**Table 1.3.3**). Currently, a new VEE strategy for 2022-2026 and the SWOT analysis are being prepared.
- 2. Internal and external stakeholders have been involved in developing the University's Guidelines, based on which the VEE Guidelines and the Plan are being prepared. Internal and external stakeholders have submitted their suggestions at the preparation stage of the Guidelines and the Plan. The LSMU website was publishing the encouraging the LSMU Rector's address to the members of the University community and the representatives of the society to actively contribute to the preparation of new Guidelines for 2022–2026, give their ideas, opinions, and suggestions. The VEE academic community (academic staff, personnel, and students) was also asked to express their opinions and make suggestions. The VEE Council made important suggestions for the strategic development of VEE (2021-03-30, Minutes No VF10-06). The student representatives presented the student suggestions at the VEE Council, which were approved and added to the suggestions list (2021-03-30, Minutes No VF10-06). In formulating the VEE Guidelines and Plan, all VEE staff, students, and external stakeholders have been prompted to submit suggestions relevant to the development of the VEE's activities. The prepared draft of the Guidelines is

publicly available, and the community has been requested to comment on the draft before submitting it to the VEE Council for approval.

- 3. Revisions of the Biosecurity and Biosafety SOP are planned according to assessment of new risks and needs at the VEE, including changes in infrastructure and management. One major revision has been done of the Biosecurity and Biosafety SOP until present.
- 4. QA process is used to monitor and review rotations in order to take advantage of all the clinical cases in the Small Animal VTH. Patients arrive in the Small Animal Hospital by pre-registration or, in urgent cases or emergency, without registration. Patient registration is combined with academic clinical work so that students have the opportunity to observe and participate in the hands-on procedures with all patients treated at the hospital. All patients treated at the hospital are registered in the E-patient registration system of the hospital and is accessible by the students.

The clinical rotation takes place according to a pre-approved schedule prepared by a coordinator. The schedule is published in the Moodle and is availabile for students. During the rotation student participates in the clinical examination, diagnosis, and treatment of all patients registered with the lecturer of that day (night). Each rotation performing student is also assigned the supervision of inpatients depending on the nature of rotation. Student registers all the patients on that day, fills in personal patient registration journal and logbook, discuss the cases with a training lecturer at the end of the working day. Practicing in small groups of 1–2 students ensures that each student has the opportunity to complete each task hands-on, acquire the required mandatory ESEVT DOCs and receive an individual assessment. At the end of the rotation, a weekly discussion on patients takes place. A student writes a reflection on the most memorable case. Based on student feedback (LSMUSIS survey) and recommendations from lecturers and SPCs, the hospital monitors processes and, if required, implements updates to ensure the acquisition of DOCs.

- 5. Moodle platform has been used intensively for the last three years. The VEE Council discussed and has launched the 100% implementation of the Moodle platform since September 2019 (2019-04-17, Minutes No 60). The lecturers were trained remotely to use the Moodle platform in general and simultaneously to perform formative assessments using online e-tests. Most clinical and food hygiene subject lecturers use formative assessments online e-tests. During the pandemic, various online assessments e-tests are used more intensively than usual.
- 6. Logbook of clinical rotations since September 1, 2021, has been moved to the virtual space. It is the most efficient and student-friendly tool. The content of the logbook was also reviewed, revised, and updated based on the ESEVT DOCs. To date, no negative feedback has been received from students. A student and lecturers survey about satisfaction on the use of e-logbook, shortcomings in use, etc., is planned at the end of the semester is going to be conducted.
- 7. Policy for the assessment of students with special needs has been described in the LSMU SR. Following the experts recommendation, a separate document was approved to regulate the assessment methods for students with disabilities and special learning needs the Procedure for Submitting Documents and Reporting by LSMU Students with Special Learning Needs in Alternative Ways. New information was uploaded to the LSMU website (in LT and EN) and added to the page <u>Special Learning Needs</u>.

Comments on Area 1

LSMU VEE is the only Establishment in Lithuania preparing veterinarians. VEE consists of three departments, two VTHs, Center, and Institute, which organize and execute the VM studies and research activities, train researchers and specialists, and manage professional development. VTHs perform practical veterinary training. Various councils, boards, committees, commissions, and working groups of the University and VEE actively participate in implementing and controlling the studies, science, research, and practice.

VEE has a Strategic Plan, which includes the SWOT analysis of its current activities, a list of Strategic Directions and Objectives, and an Operating Plan with a Timeframe and Indicators for Its Implementation. Internal and external stakeholders have been involved in developing the Guidelines and the Plan from the very beginning of the process. The Guidelines and the Plan are in line with the missions of VEE and the University. The components of the Guidelines and the Plan regarding the studies, research, and animal health care are consistent with each other and with the LSMU core activities and prove the process of the VEE improvement. The information about the Plan's implementation to the VEE and University academic community, social partners, and the public society is conveyed in various forms. It is available in the public

online domain. The quality of studies, research, decision-making, University administration, and communication is integral to the LSMU quality culture. VEE places a great emphasis on the assurance of internal study quality. All structural changes made in VEE during 2015–2020 were reasonable and intended for the consolidation of human and material resources, for the improvement of the quality of higher education, research, and animal health care, increasing management efficiency, and focusing on the successful implementation of the objectives of strategic development. International and national legislation significantly impact the management of the processes and changes made at VEE, as they affect the VEE and LSMU strategic documents resulting in their review and update, adjustment, and related development. The decisionmaking process involves internal and external stakeholders, and the comments and suggestions of the internal and external auditors and experts impact change management significantly.

Suggestions for improvement in Area 1

- 1. To prepare of a new VEE Strategic Plan and the Guidelines for implementation based on the new LSMU strategic plan and guidelines.
- 2. To continue monitoring and improvement of the VEE strategic Plan and the QA indicators to implement all ESEVT standards.

AREA 2. FINANCES

Standard 2.1: Finances must be demonstrably adequate to sustain the requirements for the Establishment to meet its mission and to achieve its objectives for education, research and services. The description must include both expenditures (separated into personnel costs, operating costs, maintenance costs and equipment) and revenues (separated into public funding, tuition fees, services, research grants and other sources).

Description of the global financial process of the LSMU and VEE.

The LSMU budget is regulated following public sector accounting and financial accountability standards, other legal documents of the LR, University Statute, and approved accounting rules. The University budget is composed of the following: 1) direct funding of particular assignations from the national budget; 2) income generated by provided services such as tuition fees, other scientific and economic activities, etc.; 3) projects, financial support, and other targeted allocations.

One of the Strategic development directions of the University is to ensure economic (financial) sustainability. It is essential to note that the national budget allocations for the studies, including the VM study programme, have been increasing. Yet, the funding for research, experimental activities, administration, and economic activities have been decreasing. Directly allocated funding from the national budget related to other sources, in general, was in 2018 - 46.68%, 2019 - 42.34%, 2020 - 37.28%. For this reason, the University aims to ensure the economic sustainability of the Establishment and the implementation of strategic objectives. VEE also distributes the state budget allocations between the areas of activities so that the income increase does not relate to the studies but is generated mainly from other activities. Using the internal and external financial sources, the University implements the main activities and creates the conditions for additional activities and infrastructure development. In addition, LSMU increases its competitiveness, expands lifelong learning services, encourages science and business collaboration, conducts contracting analysis, provides other services to LT and foreign economic entities, participates in projects, and seeks additional financial sources. The incomes generated by the University and attracted financial support and funding from external projects improve the possibilities to balance the risks between the activities and achieve strategic goals. Therefore, the University maintains continuous progress, distributes the funding purposefully, thus, reducing the dependence on the state budget. Incomes from other resources are growing steadily. General incomes from the different sources excluding direct grants from the national budget was allocated respectively: in 2018 - 53.32%, 2019 -57.66%, and 2020 – 62.72%. An increment in the LSMU finances, from other than the state budget sources, was 25,4% higher in 2020 than in 2019. It is considered to be rapid growth within LSMU. In 2020, the University's budget composition was: 37.28% of direct assignations by the State, 38.67% of the income generated from the services provided by LSMU, and 24.05% from the projects, financial support, and other targeted allocations.

Within the University, VEE acts as one of the LSMU largest Faculties.

Area of expenditure	2020**	2019	2018	Mean
Personnel	4,746,284.00	4,459,692.00	3,460,280.00	4,222,086.00
Operating costs	1,106,870.00	1,087,659.00	1,031,753.00	1,075,428.00
Maintenance costs	8,821.00	10,198.00	7,531.00	8,850.00
Equipment	261,179.00	478,994.00	544,287.00	428,154.00
Total expenditure	6,123,155.00	6,036,544.00	5,043,852.00	5,734,517.00

Table 2.1.1. Annual expenditures during the last 3 academic years (in EUR)

* Last full academic year prior to the Visitation (2020).

** Additional information: during 01/01/2021-30/06/2021 the expenditures occurred: personnel (2,791,307.00 EUR), operating costs (533,873.00 EUR), maintenance costs (5,155.00 EUR), equipment (144,767.00 EUR), with total expenditure of 3,475,101.00 EUR)

In 2020, the VEE budget (**Table 2.1.1.**) was allocated among the following main categories: personnel – 77.5%, operating costs – 18%, equipment – 4.3%, and other maintenance costs – 0.2%. Personnel and operating costs have been growing steadily since 2018. However, the maintenance costs were affected adversely due to the restrictions and challenges caused by the COVID-19 pandemic, e.g., strictly limited or no-contact activities, including unplanned expenses on new equipment and a necessity to reinvest.

VEE also succeeded in attracting additional finances from the other sources (**Table 2.1.2**.): clinical services, other services for social-economic partners, donations, research grants, continuing education, although the lastmentioned categories experienced the minor impact of the COVID-19 pandemic situation due to the restrictions on the contact activities. The LSMU Small and Large Animal VTHs generate a significant part of the revenue of clinical services. This vital fact proves the VTHs' reasonable efforts to provide animal patient owners with a more expansive range of animal diagnostics, treatment and disease prevention services.

The veterinary pharmacy, veterinary consultations under a contract, veterinary services provided at animal exhibitions, etc., generate more revenue. Increasing the annual earnings is a strategic goal set for the Small and Large Animal VTHs. This goal relates directly to the main objective for additional finance sourcing. It involves attracting as many patients as possible and managing as many potential clinical cases as needed to ensure the VM studies and provide the studies and scientific research of the highest quality. VEE also generates income by implementing life-long learning services, i.e., organizing courses, conferences, and workshops for different social groups such as veterinarians, researchers, farmers, etc.

Revenues source	2020*	2019	2018	Mean
Public authorities	402,369.00	366,422.00	281,508.00	350,100.00
Tuition fee:				
Standard students - VM	1,656,240.00	1,386,537.00	1,291,975.00	1,444,917.00
Full fee LT students –VM	766,228.00	829,255.00	945,061.00	846,848.00
Full fee international students VM	787,549.00	668,203.00	518,963.00	658,239.00
Other standard students**	1,092,196.00	1,019,989.00	882,455.00	998,213.00
Other full fee LT students**	101,646.00	133,021.00	182,236.00	138,967.00
Other full fee international students**	19,300.00	13,300.00	4,200.00	12,267.00
Clinical services***	598,584.00	580,500.00	479,596.00	552,893.00
Other services	46,061.00	42,675.00	52,593.00	47,110.00
Research grants	490,464.00	746,991.00	778.661.00	672,039.00
Continuous education	43,011.00	59,927.00	66,015.00	56,318.00
Donations	450,118.00	411,918.00	13,378.00	291,805.00
Total revenues	6,453,767.00	6,258,736.00	5,496,641.00	6,069,715.00

* Additional information: during 01/01/2021-30/06/2021 the following revenues (except students addmitted in 2021) occurred: public authorities (271,790.00 EUR), tuition fee (standard students, VM) – 1,706,527.00 EUR), tuition fee (full fee LT students, VM) – 366,236.00 EUR, tuition fee (full fee international students, VM) – 493,196.00 EUR, tuition fee (other standard students) – 993,522.00 EUR, tuition fee (other full fee LT students) – 50,125.00 EUR, tuition fee (other full fee international students) – 9,825.00 EUR, clinical services – 377,109.00 EUR, other services – 22,456.00 EUR, research grants – 305,192.00 EUR, continuous education – 25,964.00 EUR, donations – 240,218.00 EUR, total revenues – 4,862,160.00 EUR.

** Funded other VEE students, other self-paid VEE LT students, other self-paid international VEE students.

*** Diagnostic services revenues are included.

Table 2.1.3 provides the primary information about the VEE balance between expenditures and revenues.

Academic year	Total expenditures	Total revenues	Balance*
2020	6,123,155.00	6,453,767.00	330,612.00
2019	6,036,544.00	6,258,736.00	222,192.00
2018	5,043,852.00	5,496,641.00	452,789.00

Table 2.1.3. Annua	l balance between	expenditures and	revenues (in EUR)
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*Total revenues minus total expenditures.

The total balance is always positive – ranging from 452,789.00 EUR in 2018 to 330,612.00 EUR in 2020. The proportion in 2021 (01-01-2021 – 06-30-2021) is even more significant – 1,387,059.00 EUR (expenditures – 3,475,101.00 EUR, revenues – 4,862,160.00 EUR); some corrections will occur at the end of the year. In this respect, VEE is cost-effective and can ensure a high quality of studies, research, and clinical practice activities. More detailed official financial information of the LSMU is available <u>online</u>.

% of margin paid as overhead to the official authority overseeing the VEE on revenues from services and research grants.

To implement the task set in the LSMU Strategic Development Guidelines, "To Improve the Distribution of Financial Resources for Enhancement of Financial Sustainability," the University has undertaken elaboration and introduction of the total costs model along with improving the distribution of earnings and precise assignment of expenditures to the LSMU units. To implement this task, the build-up of reserve funds started with 2.5% from income generated by provided services financial means per year, increasing the savings every year by 0.25%. In 2021, the reserve funds have accumulated 3.5% of revenue generated by provided services financial means per year, increasing the savings every strategic projects, including the development of the Large and Small Animal VTHs' infrastructure (University's Council decisions: 31-08-2018 No. UT1-24-4; 21-04-2019 No. UT1-29-2; 25-04-2019 No. UT1-30-6; 13-06-2019 No. UT1-31-3).

Rational allocation from the budget for research, studies, administration and property management, human and animal health care, and the University development is within the competence of the LSMU Economic and Planning Service (EPS) and the Director of Administration and Finances. The annual budget is discussed in the Senate and approved by the LSMU Council. The budget formation for the upcoming year begins in October, a year in advance. EPS by orders of the Rector "On Approval of the Description of the Distribution of the LSMU Incomes Generated by Services" (No. V-797, 31-12-2020) and "On the Allocation of Part of the LSMU Tuition Fee for Remuneration of Support Staff, Goods and Services" (No. V-0371.1, 06-23-2021), takes into consideration the intended volume of research and uses the LSMU SIS data to make precise calculations and provide the University's with required funding for assigned salaries, planned purchases, and services needed for the upcoming year: 1) The bulk of the budget goes to the implementation of study-related activities and salaries of the staff. The University has an Open Fund (Resolution of the Senate No. 8-10, 15-04-2011) supporting the mobility of researchers and Ph.D. students, and a Residency Mobility Fund (Resolution of the Senate No. 32-06, 06-07-2013) supporting the mobility of resident students. In addition, the University allocates about 49,800.00 EUR to conduct cultural, sports, and social activities. 2) The University constantly pursues optimization of expenditures and build-up of investments to develop scientific and study infrastructure and renovation of the buildings. The expenses on the infrastructure renovation increase every year to ensure the implementation of the objectives set in the Guidelines for the strategic development. In general, VEE operates the revenues earned from the services provided and from the research grants following the University's law described above and uses about 80% of it for the VEE needs (main activities). The other 20% is used for general and reserve funds. About 16.5% goes to the University Open Fond, and 3.5% is for the other (further) strategic remodelling and/or renovation of the infrastructure.

Annual tuition fee for national and international students

Table 2.1.2 provides the primary accumulated information on the revenues earned from the annual tuition fees of the national and international students. LSMU receives a standard tuition fee (normative) for all state-funded students. The normative tuition fee indicates a maximum state fund (from the state budget) for the current year to cover the tuition fee set by the HEI for the state-funded study place. The standard tuition fee covers only a part of the goods, services and salary costs of the academic and support staff serving the study

process in general. It does not cover all the cost of fixed assets, equipment and other necessary goods and services, as well. As a result, a slightly higher price is set for not funded by the state students as described above. The difference in price between the first- and second-cycle not funded by the state students is insignificant. Approved tuition fees for international students are higher due to the additional costs required to find and attract international students worldwide, to translate teaching materials, and create suitable conditions for people of other cultures and customs to study in LT. In this context the tuition fee for international students is also influenced by the situation in the foreign market, the prices applied there, and the demand for a specific study programme.

Estimation of the utilities (e.g. water, electricity, gas, fuel) and other expenditures directly paid by the official authority and not included in the expenditure tables.

Funds related to the maintenance of studies, science, and administration infrastructure, i.e., expenditures for utilities, are planned and included in the estimate on a centralized basis. Funds for the study process are distributed to the LSMU Faculties (VEE included), considering the number of students, the cost of studies, the pedagogical workload (the basis for calculating the pedagogical workload is a credit). Funds for research are allocated according to the results of research activities and the number of researchers. The need for funds to guarantee the infrastructure is also adequately considered.

	Fee per year, EUR					
State funded places	Places not funded by the state					
3,523.00	4,560.00					
3,523.00	5,360.00					
4,806.00	5,360.00					
7,608.00	7,608.00					
7,608.00	8,969.00					
8,969.00	8,969.00					
_	8,000.00					
_	8,000.00					
_	10,000.00					
10,646.00						
	10,758.00					
	6,864.00					
	10,560.00					
	State funded places 3,523.00 3,523.00 4,806.00 7,608.00 7,608.00 8,969.00					

Table 2.1.4. VEE operates the tuition fees as follows

Standard 2.2: Clinical and field services must function as instructional resources. Instructional integrity of these resources must take priority over financial self-sufficiency of clinical services operations. The Establishment must have sufficient autonomy in order to use the resources to implement its strategic plan and to meet the ESEVT Standards.

Description of the modus operandi for the financial management of the clinical and field services.

Information is provided below. Financial management of the clinical and field services follows the general principles of the Unit's financial management: VTHs forecast the revenue for the provided services by estimating the prices and quantities of the services. Based on this income, the university Unit (clinic, department, etc.) plans the expenses. The annual expenditure plan may be adjusted according to the difference between actual earnings and planned income. The Dean of the faculty (VEE) allocates funds for the organization of study processes according to the procedure described below.

VEE has autonomy to use the financial resources provided by the university budget, and to plan its expenditures:

- 1. The heads of the Units decide on using the remuneration fund following the "Remuneration and award procedure of the LSMU lecturers, researchers, administration, and other employees" approved by the LSMU Council Decision No. UT1-26-2, 29-11-2018. When the calculated remuneration fund is smaller than the number of positions occupied by competition in a Unit, the factual remuneration fund is reserved for a Unit until the end of the official term, i.e., the end of the employment contract. An open-ended contract may be terminated at the person's request, by agreement of the parties, or by waiving all resulting guarantees for the employee.
- 2. The VEE Dean decides on using the assigned funds on purchases and services related to the organization of the studies. **The process takes the following steps:**
 - 2.1. The VEE Units, bearing in mind the VEE Strategic goals and the needs determined by internal and external monitoring and following the SPC recommendations for the VM programme improvement and the QA of the studies, draft the plans of the necessary equipment and services for the upcoming year. The expense plans are submitted to the Dean before October 1 of the current year.
 - 2.2. In the third quarter of the year, the University EPS provides the Dean with a plan of the required funding to be assigned for purchases and services in the upcoming year.
 - 2.3. The Dean plans and distributes the budget, which meets the VEE Unit's needs for implementing the strategic plan, adjusts it to the curriculum, and prepares an estimate of expenditures for the purchases intended for the upcoming year lining up.
 - 2.4. VEE always has the reserve fund for unplanned/unexpected purchases.
 - 2.5. The Dean provides the estimate of expenditures to the VEE Council for discussion and approval.
 - 2.6. The estimate approved by the VEE Council is then adjusted with EPS and submitted for approval to the Administration and Finance Director.
 - 2.7. EPS reports on implementing the estimate to the Dean every six months to monitor and control expenditures.
 - 2.8. At the end of the year, the Dean submits the report on the implementing the estimate to the VEE.

Council for consideration and approval. The meeting is open to the all community members. The funds related to the maintenance of studies, science/research, and administration infrastructure, i.e., expenditures for utilities, are planned and included into the estimate on a centralized basis. VEE is not independent to operate these financial resources individually. In case of a financial need for the development of infrastructure, purchases and equipment exceeding the VEE financial capacity, the Dean submits a request, discussed with the VA Chancellor, to the University administration for consideration. The administration decides to support the request acknowledged as justified and adequate to sustain the requirements for VEE so that it fulfils its mission and achieves the objectives for infrastructure development and education. In this way, considering the reasonable grounds, a renovation of isolation facilities of Small Animals VTH was executed.

The decisions on the financial support of crucial high-cost objects to sustain achieving the strategic goals are made by the LSMU Council after prior discussions at the Rectorate and the Senate. The set of estimates for the University's financial year is prepared by December 31 of the current year. This process is performed thoroughly following the LR Law on Public Organizations Accountability, the standards of accounting and financial accountability of the public sector, and other legislative documentation regulating the preparation of financial reports by subjects of the public sector. After the LSMU Council's approval, the Rector reports on the estimates of the University's income and expenditures and the course of their implementation. The financial activities of the University are made public and are a constituent part of the annual report of the LSMU activities. It is accessible to all community members and the society outside the Establishment.

Standard 2.3: Resources allocation must be regularly reviewed to ensure that available resources meet the requirements.

List of the ongoing and planned major investments for developing, improving and/or refurbishing facilities and equipment, and origin of the funding.

VEE plans all the ongoing investments for developing, improving and refurbishing equipment following the VEE strategic goals. The investments for enhancing the facilities, excluding refurbishing the premises, construction, etc., are planned in co-operation with other LSMU units such as Building Maintenance and Repairs Department, Construction and Investment Department. Complying the <u>Lithuanian National Law on</u> <u>Public Procurement</u>, every year VEE drafts the Annual Plan for investments in facilities and equipment. The funds, directly assigned from the national budget, other incomes generated from the projects (if it is known that the funding term meets the set deadline) are included in the VEE Annual Procurement Plan. The Institutional Annual Procurement Plan for all University units shall be approved by order of the Rector till the end of March of the current year. The VEE Annual Procurement Plan and the University mainly focus on fulfilling new investment needs emerging because of upcoming projects. **Table 2.1.1** shows the that the VEE investments' mean for the equipment in 2018–2020 was about 428,158.00 EUR. **The data of the VEE**

annual procurement plan in 2021 indicated such significant investments planned by VEE:

- 1. MRI System 889,000.00 EUR (project fund, Decision of the Council No. UT1-33-3, 19-09-2019);
- 2. IT Systems including the Animal Registration and Information e-monitoring system 180,000.00 EUR (the intended funds are from other generated incomes);
- 3. Various laboratory and medical equipment: surgery quipment (>150,000.00 EUR, a biochemical analyzer (47,940.00 EUR), diagnostic equipment (41,000.00 EUR), a morphological blood analyzer (18,150.00 EUR), a centrifuge (12,300.00 EUR), the microscopes (10,000.00 EUR), etc. The funds' origin is the other generated incomes, as well as the State direct assignations.
- 4. Services related to a project proposal for building a new Veterinary Teaching Hospital (VTH) at Užnemunės Street 3, Kaunas, LT (the estimated funds for this project are 356,000.00 EUR).

VEE plans further investments in the equipment and refurbiching facilities in 2022 and later:

- 1. New Small Animal VTH construction and services related to it about 9,098,000.00 EUR in 2021–2026 m. (the origin of the funds: Decision of the LSMU Council No. UT1-24-4, 31-08-2018, the national investments for 2021-2023 (page 21));
- 2. Various laboratory and medical equipment to enhance VEE in respect of a) the public procurement plan planned for 2022, b) prospective projects, c) other initiatives, if any;
- 3. The development of experimental and practical farms of PMBC (the scheduled upcoming LSMU Council's Decision on January, 2022). One of the primary sources for funds are the funds generated by investing in properties. The total estimated amount and the schedule shall be set out in the Council's Decision.
- 4. Additional information on the intentions to review the LSMU Employee Salary Regulations is available. Such possible amendments aim to raise the staff salaries and reduce the pay inequalities of different employees. This is set as one of the main goals in the LSMU strategy for 2022–2026 period.

Total expenditures Balance* Academic year **Total revenues** 2021 6,441,609.00 6,806,455.00 364,846.00 2022 6,760,064.00 7,158,667.00 398,603.00 2023 7,139,750.00 7,600,404.00 460,654.00

Prospected expenditures and revenues for the next 3 academic years.

*Mean of the period 2018-2020 – 408,034.00 EUR

Description of how (procedures) and by who (description of the committee structure) expenditures, investments and revenues are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The University's budget implementation is based on the national control and internal and external audit systems at different levels. The LSMU Internal Audit Office is ensured with organizational independence and freedom of action. The members of the internal audit do not take part in the University's administrative subdivisions to uphold objectiveness.

 Table 2.1.5. Annual prospected balance between expenditures and revenues, in respect to Table 2.1.3.



Fig. 3. The processes of planning, allocating financial resources, decision-making and approving (are described above).

The conclusions of the planned internal audits and the recommendations on the potential risks and improvement of the internal control procedures are submitted to the Rector. The internal auditors also monitor the implementation of the recommendations. LSMU submits the annual report on the University's financial control status to the LR Ministry of Finance. No cases of not following the Internal Audit Office recommendations have been registered. The LR National Audit Office conducts the planned financial and activities audits of the University. The companies of external audit check the financial reports. The national auditors express their independent opinion about the correctness of the University's financial and budget implementation reports. An audit helps determine whether the University implements the principles of economic use of resources, efficiency, and resultant activity; whether the allocations from the state budget are used economically and rationally. Every national audit provides conclusions and recommendations on how to improve the University's activities. The University takes appropriate actions to make positive changes in setting new internal control procedures.

Comments on Area 2

The University enhances the efficiency of its activities, improving the management of material resources and use of funds, and aims to ensure the QA of facilities, human resources development, and the well-being of the LSMU staff and students.

Suggestions for improvement in Area 2

Diversify incomes by reducing dependence on the funding from the state budget and increasing incomes from intenational projects, agreements for services and other initiatives.

AREA 3. CURRICULUM

Standard 3.1: The curriculum must be designed, resourced and managed to ensure all graduates have achieved the graduate attributes expected to be fully compliant with the EU Directive 2005/36/EC (as amended by directive 2013/55/EU) and its Annex V.4.1. The curriculum must include the subjects (input) and must allow the acquisition of the Day One Competences (output) listed in Annex 2. This concerns Basic Sciences, Clinical Sciences in companion animals (including equine and exotic pets), Clinical Sciences in food-producing animals (including Animal Production and Herd Health Management), Food Safety and Quality, and Professional Knowledge.

The VM integrated study programme is the only programme in the study field of veterinary medicine in Lithuania and, since 1936, has been implemented only at LSMU VEE. The programme is accredited by SKVC. Since 2019, the programme has been accredited by EAEVE, and since 2011, the VM studies have been conducted in parallel in LT and EN. The learning outcomes, the scope of studies, contact, practical and independent study hours of both the LT and EN programmes are the same, and their slight differences are described in some other Standards of this report.

Description of the educational aims of the Establishment and the general strategy for the design, resources and management of the curriculum.

Educational aims are designed to effectively align the programme's content, teaching, learning, and assessment activities to form a cohesive framework. The Curriculum is regularly reviewed, improved, adjusted and updated to ensure that it remains relevant, adequate and the DOCs are to be effectively achieved. The Curriculum is implemented through modules and subjects covering all subject groups, listed in ESEVT SOP Annex 2, to achieve the Objectives of the VM programme (Annex 10). The main focus is on practical and clinical, research-based teaching and training. All changes to the Curriculum are communicated to staff, students, and stakeholders regularly. The strategy for the management of the Curriculum is based on the improvement objectives defined by the demands of primary stakeholders (employers) and feedback from the interested parties (Fig. 4). These objectives are implemented through improvement plans established at the VEE level. The data from the study process (surveys, study achievements, etc.) are used for evidence-based decisions in the planning stage. Improvement plans incorporate concrete means applied to the resources (infrastructure, staff), Curriculum, and study process. Each of the means is appointed qualitative or quantitative indicators used to measure the level of achievement, and the SPC report to the Dean and VEE Dean report on the results obtained to the VEE Council and Rectorate. If the intended goals are achieved, the planned measures and resources are standardized to what has been achieved, and new improvement goals are set based on the emerged needs for improvement of the study process. If the intended goals are not achieved, the causes of weaknesses are evaluated, ways for improvement are sought, and the budget to fund the necessary actions to be taken for improvement is planned. In case of a financial need to develop infrastructure, purchases, and equipment exceeding the VEE financial capacity, the Dean submits a request, discussed with the VA Chancellor, to the University administration for consideration. Successful implementation of the Curriculum is in direct dependence on the competencies of the academic and support staff (Area 9) as well as material (Area 4) and learning resources (Area 6).

Until 2017, the VM study programme consisted of 336 ECTS credits spread over 11 semesters (5.5 years, (*Annex 11*)): ten semesters – 30 ECTS credits each, and in the 11^{th} semester – 36 ECTS credits. The last graduates of this programme will graduate in February 2022. For this reason, this curriculum report is presented only in table forms to compare the changes/modifications that occurred in the Curriculum.



Fig. 4. General approach for the design, resources and management of the Curriculum

Based on the LR <u>LHER</u>, amended in 2016 (*Chapter 53, Article 7*) and <u>General Requirements for the</u> <u>Provision of Studies</u> (GRPS) (*Chapter 3, Article 11*), **since 2017**, the scope of the VM study programme has been increased to 360 ECTS credits (6 years, *Annex 12*)), teaching 12 semesters (30 ECTS credits per semester). Consequently, a detailed evaluation of the Curriculum was performed, and appropriate related modifications were made. VEE had one year to restructure the Curriculum, so the 6-year curriculum was designed following the valid 5.5 years curriculum, considering the evaluated strengths and weaknesses and following the LT and EAEVE legislation on the VM studies. More hours have been designated to Master thesis preparation, Clinical Rotation and Clinical and Food Hygiene Practices, and, to achieve competency-based teaching, some subjects have been integrated. Also, two new practices (Preclinical Production Animal Practice and Practice of Companion Animal Nursing) have supplemented the study programme by reducing the scope of general subjects. Moving from classical to competency-based teaching and introducing as many innovative, student-centered novel teaching/learning methods as possible, complimentary soft competencies such as intellectual property protection/entrepreneurship/ innovation/ the basics of telemedicine have been included in the curriculum. The students admitted before 2020 are being taught by the Curriculum, approved in 2017. The last graduates of this programme will graduate in 2023.

Following the recommendations of the external experts and internal and external stakeholders and after the annual evaluation of the curriculum, in 2020, the additional curriculum adjustments (not implemented in 2017) were made. The current content of the VM curriculum has been adapted based on modern technologies and achievements in veterinary sciences. In principle, the content of all subjects is coherent to the latest scientific advances and research-based veterinary practice. Modern equipment, devices, and tools that meet high technological standards are used to implement the modules. Innovative digital technologies are used to teach all the subjects. To further ensure competency-based teaching, basic subjects and sciences previously taught more traditionally, have been classified and adapted to teaching by animal organ systems and areas. The volume of clinical rotation (taking place in the 9th and 10th semesters) has been increased up to 21 ECTS credits and will be performed after the students complete all clinical courses. The students will be divided into two groups for a month-long rotation which will be done through the entire academic year and two times per semester. Such a year-round continuous rotation will enable the student to get acquainted with animal diseases specific to different seasons of the year and acquire hands-on skills. The practice in the veterinary laboratory has been replaced with a Veterinary Public Health practice further to implement the provisions for the *One Health* concept. The acquisition of laboratory testing skills and data interpretation competencies will be ensured during the extended clinical rotations. The overall scope of the curriculum has not been changed. This curriculum has been in effect since September 1, 2020 (No. VF10-05, 25-02-2020) (Annex 13). Currently, the consistent teaching of subjects in the 1st-4th semesters of the study plan being implemented since 2020 is based on horizontal and partly vertical integrations and sequence. The Curriculum allows the students to acquire the integrated general professional anatomy, histology and physiology, animal husbandry, breeding, molecular genetics, animal welfare, etc., knowledge and competencies provided for in the programme. This way, optimal conditions are created for acquiring the knowledge necessary to perform the analysis and critically evaluate the obtained results. The pre-clinical Practice in Production Animals is done in the 4th semester. The 5th and 6th semesters are a transition to clinical studies. Studying Epidemiology, General Pathology, Pharmacology, Immunology, Microbiology and Parasitology, Biosafety, and Propaedeutics allows the students to acquire the professional knowledge and competencies required for clinical practice. The Practice in Companion Animal Nursing takes place in the 6th semester. The clinical studies of Internal Medicine, Herd Health Management, Anesthesiology, Surgery, Reproductive disorders, Clinical Pathology, etc., starting with Propaedeutics in the 5th-6th semesters, are continued in the 7th-10th semesters with a focus on the teaching by animal species and vertically integrating these clinical studies with the subjects of basic sciences such as Anatomy, Histology, General Pharmacology, Pathology, etc. The Food Safety and Quality subjects are taught in semesters 9th-10th. Next, the students begin preparing their master theses. In the 11th semester, they have Public Health. Clinical Practice is performe in semesters 11th-12th. After finishing Clinical practice, students have the defence of the Practice, take the OSCE examination and the defense of the Master thesis finalizes the VM studies.

Description of the legal constraints imposed on curriculum by national/regional legislations and the degree of autonomy that the Establishment has to change the curriculum.

The LR Constitution and other laws give the University the right to prepare and approve the study programmes, which meet the requirements established by legal acts and change their curriculum. The VM programme is registered in the LR Register of Studies, Training Programmes, and Qualifications and is publicized in the Open Vocational Information, Counselling, and Guidance system (AIKOS) <u>www.aikos.smm.lt.</u> The general requirements for the implementation of studies in Lithuania are set out in LR LHER, the Descriptor of the Lithuanian Qualifications Framework, the Descriptor of Study Cycles, and GRPS. The DSFV is a specific national document regulating veterinary studies in Lithuania. SKVC has prepared the last version of DSFV according to those mentioned above national and EU standards and criteria stated in the Directive 2005/36/EC, as amended, and ESEVT SOP Annex 2 (the VEE representatives and social partners were involved in preparing the DSFV). If the programme is substantially renewed, i.e., the name, aims, and/or objectives are changed, the newly created programme must be repeatedly submitted for the University Senate's approval and then submitted to SKVC for accreditation. The accredited programme is registered with AIKOS. Periodic curriculum reviews and, if necessary, updates are conducted annually. They come into force with the approvals of the VEE Council and the University Senate.

Description of how curricular overlaps, redundancies, omissions, and lack of consistency, transversality and/or integration of the curriculum are identified and corrected.

Subject/module descriptions (Annex 14) are the primary documents describing the subject learning process. They are prepared annually, updated by a group of subject/module teaching lecturers, and supervised by a subject coordinating lecturer. If necessary, a module is supplemented with new topics, the content overlaps and/or deficiencies are eliminated, teaching and/or assessment methods are updated. The consistency and integration of the subject topics are evaluated according to the previous year's learning outcomes, student competencies acquired, and student survey results. The subject descriptions are submitted to SPC, which reviews and evaluates the entire Curriculum, considering the expressed opinions, comments and recommendations of internal and external experts, alumni, stakeholders, academic staff, and students. The SPC also evaluates the study programme's content, volume and content of the study subjects to avoid curricular overlaps and redundancies. Interdisciplinary integration and continuity of knowledge, the relevance of teaching and assessment methods, the credibility and validity of assessment principles, reliability and transparency, the ratio of lectures, laboratory and classroom works, non-clinical and clinical works with animals, and supervised self-study learning are thoroughly evaluated to ensure student-centered studies further. If a module needs to be modified, corrected, and improved, SPC provides the list of recommendations to a subject coordinating lecturer. The subject descriptions prepared in LT and EN are uploaded to LSMUSIS. The changes are applied and take effect from the beginning of the academic year. The described processes ensure that the Curriculum's overlapping and/or redundant content, lack of consistency, and transversality are identified and corrected promptly.

Description of the core clinical exercises/practicals/seminars prior to the start of the clinical rotations.

The VM programme is designed by consistently distributing and integrating study subjects into the modules so that students acquire the knowledge and skills necessary to develop clinical competencies from the very beginning of their studies. From the first semester, the VM students can use VMSC to continuously train practical skills in VM by using veterinary medical simulation methods, mannequins, and simulators in a safe, stress-free, self-study learning environment without causing risk or harm to animals. The students in the 1st-2nd semesters, in groups of 10-12 students, study cell biology and histology, blood, lymphatic circulation, respiration, metabolism, excretion, and the interaction of neuroendocrine systems and sensory functions through integrated modules general patterns at the macro and micro levels and biochemistry. Teaching takes place in laboratories by performing laboratory work and preparing for the preparation of carcasses, organs, and cadavers of not infected animals (Standard 5.1). Practical work with laboratory animals is done at the teaching laboratory of the Vivarium where student groups of 3-4 practice animal fixation to obtain blood samples, examine them, determine reflexes, conduct a comparative evaluation of heart function, etc. In addition, alternative methods are also used in the VMSC (Standard 6.3), and seminars and discussions are held. The students learn professional language, acquire communication skills, and use digital technologies. In the 3rd-4th semesters, the students study animal husbandry, breeding, agronomy, and feed analysis and the peculiarities of feeding the common animal species. They learn to create feed rations adjusting them to veterinary hygiene and animal welfare requirements, acquire practical competencies during laboratory work in laboratories and PMBC (student groups of 10-12), and the trips to the external practical sites/farms that house other animal species. Veterinary Hygiene and Animal Production teaching is conducted in PMBC and on the external farms where the academic staff supervises the students. Performing the individual tasks in groups of 2–3, the students practically apply their theoretical knowledge in evaluating housing conditions, animal health status, and welfare (9 animals per student per time). During the practice

of the Animal Production and Breeding module, the students evaluate management, veterinary, and animal research parameters of different animal species, including animal constitution, features of the breed, milkyielding capacity, milking procedure, etc. Two students evaluate one animal. In addition, the visits are organized into poultry and sheep farms where every student evaluates housing and feeding technologies of sheep of different age groups, learns to fill certificates of origin, etc. Practical training in Pisciculture is performed at the LSMU Laboratory of Aquaculture and the fishery *Šilavotas*. During the visit, the students study fish farming methods in ponds, closed recirculation systems, water basins, fish farming technology and participate in transferring fish to wintering ponds, etc. At the end of the 4th semester, pre-clinical Production Animal Practice (done individually) takes place on external animal farms. This practice provides the general practical knowledge of animal care related to clinical practice, animal welfare, and professional ethics.

With the studies of General Pathology in the 5th-6th semesters, the students deepen their understanding of the etiology and pathogenesis of general pathological processes and evaluate it in practice through necroscopies, collecting samples, and cytological evaluation. General pathological processes are analyzed using the analysis of clinical cases (the problem-solving principle is applied). The module on Infectious Diseases and Immune Response introduces the pathogens of infectious diseases, their diagnosis, and prevention. Individual laboratory work with microscopes, sample preparation, tests, and research activities are performed in the laboratories. Simultaneously, the Propaedeutics studies with theoretical and practical training in the laboratory, VTHs, PMBC, external animal farms (housing all common animal species), and VMSC are conducted and the laboratory work techniques are studied. Working in groups of 10-12, the students gain knowledge in General and Clinical Pharmacology and Pharmacy, write prescriptions, do laboratory sample testing. The study subject of Veterinary Professional Ethics and Communication allows developing communication skills necessary for effective and successful communication with animal patient owners and professional partners. The soft competencies such as communication skills and professional ethics, document completion, critical thinking, etc., including the specialized subjects mentioned above, are consistently distributed and integrated throughout the entire study process from the 1st to the 12th semesters. The 3rd study year ends with the Practice of Companion Animal Nursing.

Studying the Propaedeutics, the students learn to perform general examinations of all organ systems, animal fixation methods, blood sampling, drug injection techniques, etc. The students have the opportunity to further deepen their knowledge by studying elective subjects (3 ECTS credits per year), doing additional practical training, volunteering in VEE VTHs and external veterinary clinics. Before starting clinical rotation, students acquire practical clinical skills through practical work of the clinical subjects of Internal Medicine, Anesthesiology, Surgery, Emergency Medicine, Intensive Care, Diagnostic Imaging, Reproduction, etc. During the practical work of Internal Medicine, they collect a medical history, perform special examinations (endoscopy, ultrasound examination of internal organs, etc.), interpret the blood test and other biological fluid results, set a dosage, examine colic in horses to decide whether surgical intervention is needed, etc. During the practice of Surgery, the techniques of suturing and bandaging, performing limb diagnostics, bandaging and treatment of open wounds, and more. The VM students participate in surgeries, assist the veterinary surgeon in performing assigned tasks, monitor animal sedation and anesthesia. The practical skills in providing animal care in an emergency, patient fixation, and assisting the veterinarian in performing emergency first aid diagnostic and/or treatment procedures are successfully acquired and developed.

Description (timing, group size per teacher, ...) of the core clinical rotations and emergency services (both intramural VTH and ambulatory clinics) and the direct involvement of undergraduate students in it (responsibilities, hands-on versus observation, report writing, ...)

Clinical rotation follows a set schedule and is mandatory for each student. The procedure for conducting and assessing clinical rotation and the competencies to be acquired are described in the Procedure of Clinical Rotation (*Annex 15*). The schedule is drawn up in advance and published in LSMUSIS. Rotations begin in the 5th-6th semesters as an integral part of the Propaedeutics and Clinical Pathology modules. They are continued in the 7th-8th semesters as an essential part of the Small and Large Animal Internal Medicine modules and in the 9th-10th semesters as an integral part of the Small and Large Animal Surgery and Anesthesia and Animal Obstetrics and Reproductive Disorders modules.

At the beginning of the academic year, an introductory lecture is organized for students on performing a clinical rotation in hospitals and on mobile ambulatory clinic trips, following the requirements for

occupational safety and health, biosecurity and processing of personal data, etc. The students are provided with hospital uniform clothing and footwear. A VEE VTH lecturer leads and supervises clinical rotation.

Clinical rotation is done at the VTHs, PMBC, and participating in all mobile ambulatory clinic trips to external farms (Standard 5.2) and VMSC. During the rotations, the students practice working hands-on with all common animal species treated in hospitals and farms. There are also exceptional cases with wild animals. Practicing in small groups of 4–8 students ensures that each student has the opportunity to complete each task hands-on, acquire the required mandatory competencies and receive an individual assessment. Clinical rotation runs in weekly periods, during the day and at night. Hence, the students can monitor the course of healing of hospitalized patients from check-in to recovery, provide intensive care and first aid. During the rotation, the student participates in the process of collecting the patient's medical history, appropriate recording, evaluating the general health condition of a patient, animal sedation, performing and interpreting clinical case trials, appointing treatment and care. The students studying in EN are assisted in collecting anamnesis, if necessary, by residents or a lecturer. The SOPs describing communication with patient owners, animal examinations, and others are available in LT and EN. Surgical procedures, the monitoring and treatment of patients in intensive care, further follow-up check-ups, and simple surgeries such as castration, sterilization, Caesarean section, diagnosing of lameness, first aid and intensive care are integral parts of the clinical rotation. On each mobile ambulatory clinic trip with one lecturer to cattle, horse, and sheep farms, there are 2-4 students (Standards 4.4; 4.7 and 5.2). Practical training on external farms is done following the occupational safety and biosecurity rules. There, the students get acquainted with the selected patients, colect the anamnesis, perform the clinical examination and special tests individually, prepare treatment protocols, do the assigned tasks. In the cases of more complex manipulations, the students perform simple tasks, present their conclusions, learn herd health management. On the equine farms, the students perform lameness diagnostics, a horse health evaluation, injections, horse teeth and oral cavity examination, the selection of a sedation type, a uterine examination, pregnancy diagnostics by ultrasound, bacteriological and cytological sampling from the uterus, and an animal fixation using fixating devices, etc. Pig farms are visited in groups of 10-12 students (under the requirement of farm owners). The students spend eight hours on the farm. They perform castrations, vaccinations, insemination, assistance in the delivery, injections, herd management cycles, and more tasks under the supervision of a lecturer. These farms house up to 10,000– 12,000 pigs. Therefore, the required hands-on training is sufficient for all students.

The DOCs obtained during clinical rotation have to be registered in the Clinical Rotation Logbook (*Annex 16*). The student-acquired competencies are assessed by a responsible lecturer. The most interesting clinical cases are discussed and analyzed at the end of the rotation. The students write reflections on the most notable cases.

Description (timing, group size per teacher) of the teaching in slaughterhouses and in premises for the production, processing, distribution/sale or consumption of food of animal origin.

Two training components need to be distinguished – the intra-mural and the extra-mural. The intra-mural training is performed during the subject Food Hygiene and Technology. The practical sessions of the 5th-year VM students take place in one of the three animal slaughterhouses selectively. One group (up to 10 students) is supervised by a lecturer and spends at least 4 hours in the slaughterhouse monitoring the slaughter process and work of veterinarians, performing antemortem and post-mortem inspection, evaluation of assuring animal welfare and the hygiene during a technological slaughter process. They get acquainted with the labeling of carcasses, traceability, handling of by-products, identification of dangerous substances, and sampling procedures. The knowledge acquired by students at the slaughterhouses is assessed by colloquium, and the practical skills are subsequently developed and assessed during the Food Hygiene Practice. The student groups studying Dairy Hygiene and Technology (up to 10 students at a time), accompanied by a lecturer, visit the JSC Pieno tyrimai Laboratory, spending there 4 hours, where they get acquainted with testing the composition and quality of procured raw cow's milk. The volume of extra-mural practical training (formalized by contract, mandatory for all students) in the slaughterhouses is 2 ECTS credits (since 2021/2022 - 3 ECTS credits). The student is trained and taught by professional veterinary surgeon – official meat inspector on deepening the abilities acquired during studying the subject and implementing the objectives, prescribed in the Order of the practice (Standard 3.5).

Table 3.1.1. Curriculum hours in each academic year taken by each student

Academic				Theore	etical ti	raining	;					Supe	rvised	practi		G	: other	:s	H: total					
year	Α	: lectu	res	B:	semina	ars	C: supervised self			D: laboratory and			E: n	on-clir	nical	F: cli	nical a	nimal						
							learning			deskbased work			ani	imal w	ork		work							
	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°
Year 1	177.5	188.5	215.5	22	22	30	390	444	430	196.5	194.5	295.5	184	230	193	-	-	-	308	280	323	1278	1359	1487
Year 2	228	235	212	13	48	42	445	444	382	355	332	245	145	184	180	-	-	-	279	338	278	1465	1581	1339
Year 3	215	183	212	53	53	81	426	388	508	138	70	89	141	185	202	211	219	127	316	258	250	1500	1356	1469
Year 4	244	258	262	12	12	12	469	518	446	82	82	0	73	91	90	552	587	617	215	196	185	1647	1744	1612
Year 5	209	233	178	31	34	32	458	512	371	56	132	154	57	97	101	388	560	579	217	213	188	1416	1781	1603
Year 6	38	20	30	3	0	20	378	517	717	72	28	34	80	70	106	194	424	536	111	194	215	876	1253	1658

Table 3.1.2. Curriculum hours taken by each student

Subjects			Th	eore	tical 1	train	ing				(Superv	vised p	oractio		G	: other	rs	H: total					
	A:	lectu	res	B: s	semir	ars	C: s	uperv	vised	D: lab	orator	y and	E: n	on-cli	nical	F:	clinic	al]					
							self	learr	ning	desk	based y	work	ani	mal w	ork	ani	nal w	ork						
	5.5 ^a	6 ^b	6c ^b	5.5 ^a	6 ^b	6 ^c	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°
1. Basic subjects																								
Medical physics	16.5	16.5	16.5	-	-	-	23	23	23	35.5	35.5	35.5	-	-	-	-	-	-	5	5	5	80	80	80
Chemistry (inorganic. organic)	15	15	15	-	-	-	22	22	22	28	28	28	-	-	-	-	-	-	15	15	15	80	80	80
Animal biology, zoology, cell biol.	24	24	24	6	6	6	80	80	80	40	40	40	-	-	-	-	-	-	10	10	10	160	160	160
Feed plant biology, toxic plants	19	19	21	12	12	14	65	65	70	28	28	34	-	-	-	-	-	-	6	6	6	130	130	145
Biomedical statistics	15	15	15	-		-	34	34	20	32	32	20	-	-	-	-	-	-	26	26	-	107	107	81
1 – Total number of hours	89.5	89.5	91.5	18	18	20	224	224	215	163.5	163.5	157.5	-	-	-	-	-	-	62	62	36	557	557	520
Specif											rinary	subject	ts											
2. Basic Sciences																								
Anatomy. histology, embryology	90	90	90	-	-	-	190	209	208	30	-	-	184	230	233	-	-	-	149	126	125	643	655	656
Physiology	34	34	34	-	-	-	68	68	76	-	-	-	73	73	76	-	-	-	92	92	92	267	267	278
Biochemistry	36	36	36	8	8	8	18	18	20	56	56	56	-	-	-	-	-	-	42	42	42	160	160	160
General and molecular genetics	18	18	18	4	4	4	6	11	11	26	26	26	-	-	-	-	-	-	26	21	21	80	80	80
Pharmacol., pharmacy, p-therapy	32	16	16	10	10	-	93	53	53	42	36	36	0	20	20	-	-	-	41	8	8	218	143	133
Pathology	46	46	39	-	-	-	101	101	93	-	-	-	90	90	81	-	-	-	35	34	26	272	271	239
Toxicology	12	12	10	-	-	-	12	12	10	-	-	-	24	24	24	-	-	-	32	32	32	80	80	76
Parasitology	36	36	10	-	-	-	74	74	40	56	56	26	0	0	0	25	25	7	22	22	4	213	213	87
Microbiology	38	38	38	-	-	-	123	123	111	20	20	-	72	92	80	-	-	-	54	54	36	307	327	265
Immunology	14	14	16	-	-	-	17	17	10	-	-	-	32	32	30	-	-	-	57	57	50	120	120	106
Epidemiology	20	20	20	17	17	17	53	53	53	-	-	-	19	19	19	-	-	-	27	27	27	136	136	136
Inform. literacy, data manag.	8	10	60	-	-	-	234	300	415	39	37	88	-	-	-	-	-	-	213	307	312	494	650	875
Profess. ethics, communication	11	11	11	26	26	26	20	20	20	-	-	-	-	-	-	-	-	-	23	23	23	80	80	80
An. health econ., pract. manag.	12	12	12	-	-	-	20	20	20	22	22	26	-	-	-	-	-	-	6	6	6	60	60	64
Animal ethology	6	6	6	-	18	18	14	20	20	15	-	-	-	-	-	-	-	-	-	9	9	35	53	53

Continuation of the Table 3.1.2.

Subjects	Theoretical training											Superv	ised p	racti		G: others			H: total					
	A:	lectu	res	B: s	semir	ars	C: s	uperv	vised	D: lat	orator	y and	E: n	on-cli	nical	F	clinic :	al						
						self	learı	ning	desk	based y	work	ani	mal w	ork	ani	mal w	ork							
	5.5 ^a	6 ^b	6c ^b	5.5 ^a	6 ^b	6 ^c	5.5 ^a	6 ^b	6 ^c	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6 ^c	5.5 ^a	6 ^b	6 ^c	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6 °
Animal welfare	6	6	6	-	16	16	14	20	20	15	-	-	-	-	-	-	-	-	-	10	10	35	52	52
Animal nutrition	28	16	23	-	-	-	14	13	24	62	38	54	-	-	-	-	-	-	56	40	50	160	107	151
2 – Total number of hours	447	421	445	65	99	89	1071	1132	1202	383	291	312	494	580	563	25	25	7	875	910	873	3360	3458	3491
3. Clinical Sciences																								
Obstetrics, reprod., disorders	50	54	36	8	8	6	110	110	100	-	32	22	9	9	9	79	79	79	38	23	10	294	315	262
Diagnostic pathology		56	56	12	12	12	110	101	101	-	-	-	16	24	24	75	75	75	51	67	67	320	335	335
Medicine		18	18	-	-	-	32	32	32	-	-	-	0	0	0	47	47	47	3	3	3	100	100	100
Surgery		76	84	-	-	-	128	128	130	-	-	-	0	0	0	190	190	230	17	17	33	411	411	477
Anesthesiology		13	10	-	-	-	22	22	15	-	-	-	0	0	0	34	34	26	6	6	3	75	75	54
Clinic. pract. train. com. an. spec.		-	-	-	-	-	138	265	268	-	-	-	60	60	80	415	817	1000	-	-	-	613	1142	1348
Preventive medicine		18	18	-	-	38	61	61	90	-	-	-	24	24	24	12	12	24	45	45	45	160	160	239
Diagnostic imaging		20	28	-	-	-	42	42	66	14	14	20	-	-	-	16	16	24	16	16	47	108	108	185
Therapy in com. animal species	84	110	80	-	-	-	149	219	140	-	-	-	-	34	24	281	316	239	55	52	47	569	721	530
Propaedeut. comm. anim. species	32	32	34	-	-	-	24	28	20	-	-	-	-	-	-	135	143	72	49	49	34	240	252	160
3 – Total number of hours	367	397	364	20	20	56	816	1008	962	14	46	42	109	151	161	1284	1729	1816	280	278	289	2890	3629	3690
4. Animal Production																								
Anim. prod. breed. husb, econom.	84	84	73	5	6	6	166	170	118	185	184	140	-	19	12	-	-	-	71	71	63	511	534	412
Herd health management	4	4	4	-	-	-	8	8	18	-	-	-	9	9	18	-	-	-	-	-	-	21	21	40
4 – Total number of hours	88	88	77	5	6	6	174	178	136	185	184	140	9	28	30	0	0	0	71	71	63	532	555	452
5. Food Safety and Quality, Veteri	inary	Publ	lic He	alth a	and ()ne H	Iealtl	ı Con	cept															
Vet. legisl. offic. Contr., regulat. vet.	34	36	46	-	-	-	123	123	168	54	54	60	10	10	26	36	36	36	27	27	47	284	286	403
services, forens. vet. med. certific.																								
Control of food, feed, anim. by-prod.	45	45	45	14	14	14	75	75	75	22	22	22	10	10	10	-	-	-	40	40	40	206	206	206
Zoonoses	10	10	10	3	3	3	21	21	21	24	24	24	10	10	10	-	-	-	9	9	9	77	77	77
Food hygiene and microbiology		10	10	-	-	-	42	42	55	31	31	37	28	58	62	-	-	-	52	52	52	163	193	216
Food technology		21	21	9	9	9	20	20	20	23	23	23	10	10	10	-	-	-	30	30	30	113	113	113
5 – Total number of hours	120	122	132	26	26	46	281	281	339	154	154	166	68	98	118	36	36	36	158	158	178	843	875	1015
TOTAL NUMBER OF HOURS	1112	1117.	.1109.	134	169	213	2566	2823	2854	956.6	838.5	817.5	632	857	872	1345	1790	1879	1446	1479	1439	8182	9074	9168
1-6 YEAR		5	5																					

^a5,5 year curriculum; ^b6 year curriculum since 2017, ^c6 year curriculum since 2020.

Types	List of practical rotations (Disciplines/Species)	Duration (weeks)* 2020/2021	Duration (weeks)* 2021/2022	Year of programme
Intra-mural (PMBC, farms laboratories, Institute of Animal Science, etc.)	Animal Production and Welfare Practical Skills	0.6	0.6	2
Intra-mural hospitals (VTH)	Propaedeutics and Clinical Pathology clinical rotation	1	1	3
	Clinical rotation of Small Animal Internal Medicine	1.2	1.2	4
	Clinical rotation of Large Animal Internal Medicine (horses included)	0.8	1.2	4
	Clinical rotation of Small Animal Surgery	1.4	1.8	5
	Clinical rotation of Large Animal Surgery (horses included)	0.8	1.6	5
	Animal Obstetrics and Reproductive Disorders	0.8 – small animals; 1 – large animals; 1 – other**	0.8 – small animals; 1– large animals; 1 – other**	5
Ambulatory clinics Herd	During Clinical Rotation of Propedeutics and Clinical Pathology (horses included)	0.2	0.2	3
Health Management	During Clinical Rotation of Large Animal Internal Medicine (horses included)	0.4	0.4	4
	During Clinical Rotation of Large Animal Surgery (horses included)	0.4	0.6 – large animals; 0.2 – pigs	5
FSQ & VPH	Food Hygiene and Technology	0.2	0.2	5
Electives	-	-	-	-
Others (specify)	-		-	-

Table 3.3.3. Practical rotations under academic staff supervision (excluding EPT)

*Duration of week (5- work days week) – 40 academic hours ** – other hands-on activities during the large animal clinical rotation in pathology center and VMSC.

Table 3.1.4. Curriculum hours taken as electives for each student

Elective subjects		A: lectures			B: seminars			C: supervised self learning			D: laboratory and deskbased work			E: non-clinical animal work			F: clinical animal work			G: others			H: total		
		6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	5.5 ^a	6 ^b	6°	
Basic subjects	9.5	5.8	9.3	15.8	10	18.2	38.5	30.7	39	9.5	3.5	6.3	-	-	-	-	-	-	6.8	3.5	6.2	80	53	80	
Basic Sciences		7.7	11.8	4.5	2.7	5.2	39.9	27.8	39.7	20	14.6	19.6	1.8	0.8	1.4	-	0.4	-	1.3	1.8	2.2	80	55.7	80	
Clinical Sciences		9.2	11.4	1.8	3.8	3	40	32.8	14.1	14.6	7.1	12.2	2.75	2.5	3	6.4	5.2	7.5	2.1	0.9	2	80	61.7	80	
Animal Production	11.1	8.25	11.4	8.7	5.1	7.3	36.1	28.3	36.8	13.8	7.5	13	5.4	3.8	7.1	3.8	3	3.8	1.4	2.5	1.6	80	58.2	80	
Food Safety and Quality. Veterinary Public Health and One Health Concept		8.4	12.1	9.8	4	11.5	37.8	31.1	38.4	13.2	6.3	11.4	4.2	3.4	4.4	-	-	-	2.2	1.6	3	80	56.4	80	
Professional knowledge, communication and digital technologies		5.4	7.4	7.8	7.5	10.3	34.7	29.1	38.9	8.8	3.7	8.8	-	-	-	-	-	-	12.4	9.9	14.6	80	55.6	80	

 5.5^{a} year curriculum; 6^{b} year curriculum since 2017; 6^{c} year curriculum since 2020.
Description of the selection procedures of the Electives by the students and the degree of freedom in their choice (e.g., what happens when too many students select one specific track).

The procedure for choosing elective subjects is regulated in Chapter VII, Section 5 of the LSMU SR. Each student must choose at least 15 ECTS credits during the study period from the proposed list of electives (Annex 17). For EN-speaking students in the 1st-2nd study years, a compulsory subject of LT language (total of 11 ECTS credits) alternative is taught, which is necessary during their clinical studies for communication with animal patient owners. There are no more compulsory electives in the study programme. In different semesters, the students are offered elective subjects corresponding to the groups of subjects studied at that time, e.g., Basic Sciences, Clinical sciences, etc. (Table 3.1.5). The list of electives is updated annually by SPC according to the programme's objectives and the relevance and popularity of the study subjects. SPC decides when the most suitable time in the study plan is to teach a new subject. The list of elective subjects is compiled, maintaining the continuity of subject groups. The students can deepen their knowledge in the chosen area throughout the academic years or yearly choose modules of a different field. The students select the electives for the upcoming academic year in LSMUSIS, where the min and max number of places available in the subject is indicated. The students are entitled to study individual subjects or modules at the University as additional elective subjects, exceeding the volume of the study programme. Newly enrolled students choose subjects within the first two weeks of the 1st semester. The priority to choose is based on the pre-registration procedure. The extra group of some prevalent subjects can be formed, if necessary.

Fable 3.1.5. Optional cours	s proposed to students	(not compulsory)*
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Electives	Number of electives
Basic subjects	6
Basic Sciences	10
Clinical Sciences	25
Animal Production	12
Food Safety and Quality, Veterinary Public Health and One Health Concept	8
Professional knowledge, communication and digital technologies	12
*The full list of elections is since in Armon 17	

*The full list of electives is given in Annex 17.

Description of the procedures (e.g., logbooks) used to ascertain the achievement of each core practical/clinical activity (preclinical, clinical, ambulatory clinics, EPT) by all students.

The VM curriculum has specific procedures to assess the achievements of students' practical/clinical activity (pre-clinical, clinical, ambulatory clinics, EPT) which are described at the descriptions of clinical rotations and practices and published on webpage of LSMU (**Table 3.1.6**).

Table 3.1.6. Procedures followed at VEE to ensure that each student has acquired the intended learning outcomes and competencies

Types of training	Procedures
Subject laboratory	 Mandatory student participation in subject practical and laboratory work. Attendance checks during courses laboratory works and practical training
training	 Individual assessment of the intended in the plan student competence acquisition.
2. PRECLINICAL	SCIENCES
2.1. Development of Practical Skills in Animal Production and Welfare	 Attendance checks during course laboratory works and practical training. Students fill in the Logbook of acquired competencies. Practical skills in Animal Husbandry, Breeding, Veterinary Hygiene, and Animal Welfare are assessed separately in the Practical Skills Logbook and are part of the summative assessment of subjects.
2.2. Preclinical Production Animal Practice (EPT)	 Practice is performed according to the agreed and submitted to a Coordinator work schedule (practice performance by schedule is constantly being checked). Each student completes the tasks provided in the study plan to achieve learning outcomes and prepares a practice report. Practice Supervisor writes an evaluation report and assesses the student's acquired competencies with a grade. Report on practical training prepared by a student is assessed with a grade by the responsible lecturers.

2.3. Practice of	• Practice is performed according to the agreed and submitted to a Coordinator work schedule
Companion	(practice performance by schedule is constantly being checked).
Animal Nursing	• Each student fills in the Logbook of Practice, describing the activities and works done,
(EPT)	competencies acquired, registers the evaluated/examined patients, writes a reflection paper.
	• Practice Supervisor writes a review and assesses the acquired competencies.
	• Lecturers evaluate/assess the Logbook of Practice and the reflection paper.
	• Student practically demonstrates the achieved results/acquired skills in VMSC and is assessed
	(applying the OSCE principle).
3. CLINICAL	• Attendance checks during clinical subject/module laboratory works and practical training.
SCIENCES	• Students demonstrate their practical skills hands-on working with the animal.
3.1. Clinical	• Clinical rotation is performed according to the confirmed schedule. The attendance is being
Rotation	checked.
	• Student Patient Registration Journal, Logbook of Clinical Rotation are filled in every rotation
	day (since September 2021 – e-Logbook).
	• Student prepares for writing the reflection paper.
	• Communication between a student and a lecturer in the workplace: patient admission,
	discussions, questions, monitoring.
	• Student is assessed for the acquisition of each competency. The assessments of student
	progress and the final assessment are applied.
	• At the end of chinical foliation, the students prepare the chinical case presentations and discussions on whot is being evolveted
	Assessment of the reflection paper propered by a student
2.0 M-1:1-	• Assessment of the fenteering aper prepared by a student.
3.2. MODIle	• Students with the lecturers of VIH visit animal farms and take part in the treatment of
Amouatory Chine	patients.
	• Acquired competencies and treated patients are registered in the Logbook and Fatient Registration Journal
	• Analysis of herd health management: student analyze data submit a report to the lecturer and
	is assessed
	 Practice is performed according to the agreed and submitted to a Coordinator work schedule
4 FPT	(practice performance by schedule is constantly being checked)
7, 121 1	• Student fills in the Logbook of Clinical Practice every practice day Patient Registration
4.1 Clinical	Iournal and prepares the report and reflection paper
4.1. Chilical	• Practice Supervisor assesses and affirms with the signature in the Practice Logbook and
Thethee	Patient Registration Journal.
	• Lecturers assess the Practice Report according to the Practice Logbook and Patient Registra-
	tion Journal.
	• Assessment of the oral practice defense.
4.2. Practice in	• Students register their acquired competencies and write a report.
Veterinary	• Practice Supervisor assesses the student acquired competencies by grades.
Laboratory	• Lecturers assess the student practice report by grades.
OSCE	Practical demonstration of acquired competencies during the examination
5 Extra-	Additional clinical practice not compulsory
Curriculum	 Students write a report on their acquired skills. The report must be signed by a supervisor by
Training	indicating completed/not completed

Standard 3.2: Programme provided by the Establishment must be competency-based and designed so that it meets the objectives set for it, including the intended learning outcomes. The qualification resulting from a programme must be clearly specified and communicated and must refer to the correct level of the national FQ for higher education and, consequently, to the FQ of the EHEA. The Establishment must provide proof of a QA system that promotes and monitors the presence of an academic environment highly conducive to learning including self-learning. Details of the type, provision and updating of appropriate learning opportunities for the students must be clearly described, as well as the involvement of students. How it encourages and prepares students for self-learning and lifelong learning.

Description of how the Establishment: -) ensures that the study programmes meet the objectives.

The Curriculum covers all subject groups listed in Annex 2 of the ESEVT SOP. The structure of the VM Curriculum is based on subject integration, which ensures a systematic understanding of the problem to be solved. The content of the Curriculum includes all the intended learning outcomes, for the implementation

of which the lecturers are free to choose the effective teaching methods, the most suitable for the subject studies. It is possible to adjust the number of lecture hours in the benefit of practical classes to ensure the students' hands-on training. The focus is on practical, research-based training to ensure that the students achieve the programme's objectives by acquiring all the intended learning outcomes and DOCs for work with all major animal species. The descriptions of all subjects and modules prepared by subject teaching lecturers are reviewed by SPC and published in LT and EN languages in LSMUSIS. The subject description contains annotation, requirements for beginners of the subject, objectives and the intended to acquire competencies and outcomes, the subject's content with indicated contact and individual work hours and tasks, learning methods, the lists of the literature sources and responsible lecturers. The description shall include an evaluation strategy to ensure that all results have been achieved (Standard 8.4). The students are introduced to the subject description during the Introduction to each subject/module. The procedures for reviewing and improving subject descriptions are described in Standard 3.1. To assure that the study programme conforms to the objectives and learning outcomes, the VEE Council, based on the recommendations given by the national (SKVC) and international (EAEVE) experts, has approved the plans to address the identified areas for improvement, and the improvement processes are ongoing. The continuous review and revision of learning outcomes are based on feedback from internal and external stakeholders. The SPC annual report contains information on the implementation of the planned measures for improvement.

The graduates of the VM programme are awarded the master's degree in Veterinary Sciences and qualification of a Veterinary Doctor. The degree and qualification in Veterinary Medicine conform to Qualification Level VII of the <u>Descriptor of the Lithuanian Qualifications Framework</u> which is in line with the European Qualifications Framework. For the new graduates, SFVS issues the license permitting to practice veterinary medicine. The international students receive the licenses in their home country in accordance with the legislation in force in that country. To date, no graduate has had a problem obtaining a license.

-) promotes an academic environment conducive to learning.

VEE is implementing the student-centered teaching model. It is executed by implementing studentoriented, encouraging, and low-stress teaching methods, an objective and fair assessment of student achievements according to clearly determined expectations, and well-defined learning outcomes, which also reflect the perspectives of future careers. Using teamwork, self-confidence, creative tasks, quick and impartial assistance, and advice allow the students to achieve the intended results. An objective evaluation of student achievements, oral consultations (clearly described and made public in the subject descriptions), clinical rotation, practical training, and examination procedures ensure building students' confidence and motivate them to progress. The harmonious conducive to the academic learning environment is created by the following: clear and friendly communication, good study administration, mentoring, career advising, counseling services for students, quick mutual feedback, student motivation forms (nominal scholarships, exchange programmes, additional competitive score points for residency studies, etc.), recognition (leadership, appreciations, etc.), academic, social and personal support (exam retake, individual schedules, academic leaves, psychological counseling, students' insurance, dormitories), a wide range of opportunities for student self-realization and leisure, joint academic and leisure events for students and lecturers. An integral part of this process is a consistent educational and professional development of the academic staff, e.g., internal courses/seminars, external practical training opportunities, and support.

-) encourages and prepares students for self-learning and lifelong learning.

From the very first year of studies, VEE encourages and prepares students for self-study and lifelong learning. The compulsory introductory subjects in professional ethics and communication, management and business organization, and the elective subjects of Communication Psychology, Design-Based Thinking, Foreign Languages, etc. provide professional knowledge and increase student confidence, self-awareness, and motivation to improve. At least 30% of study subject time/hours are allocated for students' self-learning. It includes preparation for mid-term examinations and exams, analysis of clinical cases, preparation of reports and final theses, individual learning (not assessed), etc. Students' self-learning and self-assessment tools (tests, assignments, questions in the Moodle) have been implemented in the subjects of the VM programme and VMSC. The support of the academic staff to students in organizing their self-learning is ensured. Schedules of students' self-learning are drawn up in the laboratories of the departments, and persons responsible for the registration and supervision of students during their independent work are appointed (*Annex 18*). Students are

provided with descriptions of practical tasks and necessary work tools enabling student discussions and search for the solutions to problems in the VMSC, clinics, or library, use the suggested alternative learning tools, video banks of clinical cases, etc. Students have the opportunity to consult on the performance of self-learning tasks directly or remotely. Independent search of scientific literature in the library, the literature analysis, and interpretation develops a deeper understanding of knowledge and more effective problem solving based on scientific knowledge. The library provides excellent conditions for students to find information for studies. The VTH provide access to patient medical records and laboratory test data, give additional opportunities to practice (voluntary practice). Using the Moodle platform to study all subjects creates a personal learning environment and various teaching tools available to students (presentation of information, lecture recordings, assessment tasks, etc.), develops student time planning competencies, fosters honesty and self-centered learning. Observing and controlling the outcomes of personal progress and submitting the timely applications in LSMUSIS deepens the students' understanding and management of responsibility. The students and graduates of the VM programme have the opportunity to improve their qualifications in courses organized by LSMU and VEE. The graduates are granted a license to practice animal insemination and work with ionizing radiation devices.

Standard 3.3: Programme learning outcomes must: ensure the effective alignment of all content, teaching, learning and assessment activities of the programme to form a cohesive framework; include a description of DOCs; form the basis for explicit statements of the objectives and learning outcomes of individual units of study; be communicated to staff and students; be regularly reviewed, managed and updated to ensure they remain relevant, adequate and are achieved.

Description of the educational aims and strategy in order to propose a cohesive framework and to achieve the learning outcomes.

The Learning Outcomes as approved by VEE Council, of the VM programme (Annex 10) correspond to the knowledge, skills, and competencies harmonized at the EU and national levels. The relevance of the Learning Outcomes of the VM programme is emphasized on the analysis results of professional activities, based on the advances of veterinary science, evidence-based VM, and the application of digital technologies that are consistent and include: 1) Knowledge and its application, 2) Social skills, 4) Personal skills and 5) Special abilities. The goals and intended Learning Outcomes of the VM programme are in line with the Mission of the University and are an integral part of the University's strategic goals. They comply with the Standard for the Veterinary Profession (Annex 2, Chapter V, Clause 37) and are formulated with the participation of social partners and students. Specific learning outcomes are defined for each teaching subject/module, are compatible with each other and the other results of the study programme, and are available publicly in the subject descriptions in LSMUSIS. They are formulated using Bloom's Principle of Taxonomy as a clear criterion for assessing achievement, allowing decisions to be made on which assessment methods and techniques should be used to demonstrate students' acquired knowledge, skills, and graduate and post-graduate competencies. The coherence of the modes of instruction, intended outcomes of the compulsory subjects with the learning outcomes of the VM programme and with the ESEVT DOCs is presented in Annex 19. The students are informed about the DOCs to be acquired while studying the subject. Harmonious, non-repetitive integration is achieved through regular collaboration between the groups of academic staff from different modules. The coherence of the goals and intended learning outcomes of the VM programme with the LSMU mission, operational objectives, and strategy is reflected in the public annual reports of the VEE Units, SPC activity plans and reports submitted to the VEE Council, as well as the reports of the VEE Dean and the LSMU Rector.

Description of how the Establishment ensures that the learning outcomes fit with the ESEVT Day One Competences.

The Learning Outcomes of the VM programme (*Annex 10*) fit with the ESEVT DOCs and the national requirements <u>DSFV</u>, regulating veterinary studies in Lithuania. The student-centered assessment strategy of students' achievements in VM studies leads to an objective assessment of students' intended learning outcomes. The studies of each subject/module are completed with an exam or a student's independent work (project). The professional preparation level of the students graduating from the programme, the degree of independence, the ability to apply the special knowledge, the skills required to obtain the qualification of a veterinarian are assessed by the passed OSCE examination and the defended master thesis. Passing the compulsory examinations proves that the students have the requisite knowledge and skills (*see Standard 8.4*). Regular monitoring of graduates' careers, feedback from graduates and employers, and recommendations from external evaluators are used to determine whether the learning outcomes and their assessment methods fit with the ESEVT DOCs.

Description of how (procedures) and by who (description of the committee structure) the learning outcomes are decided, communicated to staff, students and stakeholders, assessed and revised.

To ensure the relevance of Learning Outcomes of the VM programme based on professional competencies and skills fulfilling the needs of the State, society, and labor market, the outcomes are periodically revised and, if necessary, updated and complemented. This function is performed by SPC (Table 1.2.1) following the updates of the above legislation, considering the surveys of alumni and employers, analyzing the needs of the labor market, and the suggestions of employers regarding the need for well-trained and qualified specialists, and evaluating the improvement of the programme study outcomes. Factors influencing the development of veterinary sciences (e.g., the introduction of new IT, animal welfare, etc.) and relevance to the employability of graduates are also considered. After evaluating these measures, SPC identifies areas for programme outcomes that need to be improved or supplemented with new competencies. With the help of the VEE departments, the conditions of implementation and the need for improving the qualification of lecturers are discussed. The updated results are submitted to the VEE Council for consideration. The Council confirms the learning outcomes after evaluating the adequacy of updated and supplemented results for the legislation and the validity of the planned changes (assessing whether and why the recommendations of internal and external stakeholders have been taken into account). The programme learning outcomes are publicly available on the LSMU website. After approving the study plans for the upcoming academic year, the subject teaching lecturers are invited to review and update the subject descriptions at LSMUSIS.

Standard 3.4: The Establishment must have a formally constituted committee structure (which includes student representation), with clear and empowered reporting lines, to oversee and manage the curriculum and its delivery. The committee(s) must: determine the pedagogical basis, design, delivery methods and assessment methods of the curriculum; oversee QA of the curriculum, particularly gathering, evaluating, making change and responding to feedback from stakeholders, peer reviewers and external assessors, and data from examination/assessment outcomes; perform on going and periodic review of the curriculum at least every seven years by involving staff, students and stakeholders; these reviews must lead to continuous improvement. Any action taken or planned as a result of such a review must be communicated to all those concerned; identify and meet training needs for all types of staff, maintaining and enhancing their competence for the ongoing curriculum development.

Description of how (procedures) and by who (description of the committee structure) the core curriculum is decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

CMSQA develops the strategy and coordinates monitoring, evaluation, and improvement of study quality at LSMU. The Commission collects, generalizes, and considers the outcomes of the study quality evaluation and submits a report to the Rectorate. The Rector makes decisions as to the measures for study quality improvement and their implementation.

VM SPC, operating under the <u>SPC Regulations</u>, coordinates the QA of the VM study programme. The SPC Chair organizes the SPC's activities, and the decisions are made collegially. Minutes are taken of all SPC meetings. SPC works in cooperation with the academic Units and staff that implement the programme; VEE Dean; VEE Council; Career Center, which conducts the surveys of graduates and employers, collects employment information; the SC, which also conducts surveys of students and lecturers, organizes the QA training for lecturers. The list of feedback surveys described in the new updated <u>Feedback Organization Procedure for Improving the Quality of Studies at LSMU</u>. Assurance of the study programme quality control and improvement of the studies are facilitated by external evaluation of the programme (EAEVE and SKVC).

Bearing in mind the Strategic Guidelines of LSMU and VEE and considering the VM studies governing DSFV, GRPS, and EAEVE SOPs and external expert recommendations and study quality monitoring outcomes, SPC evaluates and plan the changes and/or improvement of the Curriculum and its execution. For assurance of consistent activities, SPC annually prepares a <u>Curriculum improvement plan</u> which is approved by the Dean and uploaded on the LSMU website. The results of the SPC plan implementation in the form of a written SPC Report are submitted to the VEE Dean and CMSQA after each semester. Based on the report, the Dean decides on the necessity of the measures for study quality improvement, discusses them in the VEE Council and/or LSMU administration plans the funds and human resources.

According to the <u>Procedure for Development, Improvement, and Management of Study Programmes</u>, SPC annually and periodically reviews and updates the curriculum when preparing study plans of the upcoming academic year for approval. The updating of the components of the curriculum (subject, practice, etc.), changes are suggested by the group of subject lecturers and the unit implementing the programme. SPC analyzes the

updated parts of the programme to evaluate whether the updated content, the ratio of self-study/independent work and contact (theoretical and practical work), study hours, teaching methods, and assessment strategy meet the criteria to achieve the intended learning outcomes and graduate competencies in the student-centered study format. SPC can initiates preparation of new or amended documents regulating the programme, e.g., practical training, examination operation procedures, etc. Updates are based on internal and external evaluations, graduate and employer recommendations, lecturer and student surveys. The updated curriculum is considered by the VEE Council and Rectorate and approved the Senate. The approved updated curriculum is published on the LSMU website and available to the public, students, academic, and support staff. The VEE and students are introduced to changes by the SPC members and the Dean at public meetings. The students, SPC and VEE Council members, also share this information with students. The Curriculum is presented to the SFVS and LVGA representatives during scheduled meetings. SPC cooperates with the Marketing and Communication Service, the Career Center, IRSC, etc. of LSMU to organize the study programme's publicity. SPC mainly use the capacity of University's personell training system (coordinated by Innovative Education Department (InoEdu)) and recommends their courses for the staff. External training can be obtained both from various trainings available nationally (e.g. mandatory training of staff in clinical subjects as veterinarians) and internationally (e.g. getting exchange grants for training visits to partner institutions). SPC by themselves participate in trainings including various trainings on curicullum management organised by SKVC.

Standard 3.5: External Practical Training (EPT) is compulsory training activities organized outside the Establishment, the student being under the direct supervision of a non-academic person (e.g., a practitioner). EPT cannot replace the core intramural training nor the extramural training under the close supervision of academic staff (e.g., ambulatory clinics, herd health management, practical training in FSQ and VPH). Since the veterinary degree is a professional qualification with Day One Competences, EPT must complement and strengthen the academic education inter alia by enhancing student's professional knowledge.

Description of the organization of the EPT and how it complements (but not replaces) the academic clinical training

EPT aims to provide students with the practical knowledge and skills necessary for their successful work in the future and improve them. EPT complements and strengthens the student's professional abilities through the routine acquisition of professional competences and student preparation for professional activities.

	Production Animals (preclinical)	Companion Animals/Nursing	Practice in Vet. Laboratories	FSQ Practice	Clinical Practice	
	6 ye	ears Curriculum – sir	nce 2020			
Volume, ECTS	3	3	Changed to the VPH practice-3	3	24	
Duration/weeks	2	2	2	2	16.2	
Year/semester	2 / after the 4^{th}	3 / after the 6^{th}	6/ 11-12	6 /11-12	6 / 11–12	
6	years Curriculum – no	admission since 2020) (last graduates – 3	80-06-2023)		
Volume, ECTS	3	3	3	3	30	
Duration/weeks	2	2	2	2	18	
Year/semester	2 / after the 4 th	3 / after the 6^{th}	4 / after the 8 th	6 / the10 th	6 / 11–12	
5.5 years Curriculum – no admission since 2017 (last graduates – 28-02-2022)						
Volume, ECTS	_	_	3	2	15	
Duration/weeks	_	_	2	1	9	
Year/semester	—	—	4 / after the 8^{th}	6 / after the 10^{th}	11	

Table 3.5.1. Curriculum in Days of External Practical Training (EPT) for Each Student

During practical training, students receive proposals for additional practical training orare invited to pursue a career at the company after graduation. However, this does not replace the core intramural training nor the extramural training done under close supervision of the academic staff. VEE organizes EPT according to the Practice Operating Procedures approved by the VEE Council. The assessment and implementation of the competencies to be acquired are described in the Procedures.

All important information about practical training is published on the Moodle platform. At the end of practice, the students submit the completed practical training logbook, patiens registration journal, report,

and other documents required for the practical training assessment in the Moodle course. In total, the VM students have five types of different compulsory EPT (**Table 3.5.1**).

Standard 3.6: The EPT providers must have an agreement with the Establishment and the student (in order to state their respective rights and duties, including insurance matters), provide a standardized evaluation of the performance of the student during their EPT and be allowed to provide feedback to the Establishment on the EPT programme. There must be a member responsible for the overall supervision of the EPT, including liaison with EPT providers.

A Coordinator of practical training (hereinafter – Coordinator), appointed by the Dean's decree, employed by VEE and holding a veterinary qualification, coordinates the practice (**Table 3.6.1**). The Coordinators plan and coordinate the intended events and dates/times, inform students, communicate with the practical training Supervisors, assure the preparation of agreements, the selection, and evaluation of the EPT bases, check on the course of student's practice, conduct the anonymous surveys of students and Supervisors, arrange training seminars for the EPT Supervisors and perform other related activities.

Description of how the EPT providers are linked to the Establishment (a copy of one of the agreements to be provided in the appendices), assess the students and provide feedback to the Establishment.

The tripartite agreements (*Annex 20*) regarding EPT are signed between the University, EPT providers, and the student. The University is represented by the VEE Dean appointed by the Rectors order. At the request of the EPT supervisor, a salary can be paid for supervising the student's EPT. An e-EPT administration system has been implemented since 2021. The EPT agreements are signed electronically. During EPT, the students are supervised and assessed by a Supervisor who has a minimum of three years of practical work experience. At the end of practice, the Supervisor assesses student's logbook and report, writes a review on the student's practical preparation and acquired competencies (*Annex 21*) and gives feedback to the Establishment. The Supervisor's signature and official stamp confirm that theinformation in the documents is true and correct. The academic staff visits students on a practical training basis and checks whether the practice is done by schedule, communicates with the students and Supervisor (individually), and verifies compliance with the procedures and conditions provided for in the EPT agreement. Distance meetings are organized with the Supervisors working abroad. Considering Supervisors' recommendations, the procedures of practical training can be updated or adjusted.

Academic person responsible for the supervision of the EPT	Contacts	Fields of Practice
Dr. Jurgita Jovaišienė Dr. Jūratė Rudejevienė	jurgita.jovaisiene@lsmuni.lt jurate.rudejeviene@lsmuni.lt	Production Animals preclinic Companion Animal Nursing Clinical Practice
Assoc. Prof. Dr. Aistė Kabašinskienė	aiste.kabasinskienė@lsmuni.lt	FSQ
Prof. Dr. Saulius Petkevičius	saulius.petkevicius@lsmuni.lt	Practice in Vet. Laboratory

Table 3.6.1. Academic person(s) responsible for the supervision of the EPT activities

Standard 3.7: Students must take responsibility for their own learning during EPT. This includes preparing properly before each placement, keeping a proper record of their experience during EPT by using a logbook provided by the Establishment and evaluating the EPT. Students must be allowed to complain officially and/or anonymously about issues occurring during EPT. The Establishment must have a system of QA to monitor the implementation, progress and then feedback within the EPT activities.

Description of the implications of students in the preparation, recording and assessment of their EPT.

Before each EPT, the Coordinator communicates the practice's procedure, tasks, and assessment criteria to the students. The students are advised on how to write reports, fill in the logbook, and are informed about the possibility of submitting a complaint about issues related to the practice. The documents that students must complete in each EPT are also specified in the procedures approved by VEE. The students can choose the practice base individually from the list of recommended practice bases uploaded in the Moodle or choose the base for practical training of their preference. Students studying in EN usually do practice in their home countries. Although, some international students do it in Lithuania. Some LT language speaking students go on practice abroad under the Erasmus exchange programme or find a practical training base individually. The foreign institutions and Supervisors of EPT are subject to the same quality criteria as national practice

bases and supervisors. The student's acquired DOCs during practice are assessed following the provisions of the LSMU SR. The particular parameters of the assessment of each EPT are described in the EPT Regulations. At the end of EPT, the practice Coordinator conducts anonymous student surveys. Students' feedback on practical training, its operation, and EPT bases is the main criterion for improving the practice organization, registration of competencies, and the assessment processes.

Description of the complaint process in place concerning EPT.

There are three ways how students can complain about EPT: 1) During the practice, the students have the right to inform in writing the practice Coordinator or the VEE Dean about any issues/problems related to the practical training and can change the practice base. No student complaints have been received in the past four years; 2) At the end of practice, the students fill in an anonymous questionnaire (approved by CMSQA) uploaded in the Moodle course of the practice. Practice coordinators analyze these questionnaires, presenting their results to SPC and the Dean; 3) Students can provide anonymous feedback (opinion, suggestions, complaints) about an EPT by filling out a questionnaire Study Quality Thermometer in LSMUSIS. The Coordinator and SPC analyze the filled questionnaires. The results of the questionnaires are discussed in SPC, together with practice coordinators, responsible lecturers, practice Supervisors (if necessary), and the decisions on improvements are made. All decisions are communicated to the Dean and confirmed by the VEE Council. Similarly, the VM students are provided with feedback by the practice Coordinators, SPC, and the Dean's office.

Comments on Area 3

In 2020, the implementation of the updated VM Curriculum opened up wider opportunities for the VM students to understand the programme's content. From the first study year onwards, it allows the students to study a broader range of subjects, link the knowledge and skills acquired, and develop their critical thinking and skills to solve problems in an integrated way early on. The Curriculum includes all the intended structural parts. The time/hours intended to teach the General Subjects and Sciences, Animal Production and Herd Management, Clinical Sciences and Food Hygiene and Public Health groups are allocated optimally. Veterinary science is evolving rapidly, so SPC, coordinating the programme and responsible for its quality, reviews the Curriculum and its learning outcomes and updates it regularly. SPC is a cohesive Curriculum QA team composed of lecturers of various disciplines, veterinary practitioners, and students of different study years. Therefore, SPC is competent to execute an objective curriculum improvement, timely respond to feedback, and provide educational support to the academic staff. SPC follows the documents governing veterinary studies, the recommendations of VEE, the University and external experts, as well as the students and social partners, and ensures that the principles of interdisciplinary integration and continuity of knowledge, validity, credibility, and transparency of assessment are consistent and conform with learning outcomes. All this and the ratio between the lectures, laboratory and desk-based work, non-clinical and clinical animal work, and supervised self-learning necessary to ensure the student-centered studies are described in the subject descriptions available at LSMUSIS. The VM study programme is a competency-based study. Therefore, the new pre-clinical production of animals and the company's animal nursing practices are focused on preparing for clinical studies and are started in the 2nd-3rd study years. The programme has increased the volume of clinical studies' time and focused more on biosafety, the rational use of antimicrobials, and animal welfare. The substantially upgraded clinical equipment of the Small and Large Animal VTHs, new veterinary services, and plenty of contracts on the Large Animal VTH mobile ambulatory clinic services enable the students to work with all common animal species during clinical studies and clinical rotations. The newly introduced e-logbook for registering the DOCs and assessment is more transparent, precise, and ergonomic for students and lecturers. It is planned that the VEE provided opportunities to acquire clinical skills will improve further after the PMBC study base have been renovated and the construction of the Wild Animal Rescue Center, funded by the Ministry of Environment of the RL, have been implemented. The student's professional skills are also supplemented and strengthened by the acquisition of the DOCs during EPT.

Suggestions for improvement in Area 3

- 1. To regularly monitor and timely update learning outcomes, considering the latest advances and the rapid growth of digital technologies in veterinary sciences and practice.
- 2. To further improve the current possibilities of the newly implemented e-logbook for registering and assessing the competencies acquired by the students.

- 3. To increase the integration of general sciences with clinical subjects, thus further advancing the start of clinical studies when a new VTH (which is being built) is open.
- 4. VEE is planning conducting surveys of the market needs and student opinion to evaluate the need and possibilities for introducing specializations in the programme from the 6th study year.

AREA 4. FACILITIES AND EQUIPMENT

Standard 4.1: All aspects of the physical facilities must provide an environment conducive to learning, including internet access. The veterinary VEE must have a clear strategy and programme for maintaining and upgrading its buildings and equipment. Facilities must comply with all relevant legislation including health, safety, biosecurity, accessibility to people with reduced mobility, and EU animal welfare and care standards.

Description of the location and organization of the facilities used for the veterinary curriculum (surface area, distance from the main campus for extramural facilities, ...) (maps to be provided as appendices).

VA VEE is located in Kaunas, the second-largest city in Lithuania, in the very center of the LR. The VA area occupies 5.95 ha and forms a closed-type VA student campus (Annex 22). The campus has all the necessary infrastructure for the VM study process: Large and Small Animal VTHs and Isolation facilities, Anatomicum, Pathology Center, VMSC, VA Library, departments of Anatomy and Physiology, Food Safety and Quality, and Veterinary Pathobiology, and Institute of Microbiology and Virology. Also, there are the Departments of Animal Nutrition and Animal Breeding and two Institutes: Animal Husbandry Technology and Biology Systems and Genetic Research - belonging to the Faculty of Animal Sciences; the Vivarium and the LSMU Biological Research Center. On the VA campus, other LSMU units provide conveniences for students and staff. They include the University garage/car park of the vehicles used for the VTHs needs, student and animal transportation, the Laundry, and the Kaunas NFVRAI Territorial Division where the students have practice. The LSMU Sports Center for the needs of students and staff and the Faculty of Public Health building are also in the VA territory. A part of the Faculty of Public Health premises is used for teaching Food Hygiene, and the general university classrooms for performing the VM student assessments and studies. Next to the VA campus, there are four student dormitories. All buildings on campus have internet access and Wi-Fi, and sanitary facilities. The distance between the buildings is 2-7 minutes of walking on average. Even though most of the buildings are heritage sites, they are well adapted to the needs of individuals with disabilities. The public transport stops are 5–8 minutes walking distance from the VEE. LSMU PMBC, which is used for developing the students' preclinical and clinical skills, has two farms located 8 km and 20 km from the VA student campus (Annex 23). The extramural practical sites/bases (partner farms and companies) are within an 8–120 km radius from the VEE (Annex 24).

Description of the strategy and programme for maintaining and upgrading the current facilities and equipment and/or acquiring new ones.

The general management of all LSMU material resources is regulated by the LR LHER, the University Statute, and the Procedures for management and disposal of funds and assets at the University (LSMU Council's Decision, No. 5–6, 20-06-2014 (will be updated on 22-12-2021)). Strategic needs for the buildings and the equipment are considered and planned following the University's strategic development guidelines. VEE performs an annual evaluation of other needs for infrastructure repairs, maintenance, renewal, and development. The procedure for decision-making is described in Standard 2.2.

A renovation of the infrastructure of the VEE Large and Small Animal VTHs (herein – VTHs, Project) was one of the strategic development priorities for LSMU in 2017–2021. The LSMU Council made the decisions (No. UT1-24-4, 31-08-2018; No. UT1-31-3, 13-06-2019) on allocating more than 4 million EUR for renovation and further development of buildings and equipment and improvement of the competencies of the VTHs' veterinarians. The State investment programme has been approved for the "Development of the Infrastructure Required for Implementation of the VM Study Programme" project. Currently, in October/November 2021, the related civil engineering services are being provided to embody the concept of the new VTH with a total area of > 5216 m², of which 4344 m² are designed for the premises of a Small Animal VTH. The remaining 1.4 ha are planned for the buildings of the equine disease diagnostics and equine orthopedics sections: a building with surgery rooms and 14 separate stalls for horses will occupy 0.6 ha, a horse manege – 0.3 ha. Currently, the primar project proposals are being submitted. The term planned for the

full implementation of the project is 2024–2026¹. Another ongoing strategic project is the modernization of the PMBC practical training base, and the environmental impact evaluation has already been performed. LSMU will set up a new cattle farm and a separate functional training building with individual training farms of small ruminants, horses, and pigs to acquire practical skills for students. The presently operating Giraitė farm facilities are planned to be adapted to the needs of the Large Animal VTH².

Description of how the Establishment ensures that all physical facilities comply with all relevant legislation.

The re-construction, construction, and maintenance of buildings are carried out by the licensed contractors (services are purchased) following the Lithuanian Construction Technical Regulation requirements and other legal acts prepared on its basis. Therefore, the general condition of all VEE buildings complies with the requirements of national safety legislation. Supervision/maintenance of buildings and territory is executed following the LR Law on the State Supervision of Territorial Planning and Construction. At the VEE, the LSMU Building Maintenance and Repair Service supervises the buildings, arranges current repairs of buildings, premises, engineering networks, equipment used in the VEE's activities. The equipment maintenance coordination is planned by equipment maintenance specialists. There is an online registration system https://uzduotys.lsmuni.lt/login.php for registering routine check-ups and for (re)solving faults and other technical problems. The LSMU Accommodation Service performs and supports proper maintenance of the VEE territories and internal premises in the VEE buildings, fire, and physical protection. The Service also assures the readiness/compliance/suitability and technical safety of the premises designated for the studying process. The trained and responsible employees service the elevators and the lifts of wheelchairs and maintain their use, follow and assure hygiene standards, do daily cleaning of the premises and waste removal/disposal. The contracts are concluded with external private security companies for the security of the premises. All study and work premises and work environments comply with the LR Law on Occupational Safety and Health and the Lithuanian Hygiene Norms (HN 129:2012; HN 32:2004; HN 69:2003; HN 23-1993; HN 33-1993; HN 51-1994 and HN 31-1993). The premises where chemical and biological materials are handled are equipped with eye showers, laminar boxes, and reagent storage cabinets. All rooms have emergency exits, first aid kits, fire extinguishers, and other necessary safety equipment. In the corridors of all buildings, there are emergency evacuation plans and direction signs, stationary fire extinguishing systems, sanitary facilities. The inspection of the premises is performed according to the Methodological Guidelines for The Evaluation of Ergonomic Risk Factors. The LSMU SHSD is responsible for controlling compliance with the legal acts on the safety and health of the premises and employees and fire protection. This Service is also responsible for the proper management of bio-waste at the University. An external inspection of the buildings and premises is performed according to national regulations. The heads of the VEE units, according to their competence, manage and are in charge of implementing the biosecurity, biosafety and health and fire protection requirements for employees inside the buildings. The building administrators run the maintenance and administration of the facilities.

Standard 4.2: Lecture theatres, teaching laboratories, tutorial rooms, clinical facilities and other teaching spaces must be adequate in number, size and equipped for the instructional purposes and must be well maintained. The facilities must be adapted for the number of students enrolled. Students must have ready access to adequate and sufficient study, self-learning, recreation, locker, sanitary and food service facilities. Offices, teaching preparation and research laboratories must be sufficient for the needs of the academic and support staff.

VEE has all the necessary infrastructure (*Annex 25*) for the VM studies with a sufficient number of auditoriums, seminar rooms/classes, and laboratories of various sizes with appropriate laboratory and/or clinical equipment required for studies and research. In cooperation with the VEE units, the Study Center assigns the necessary premises for the lectures and classes. Therefore, the existing infrastructure is used rationally and efficiently. The lecturers and study support staff can see the occupancy of the premises in the LSMUSIS system, and if necessary, they can book available/vacant premises individually. VEE has a sufficient number of facilities and was able to properly ensure and fulfill the requirements imposed by the COVID-19 restrictions.

Short description (number, size, equipment, ...) of the premises for: -) lecturing, group work (seminars, tutorials, ...).

Seven main auditoriums and seven smaller (up to 46 seats) auditoriums are used to implement the VM study programme (**Table 4.1**). All auditoriums and classrooms are equipped with modern audiovisual equipment and devices. In the buildings on the VEE campus, there are 59 rooms of various sizes, with 1307

¹ The deadline is dependent on the flows of the State funding (State investment programme).

² It will be dependent on the decisions of the LSMU Council.

workplaces designed for group work. The absolute majority of the premises are equipped for work with multimedia. Each classroom has, on average, from 10 to 36 seating for students.

Hall name	Dr. S. Jankausko	Dr. K. Aleksos	Dr. R. Karazijos	IV Auditorium	Dr. J. Čygo	Dr. J. Žemaičio	Event Hall
Places	110	144	140	140	60	90	418
Size, m ²	114	215	180	183	65	85	577

Table 4.1. Main VI	EE auditoriums/halls	and the number	of seats in them
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-) practical work (laboratories, ...).

There are 69 classrooms for practical work, with 1085 workplaces. The practical work laboratories are designed and equipped for student groups of different sizes (from 10 to 36 workplaces). On average, 9–12 students work there, and 5–6 students work in clinical subject classes at a time. The work safety, biosafety and biosecurity requirements are always ensured, and the available equipment enables the fulfillment of study subject requirements. The diagnostic and/or clinical equipment in the laboratories of the VTHs, Microbiology, Parasitology, Pathology Center, Reproduction, etc., is used for both studies and clinical services.

-) skill labs (preclinical stimulation-based training on dummies, ...). See Area 6, Standard 6.3.

Short description (number of rooms and places, ...) of the premises for: -) study and self-learning.

During working hours, the students can use public spaces in the VEE campus buildings, seating furniture and tables found there, and use university wide available free Wi-Fi on their personal computers and devices. The VM students use the LSMU Library and Information Center (BIC) and the VA Library (*see Area 6*) and spacious, comfortable and well-ventilated auditoriums in the facilities for self-study. The study Units make the schedules for students' additional self-study in the laboratories. The student dormitories also have spaces for self-study.

-) catering, canteens, ... -) locker rooms; accommodation for on call students; leisure.

In Building No. 5, in front of the student leisure space, there is a café where the students can buy snacks and drinks throughout the day. In addition to the cafe a new modern catering facilities will be opened in 2022 I quarter. Due to COVID-19 pandemic LSMU canteen's premises are under renovation for longer period than expected. The main VEE buildings have vending machines for coffee and snacks. The students conducting clinical rotation or carrying out research in the departments can use the fully furnished dining rooms with tables, chairs, refrigerators, microwaves, and kettles. Conveniently, nearby VEE (within 5–10 min walking distance), there are five catering establishments of different types, a convenience grocery store and a supermarket. Also, there is always the possibility of ordering hot meals to be delivered directly to the student's location on campus.

All VEE units, where the students are required to change, suffices the number of lockers and cabinets to leave the clothes or personal belongings. The Pathology Center has the changing rooms located at the entrance area to the autopsy rooms, cloakrooms, and separate lockers for women (12 pcs) and men (7 pcs). The VTHs have student changing rooms and lockers for their personal belongings and clothes. In the Small Animal VTH, there are 123 lockers for the use of students and 48 for staff. The Large Animal VTH is equipped with changing/locker rooms for students, lecturers, and veterinarians (with a total of 100 lockers), and showers and WCs; the VTHs and the Pathology Center have installed shoe disinfection equipment; the VEE Anatomicum has 39 lockers for student needs, and the VMSC 24 lockers. The building of the Veterinary Pathobiology Department has two public cloakrooms with 52 hangers in each. On the ground floor of Building No. 4, there is a locker room with 90 lockable hangers.

In VTHs there are rooms for students on duty which are equipped with couches, pillows, blankets, a kitchenette equipped with a kettle, microwave, refrigerator, etc. On the ground floor of the VEE building No. 5, there is a 70.56 m² student leisure area with comfortable chairs, tables, and space for leisure with a TV set, game tables, a library, bean bags, a microwave, a kettle, etc. There is the VASA office on the fourth floor with premises intended for meetings of students. On the VEE campus there is the state-of-the-art Sports Center with basketball/handball/indoor soccer halls, an aerobics room, and indoor and outdoor fitness gyms

for students and lecturers. The LSMU SU hosts spacious premises in the University's administrative building. The VEE units have leisure lounges for the academic and support staff.

-) sanitary (toilets, washing and/or shower facilities,).

Toilets, and hand wash basins/sinks in all VEE buildings are installed following the hygiene standards. The hand wash sinks and showers are available in all training laboratories where it is obligatory based on the nature of the activity or the biosecurity requirements. The dormitories have showers, washbasins, and laundry rooms. A centralized laundry, providing work clothes and uniform washing services to the students and staff, is also located on the VA campus.

- Brief description of the staff offices and research laboratories.

All lecturers and support staff have offices, which are furnished with chairs, desks, book/ document/file folder cabinets and stands, wardrobes, necessary office equipment (computers, printers/copiers, etc.), and the internet. The common leisure spaces are also available.

The VEE research is carried out in the five VEE structural research laboratories and the research laboratories of the units. The laboratories have appropriate equipment for the activities performed (*Annex 26*) and are used by lecturers, researchers, and students for the research and studies. The study subject practices and laboratory work are done, and the master theses are prepared in these laboratories. The VM students are constantly supervised and assisted by a lecturer or support staff during their work in the laboratories and good laboratory practice is presented. The research activities are agreed upon and scheduled individually; Therefore, there is always a sufficient number of available workplaces in the laboratories for every student. The process of ensuring biosafety and biosecurity requirements in the laboratories is described in Biosecurity and Biosafety SOP and instructions in the laboratories.

Standard 4.3: The livestock facilities, animal housing, core clinical teaching facilities and equipment used by the Establishment for teaching purposes must: be sufficient in capacity and adapted for the number of students enrolled in order to allow safe hands-on training for all students; be of a high standard, well maintained and fit for the purpose; promote best husbandry, welfare and management practices; ensure relevant biosecurity and bio-containment; be designed to enhance learning.

Description (number, size, species, ...) of the premises for housing of healthy animals.

At the VEE Large Animal VTH, healthy animals are housed in sections of the relevant animal species to ensure animal feeding, care and welfare, and biosecurity requirements. The PMBC (also *see Standard 5.2*), where more than 450 dairy cattle are housed for pre-clinical and clinical training are visited daily by staff and students of VTH. The LSMU Animal Science Institute farms are housing cattle, pigs, sheep, etc. PMBC ensures good clinical practice, biosecurity and animal welfare requirements and provides suitable conditions for studies. In the **Giraite farm** (2512 m²) of PMBC, the premises (seminar rooms) for studies occupies – 698 m², and students' changing rooms – 72 m². The sanitary rooms have toilets, showers, and laundry. The farm has a 136 m² calving room, a 195 m² study space where sick animals are separated, and an 80 m² treatment room with headlocks. A tandem-type, fully automated, and computerized milking parlor (2×4) covers 228 m² and a milking room (70 m²), where the Afimilk Herd Management programme is used. In **Muniškiai farm** (2548 m²) is designed with 185 m² space for sick animals to keep them separately, a 43.54 m² milk storage room and the space of 35.45 m² intended for students.

The VM studies are also conducted on the **external equine, small ruminant, pig, and cattle farms**. The cooperation with these farms is confirmed by the signed contracts (*Annex 27*) on executing the studies and providing the services (*Annex 28*). All farms where the VM studies are conducted follow and comply with the SFVS requirements for animal housing, animal welfare, good veterinary clinical practice, and responsible use of antimicrobial materials.

-) research animals.

The laboratory animals for research are housed and bred in the LSMU VA Vivarium according to the SFVS Director's Order No. B1-866, 2012-10-31, the "Provision for the Approval of Requirements for Keeping, Care and Usage of Animals Used for Scientific and Educational Purposes." The VEE Vivarium by order of the SFVS Head of Kaunas County No. B-76, 2005-06-06, "On Veterinary Approval" and its amendment No. B-99, 2011-12-23 was registered with the company veterinary approval numbers of

Experimental Animal Breeding (No. LT-59-101) and Use of Experimental Animals (No. LT-61-102). In the Vivarium, the animal housing premises occupy 133 m², and different animal species are housed separately. The Vivarium premises are equipped with a recuperative ventilation system, air conditioning/ heating system. The Vivarium houses and breeds New Zealand rabbits, Hartley Guinea pigs, Wistar rats, BALB/c, and C57BL/6 mice. The number of animals in the Vivarium depends on the researchers planned needs. The use of animals for studies and research is regulated by the SFVS Director's Order No. B1-310, 2021-04-09, prepared following the European Commission Decision 2020/569/EU and the Directive 2010/63/EU. After receiving the project application SFVS evaluates the reasonability of the application and issues the permits. The animals bred in the Vivarium have also been used in the training course coded KMU777 (**Table 10.3.4**). The course is organized by VEE and intended for persons working with experimental animals. The Vivarium animals are used for studies in Physiology, Pharmacology, Ethology, and during the Animal Welfare practice.

-) hospitalized animals (number, size, species, ...) of the premises for housing.

The Small Animal VTH has six separate inpatient sections for dogs, cats, and exotic animals with a hospitalization capacity of 69 inpatients at the same time. The Intensive Therapy Section (53.80 m²) holds a total of 13 cages installed. The sizes/measurements of the cages in this section are as follows: six cages - $55 \times 75 \times 56$ cm, four cages $-85 \times 75 \times 72$ cm and three cages $-90 \times 110 \times 200$ cm. The Section of Exotic Animals (15.12 m²) has total of seven cages: two cages are $90 \times 110 \times 200$ cm, three cages $-55 \times 75 \times 56$ cm and two cages - 85×75×72 cm. These cages are equipped with warming and bactericidal/ germicidal lamps, etc. The **Cat Section** has five cages of two different sizes: three of them are $55 \times 75 \times 56$ cm and two $-85 \times 75 \times 72$ cm. The **Dog Section** (45.16 m²) is equipped with eight large stationary cages of $90 \times 110 \times 200$ cm. Animal isolation is done in a separate building in Section of Infectious Diseases (148 m²). There are five spacious isolation spaces with a total of 31 animal cages (for dogs, cats, rabbits): 21 cages are $60 \times 75 \times 60$ cm, 6 - $90 \times 75 \times 90$ cm, and $4 - 100 \times 110 \times 120$ cm. After the diagnosis is confirmed, sick animal patients are hospitalized in the different isolation wards depending on the type/class of the pathogen identified or suspected (*Standard 4.6*). In the **Magnetic resonance imaging** section area (79.12 m²), there are five sets of cages for inpatient animals before and after the medical procedures: two of them are 90×75×90 cm and three $-60 \times 75 \times 60$ cm size. To ensure the staff protection and the safety of employees and students, the Clinic has cat restraint cages, fixation straps/loops, muzzles for dogs, and special animal handling gloves.

The Large Animal VTH (1819 m²) has treatment and hospitalization sections for cattle, horses, small ruminants, and camelids. Since 2015, pigs' inpatient treatment and hospitalization have been prohibited due to the risk African swine fever epidemic and following the related orders of the LR SFVS. The Cattle Section (164 m²) is equipped with four loose-type stalls (12–18 m² each), where the cattle are kept on deep litter, and eight tie-type stalls (6–10 m² each), with the option of adjusting and using them as separate loose-type stalls. Production animals are hospitalized in the hospital under the animal owner's consent and only for study purposes. The **Small Ruminant Section** (41 m²) is equipped with two closed-type stalls (18 m² each), also adaptable for loose-type housing (one of them is designed to house animals on deep litter). Here sheep, goats, and camelids are treated, and up to four animals can be housed at one time. For the most part, due to the geographical specificity of Lithuania, veterinary services for large animals are provided on animal housing sites. Therefore, the VM students also always travel to those external sites and get directly involved in the veterinary procedures and services under the supervision of a lecturer. The Horse Section (151 m²) is equipped with 14 stalls (10–12.5 m² each), which can hold a total of 16 patients to be treated. The inpatient animals are brought to the Large Animal VTH from various Lithuanian private farms and, with the consent of the animal owners, are used for study purposes during clinical rotations, practices, and studying the clinical subjects. All hospitalized animals are provided with appropriate housing conditions, feeding and care, and animal welfare in compliance with biosecurity requirements, regulated by order of the LR MA No. 3D-234. In all stalls of each different animal species, drinking water, feed, and change of litter (straw, sawdust) are ensured and constantly supplied.

Description (number, size, equipment, species, disciplines, ...) of the premises for clinical activities. Description of the equipment used for clinical services (diagnostic, treatment, prevention, surgery, anesthesia, physiotherapy, ...).

A comprehensive list of clinical services and equipment is provided in *Annexes 28* and *29*, respectively. The **Small Animal VTH**^{\cdot} main Building No. 14 covers an area of 656.78 m²; Building No. 16 (321.0 m²) where the Section of Infectious Diseases is located has a space of 148 m² intended for animals' isolation

rooms. MRI diagnostic rooms are in Building No.1 and occupy a 79.12 m² area. In the Small Animal VTH main building, there are reception and Sections of Therapeutics, Surgery, Exotic Animal Diseases, Emergency and Imaging diagnostics (excluding MRI), a Veterinary pharmacy, a Diagnostic laboratory, and Intensive care sections. The Small Animal VTH also has six examination and procedure rooms (~11.5 m² each); they are equipped with examination and treatment tables, computers with installed registration programme, and equipment necessary for clinical examination. The Clinic's dermatology, cardiology, ophthalmology, dialysis, vaccinations, rehabilitation, exotic animal, and initial examination rooms are fully and well furnished. Medical examination and treatment of exotic animals (rodents, birds, and reptiles) are performed separately in two for this purpose equipped rooms (25 m^2) – the procedural treatment and inpatient rooms. The procedural room has the equipment necessary for clinical examination, a treatment table, washing equipment, and an oxygen system. The Ophthalmology Room has the possibility of a complete room darkening. It is equipped with an indirect ophthalmoscope, a biomicroscope with a slit lamp, a medical digital retinal fundus camera for veterinary eye examinations and procedures using the ophthalmological equipment and devices, including dermatoscopic and otoscopic lens, a tonometer, etc. The Cardiology Room has the equipment necessary for a cardiological examination, e.g., a Philips Healthcare Affiniti 70 ultrasound device. an ECG examination system, etc. The Dermatology Room has a dermatoscopy camera, a flexible video otoscope, a dermatology lamp, a Wood's lamp, and other necessary dermatologist equipment. The Rehabilitation Room provides acupuncture, massage therapy, electrostimulation Neuro Trac Rehab, muscle stimulation with a Complex Fit 3.0 stimulator, goniometer, various balls, and other devices. In the Dialysis Room, the Nikkis DBB-05D system/machine for dialysis of larger dogs is installed. Vaccination of healthy animals is performed in a separate operating room to ensure minimum contact with sick animals. The Surgery Section has an Emergency Room and Trauma Room equipped with the necessary equipment: defibrillator, ultrasound, oxygen concentrator, fluid therapy equipment including infusion pumps, monitoring equipment, etc. The Pre-Operative Room has stationary cages for dogs and cats, bathing equipment, procedural tables for preparing a patient for surgery, infrared warming/germicidal lamps for animals, a portable quartz lamp, refrigerators for feed, medicine, biological materials, etc. This room is also equipped with special hand washing basins (hot/cold water) to specially treat and prepare surgeons' and the assisting staff's hands before surgery, as well as special eye showers. There are three Surgery Rooms in the Surgery Section (with areas of 17.4 m², 22.54 m², and 11.0 m², respectively). Two of them are sterile, and one is non-sterile. There is also a Room for Dental Procedures. The Surgery Rooms are fully equipped for performing soft tissue (including obstetrics) and orthopedic surgeries. They have inhalation anesthesia machines, stationary oxygen system, arthroscope, laparoscope, patient monitoring, electrosurgical instruments – cauters, air conditioners, operating lights with the integ-rated video system. Each surgery room has two monitors for analyzing the digital X-ray pictures and/or recorded surgery (video) images. A video endoscopic system (Karl Storz Se and Co.KG) is used in the septic operating room. In a separate room of the Surgery Section, the new Instrument Sterilization room is equipped with two autoclaves, a distiller, drying cabinets, and other equipment necessary for instrument washing, disinfection, packing and marking. The Diagnostics Section has a 13.60 m² space equipped with a digital X-ray machine, EcoRay, and teeth X-ray machine. The diagnostic images are archived for further examining, analysis, and students' learning. Special protective clothing, gloves and individual dosimeters, and a gamma X-ray and radiation personal dose dosimeter-PM1621 for students and service staff are used when working with ionizing radiation. The information on personal dose is recorded in a journal, and the dosimeters are checked-up every three months (according to the current service provider contract). The Clinic has three ultrasound devices: Philips Healthcare Affinity 70, Mindray DC70 VET, Mindray DP-7, and special tables for ultrasound procedures. At the Veterinary **Pharmacy** (19.97 m²), students get acquainted with the latest medicines used to treat small animals, feed, and feed or vitamin supplements (the contracts have been concluded with various suppliers). Accounting of medicinal products and pharmaceuticals used in the Pharmacy and Clinics is performed thoroughly. Routine diagnostic tests are done in the Clinic Laboratory (35.20 m²). The Clinic Laboratory Research Section (86.59 m²) is in Building No. 5, and various laboratory diagnostic tests and scientific research are carried out there. The laboratory is richly equipped with modern diagnostic equipment: Idexx Procyte Dx; VetScan, Idexx Vet Test, Idexx Catalyst One Chemistry, electrolytic analyzer Spotchem EL SE-1520, hormonal testers and other analyzers, Immersion Circulator Haake SC100, Stand-disperser Polytron pt 3100d (High-End Line), heated bath circulator SAHARA PPO S5P, Franz Diffusion Cells System V6A-02 Immunoassay, molecular and toxicity test device Evidence Investigator, Microbiological Safety Cabinet Telstar Bio II

Advance Plus 4, etc. The **MRI Section** with a waiting room (total area – 79.12 m²) is in Building No. 1 and is advanced in the acquired modern medical devices and equipment including a Hitachi Aperto Lucent MRI machine, two Eickemeyer anesthesia machines, an oxygen system, an oxygen concentrator, other equipment needed for animal sedation, the MRI animal transport tables, a microchip reader, computers with installed image analysis programmes and transmission to the server applications, etc. The **Section of Infectious Diseases and Isolation facilities** are in a separate Building No.16. There is an examination-consultation room where only patients with suspected infectious diseases are admitted (*Standard 4.6*).

The Large Animal VTH is in Building No. 6 (1819 m²). There are everyday use premises on the ground floor, namely reception, pharmacy, staff rooms/offices, and, on the first floor, - the laboratories for Diagnostics and Propaedeutics Training and the premises for staff. In addition to the Large Animal VTH'sections described above, the VTH has a 433 m² Manege, the separate Treatment and Surgery rooms for horses, cattle, and small ruminants. There is also a Pharmacy (36 m²). The Section of Cattle, Small Ruminants, and Camelids has two treatment rooms (10 m² each) with the necessary equipment for procedures with an ultrasound machine, a rapid test analyzer, magnetic and conventional probes. It has a refrigerator for medicines and other appliances. The surgery rooms for cattle, small ruminants, and camelids have all neccessary surgical equipment, devices and instruments. The **Cattle Surgery Room** (24 m^2) has cattle fixation equipment. The corridors connecting the Clinic's sections and the Cattle Surgery Room have non-slip rubber flooring. Mobile fences are installed in the **Cattle Section** and the outer part of the building for (un)loading animals from/into transport trailers to ensure a physical protective barrier between humans and animals. The Horse Section has a 30 m² treatment room equipped for diagnostics and treatment and shower for horses. The veterinary medical procedures for horses are also performed in the 433 m² hospital manege, a part of which is paved with stones, a part is a soft path with sand, and it has a locking/fixation cage installed. The main equipment and devices are used: a portable X-ray machine with image digitizing equipment, ultrasound devices (6 pcs.), Easy Scan 3-5 MHz (2 pcs.), a portable medical ultrasound scanner Pie Medical with a convection sensor 1-3 MHz and a detector 3-5 MHz, a portable veterinary ultrasound machine iScan DRAMINSKI 7 MHz, Caresono HD 9300 Vet 5.5-7.5 MHz, a portable ultrasound machine Mindray, the endoscopic imaging system Eickview 300, horse dental care kits. The Horse Surgery Room (113 m^2) is equipped with modern ventilation and filtration systems, surgery lamps, an operating table, anesthesia and monitoring systems, an arthroscope, and surgical instruments and toolsets. There is a horse post-surgery room with fitted soft walls and floors. The Hospital's study classroom has an animal fixation machine and video demonstration equipment. This way, the surgeries can be video-recorded and broadcast directly to the study classroom No. 5. The planned development of the Large Animal VTH is described in Standard 4.1. At the VTHs, the VM students study the subjects in propaedeutics, surgery, anesthesia, internal medicine, imaging diagnostics, and clinical elective subjects and do clinical rotation and practice.

Description (number, size, equipment, species, disciplines) of the premises for: -diagnostic services including necropsy.

In the Small Animal VTH, numerous diagnostic procedures for various species of animals are performed: blood and other biological body fluids and tissues, X-ray examination (musculoskeletal system, abdominal, thorax, head and neck, teeth, etc.), ultrasonography (abdominal, thorax, cardiovascular, etc.), gastroscopy, bronchoscopy, rhinoscopy, larynx, and esophagus endoscopy, video otoscopy, arthroscopy, neurological system's MRI, bones and joints, contrast MRI of portosystemic shunts, laparoscopy, etc. The Clinic Laboratory Research Section performs preclinical and clinical studies of newly developed veterinary medicines. The Franz Chamber System is used to study the permeability of medicines, and the Randox Evidence Investigator System is used to detect the residues of medicines in biological fluids, tissues, honey, and feed. The Large Animal VTH performs the following main diagnostic procedures for cattle, horses, and camelids: X-ray and ultrasound examinations, arthroscopy, gastroscopy, endoscopy, gastroscopy, limping diagnostic tests. This VTH is the only one in Lithuania and the Baltic States which provides equine osteopathic treatment services. The LSMU Biological Research Center facilities are used for hands-on training in General Surgery, Small Animal Surgery, and Obstetrics. The Animal Reproduction Laboratory of the Large Animal VTH is equipped with modern laboratory and software for testing fresh and frozen semen, as well as diagnostic equipment for other physiology and disorders of reproduction. Semen of all animal species (sperm motility, viability and morphology, concentration, etc.) is analyzed, biochemical tests of animal blood, urine, semen, hormone concentration, ultrasound evaluation of female reproductive health, and related consultations are provided. Laboratory work in animal andrology and animal reproduction

disorders also takes place here for students allowing them to form their practical skills. At the **Pathology Center** (950 m²) autopsies of cadavers, pathological, histopathological, histomorphometric, cytological examinations of samples, and forensic veterinary examinations are performed. There are two autopsy halls (65 m² and 15 m²) with 5 autopsy tables in the Center. Up to 20–25 students can work here simultaneously. The 10 students can work in the dissection room (28 m²); up to 20–25 students – in two microscopy laboratories (67 m² and 23 m²) at a time. The autopsy hall has biological wastewater disinfection and treatment system, ventilation equipment, hoist, transport trolleys, autopsy tools and instruments, washing equipment, and special adjustable autopsy tables for different size carcasses, etc. There also is a Histology laboratory (60 m²) equipped with the microtomes, automatic tissue impregnation processor, paraffin block forming device, cryotome, diagnostic microscopes, etc. The Center has an archive of macerated macro preparations (30 m²). The students are provided with: lockers; footwear, disinfected using special ozone-generating equipment; medical uniform and lab coats (washed centrally). The Center has a refrigerator-room $-+2 - +4^{\circ} C$ (21.84 m²), freezer-room ($-10^{\circ} C$, 21.48 m²), and $-20^{\circ} C$ freezer.

In the Pathology Center, the students perform necropsies while studying General and Special Pathology and Forensic Veterinary Medicine. Practical work is conducted under the supervision of the academic and qualified support staff. Depending on the topic, students work on different varieties of cadavers. An appropriate rotation method is applied to practical work, making entries in the register so that all students obtain all required competencies. Necropsy of animal cadavers is also one of the clinical practice tasks. Students perform this task individually (*Standard 5.1, Substandard 5.1.4*).

The Microbiological Research Laboratory carries out diagnostic and scientific research in diagnosing bacterial infectious animal diseases, classical microbiology and molecular biology, pathogen diagnostics, antibiotic resistance testing, bacterial isolation, genetic tests, and researches and analyses domestic and wildlife, environmental (water, soil) microbiomes and resistomes. The Laboratory develops and tests the alternatives means to antibiotics and engages in various scientific research projects related to microorganisms. The Virology Laboratory performs virus isolation, and molecular genetics, virus isolation using different diagnostic media and reference tissue cultures, in vitro tests, and biological analysis of identified different virus types. Also, specific immunity and enzyme-linked immunosorbent assays, quantitative DNA, RNA, and protein analysis, phylogenetic, and comparative diagnostic identification of isolated and sub cultured viral pathogens with expert samples/pathogens are performed here. Unique cell culture and virus collections are formed and evaluated. The Research Center of Digestive Physiology and Pathology has laboratories equipped with modern advanced equipment enabling the scientific and diagnostic research of the digestive system of ruminants and the preparation of students' final theses. The Laboratory of Parasitology, holds modern equipment for microscopy, immunological and molecular research. Diagnosis and identification of parasites in domestic and wild animals, testing resistance to antiparasitic substances, ELISA diagnostics of infectious diseases in cattle and sheep, work on the control and prevention of parasitic infections are performed here. The research carried out in the Immunology Laboratory is related to the phenotyping of immune cells in order to investigate the composition of blood and platelet-enriched fibrin membrane in healthy and oncological dogs and to find out and clarify its further use in veterinary regenerative medicine. Some molecular studies of zoonotic antigens are performed and the laboratory works on the subject of Immunology are also done in this Laboratory. The Mycotoxicology Laboratory performs mycological (contamination with yeasts and molds) and mycotoxicological tests of raw materials and feed products of plant and animal origin. VEE staff and students also use other VA research and diagnostic laboratories, e.g., the Animal Nutrition Research Laboratory, Laboratory of Biochemistry, Institute of Animal Husbandry Technologies, Animal Breeding Value Research and Selection Laboratory, K. Janušauskas Laboratory of Genetics.

The procedures performed in all laboratories are conducted following the applicable conditions and requirements of biosecurity. All mentioned-above laboratories and centers are used for the studies and research required to prepare the master's thesis.

Brief description of the premises (both intra-mural and extra-mural) used for the practical teaching of FSQ & VPH (slaughterhouses, foodstuff processing units, ...).

The practical teaching is held in the adapted modern laboratories, equipped with all the necessary equipment for laboratory work. The **Food Research and Food Technology Laboratories** (84 m² and 92 m², respectively) can seat 30 students to work safely and gain hands-on practical experience when evaluating the safety and

quality of food products. The laboratory works on the Hygiene and Technology of Meat, Milk, and Fish, and the Hygiene of Products of Plant Origin take place here. The Sensory Laboratory (35 m²) is equipped following the requirements for testing laboratories specified in the international standard (ISO / IEC 17025:2017 general requirements for the competence of testing and calibration laboratories). The Laboratory is designed with four booths for individual work, a room for discussions, a preparation room, and has disposable sampling supplies (containers/tubes/cups/dishes, etc.). In the Food Microbiology Laboratories (77.9 m² and 32 m²) and the **Laboratory of Mycotoxicology** (12 m²), students perform microbiological and mycological examination of food, feed raw materials, food products and feed. In the Water Research Laboratory analysis of quality of water is performed. Practical teaching process in animal slaughterhouses: the VM students perform practical work in slaughterhouses during the Meat Hygiene and Technology study course. The studies take place in three slaughterhouses operating according to the international standards of QA for Food Safety and Quality (FSQ) and Veterinary Public Health (VPH) purposes during the study process. The practical training is done in the slaughterhouse **UAB** Utenos mėsa which occupies an area of 3500 m². It uses the Voran Rinker equipment and animal sedation system, certified by the EKOagra institution. On average, 203 cattle and 581 pigs are slaughtered here per day. This slaughterhouse is equipped according to the EU standards with the most advanced meat processing and packaging equipment. The slaughterhouse UAB Krekenavos agrofirma has implemented the quality management system ISO 9001 with an integrated HACCP food safety system. It also has installed the business management system CSB ERP, which helps manage all processes at the slaughterhouse more efficiently, from purchasing to logistics of end production. Daily 100–200 cattle and 300-400 pigs are slaughtered here. The slaughterhouse UAB Samsonas is modern and equipped according to the EU standards, has continuous operation technological lines, refrigeration equipment, production, and household premises, and holds a horse-slaughter permit. There are 150 pigs and 20 cattle slaughtered per day and 20 horses – per month. The students have the opportunity to observe a sufficient amount of slaughtering (at least 100 pigs, 50 cattle, and/or 20 horses slaughter). Further, the VM students have the Food Hygiene practice in one of the 12 slaughterhouses recommended by SFVS. Tripartite practical training agreements and other documents provided for in the SFVS quality programme are signed. At least 50 cattle and 200 pigs are inspected during the practice by each student. The company UAB Pieno tyrimai provides students with practical training on the routine milk quality assessment. Since 2001, the company has been accredited for quality management system according to the LST EN ISO / IEC 17025 standard. This Laboratory is certified by the National Accreditation Bureau to perform physical-chemical and microbiological tests of raw milk (the Accreditation Certificate No. LA.01.106). The The UAB Pieno tyrimai laboratory applies the most advanced technologies for enhancing learning in the Dairy Safety and Hygiene area, applies a unified milk sampling, identification, and sealing system, managed by a professional laboratory operation and computer information administration system. This system administers milk sample receiving, testing, providing information, data analysis, clustering, statistical processing, and management of the quality system. Practical teaching process on the sale sites: during the subject course of Hygiene of Products of Plant Origin, each student visits Kaunas city supermarkets (large and medium size) and farmers markets (in total three) for analysing labeling information and the compliance of selected fruits, vegetables, or berries with the General Marketing Standard or Special Standard.

Standard 4.4: Core clinical teaching facilities must be provided in a veterinary teaching hospital (VTH) with 24/7 emergency services at least for companion animals and equines. Within the VTH, the Establishment must unequivocally demonstrate that standard of education and clinical research are compliant with all ESEVT Substandards, e.g., research-based and evidence-based clinical training supervised by academic staff trained to teach and to assess, availability for staff and students of facilities and patients for performing clinical research and relevant QA procedures. For ruminants, on-call service must be available if emergency services do not exist for those species in a VTH. The Establishment must ensure state-of-the-art standards of teaching clinics which remain comparable with or exceeding the best available in the private sector. The VTH and any hospitals, practices and facilities (incl. EPT) which are involved with the curriculum must meet the relevant national Practice Standards.

Description of the organization and management of the VTH and ambulatory clinics (opening hours and days, on-duty and oncall services, general consultations, list of specialized consultations, hospitalizations, emergencies and intensive care, ...).

The Small Animal VTH is open and emergency veterinary services for companion animals are provided 24/7. During the nighttime, there is VTH a veterinarian and a nurse on duty and two the 4th and 5th-study year students. The specialised veterinarians are working on call. The Large Animal VTH is open, and emergency veterinary services for horses are provided 24/7. During the nighttime, the Clinic has a

veterinarian and one person of support staff on duty and two the 4th and 5th-study year students. Emergency care for production animals is provided on-call.

The list of diagnostics, treatment, emergency and intensive care services provided by the VEE VTHs and with the active participation of the VM students is presented in *Annex 28*.

Description on how the VTH and ambulatory clinics are organized in order to max. the hands-on training of all students.

Clinical rotation for the 4th and 5th-year students takes place in weeks to monitor the patients from admission to discharge. All students are required to participate in the trips by the mobile clinic. On average, the Large Animal VTH has eight visit trips per day. Each crew consists of two-four students. The students can monitor animal patients treated at the VTHs' inpatient sections constantly at any time. The students acquire the practical skills of hands-on by operating animals (castration and sterilization) brought from the animal shelters. Practical training takes place in small groups under the supervision of a veterinarian-lecturer. All clinical studies, rotations, and practical training are mandatory for all students. The students willing to study and practice more can volunteer or do additional practical training (it is optional).

Statement that the Establishment meets the national Practice Standards.

The Veterinary Law regulates veterinary practice in Lithuania on Veterinary Medicine. In Lithuania institutions providing veterinary services (including the VEE VTHs) must comply with the SFVS Director's Order No. B1-457, on the approved Requirements for Veterinary Service Providers. A veterinary approval is granted to the premises of the veterinary service provider following the Requirements for a Veterinary Approval of the State Veterinary Control Objects, approved by order of the SFVS Director No. B1-146. The requirements cover all the necessary biosecurity, and hygiene conditions, the number of premises, their purpose, equipment and installation, cleaning requirements, mandatory logbooks, etc. Both VEE VTHs meet these requirements. SFVS has registered the VEE VTHs officially issuing the registration numbers (Large Animal VTH /No. LT 62-19-001; Small Animal VTH/No. LT 62-19-002). Both VEE VTHs are in the list of State Veterinary Control Entities published on the SFVS website and fill in the mandatory registers of Registered Animals, Veterinary Medicines Accounting, and Biocidal Products Accounting. The VEE Veterinary Pharmacy has the license (No. JVF-VV-142) for operating; SFVS controls its activities. The appointed personell, who are licensed to work with ionizing devices, coordinate the practical activities with ionizing devices at the VTHs. The devices are handled and maintained by the certified specialists employed by LSMU. The LR Radiation Protection Center performs the annual inspection of ionizing devices and refillable logs. The VEE VTHs and all other study and research units follow the provisions of the Biosecurity and Biosafety SOP. The designated persons supervise the performance of compliance with the mentioned provisions and procedures in the departments, and the VEE Committee for Biosecurity and Biosafety supervise control of compliance fulfillment. All VTHs' veterinarians hold a veterinary practice license which is to be renewed every two years (for more details, see Area 9).

Standard 4.5: The VEE must ensure that students have access to a broad range of diagnostic and therapeutic facilities, including but not limited to: diagnostic imaging, anaesthesia, clinical pathology, intensive/critical care, surgeries and treatment facilities, ambulatory services, pharmacy and necropsy facilities.

Description of how all students can have access to all relevant facilities.

The VEE VTHs provide the VM students with a 24-hour opportunity to develop competencies and improve practical skills throughout the year with various animal species. During classes of practical work and rotations of clinical subjects, the students work with veterinarians and use the releveant equipment (X-ray, ultrasound, anesthesia machines, oxygen generators, etc.) and perform necessary laboratory testing. The rational use of equipment is optimized by using the same equipment for studies and clinical activities. The students also have full access to the clinics, departments, institutes, laboratories, the Pathology Center. They can practice with the VF specialists in microbiology, parasitology, cytology, hematology, histopathology, clinical biochemistry, serology, reproduction, necropsy, pharmacy areas, etc. They also have the opportunity to improve their practical skills in the laboratories or the VEE VMSC in the time free from the studies or at their convenience. The Image Library collections accumulated by the veterinarians of the Large Animal VTH are available to the students of clinical subjects. The Animal Information System enables the students to use patients' anamnesis, diagnostic and laboratory test data, and images (without violating the Personal Data Protection Regulation) via internet for Large animal VTH patients, and for Small animal VTH patients from local network in the hospital.

The students can volunteer in the clinics in their free time during the day or at night and participate in trips for outside visits. The students can contact a study subject lecturer and request more information about the patients being treated or outpatient visit procedures, if necessary.

Standard 4.6 Appropriate isolation facilities must be provided to meet the need for the isolation and containment of animals with communicable diseases. Such isolation facilities must be properly constructed, ventilated, maintained and operated to provide for animal care and for prevention of spread of infectious agents. They must be adapted to all animals' species commonly handled in the VTH.

Description (number, size, species, ...) of the premises for housing isolated animals and how these premises guarantee isolation and containment of infectious patients.

The Small Animal VTH's Isolation facilities (148 m²) are located in a separate from the hospital building. The patients with suspected infectious diseases are admitted here. The facilities have an examination procedure room (9.58 m²), changing rooms (13.48 m²), showers and toilets. Five rooms (~16 m² each) are used to isolate small animals located in the facilities. There are five to seven stationary cages per room, 31 in total, and 5 of them have a heated bottom. The premises are adapted for isolating and treating patients (dogs, cats, rabbits) with different infectious diseases. In these rooms, patients' care of Class 3 and/or Class 4 and biosecurity are ensured (Annex 30). The premises meet the requirements of biosecurity and biosafety, and hygiene norms, are equipped with a ventilation system with temperature control and HEPA filters, and a video system for monitoring quarantined patients. After work in the isolation area, footwear and clothing are disinfected with UV rays in a disinfection cabinet Isotherm-BZ 2. A particular attention is paid to the prevention of the following diseases: rabies, acute feline and canine diarrhea (Salmonella, Campylobacter, Parvovirus, Cryptosporidium, Giardia), canine distemper, leptospi-rosis, toxoplasmosis, feline immunodeficiency and leukemia viruses. The Large Animal VTH's Isolation facilities (60 m²) are equipped with two separate stalls of 14 m² each separated by a physical barrier (wall) to isolate horses, cattle, or other animals. One of the isolation stalls is equipped with a lift to lift a lying animal, and each isolation stall has individual access from the outside, separate ventilation systems with HEPA filters, and air temperature control systems. The isolation treatment rooms have the tools and medicines necessary for veterinary care and protective equipment. In the hallways, there are sinks, cabinets, disinfectant solutions. A high-pressure washing machine with hot water and chemicals is used to clean and desinfect the premises and equipment. The facilities are equipped with a washing system (with separate sewage treatment and disinfection system) to wash and sanitize animal transport trailers.

Standard 4.7: The Establishment must have an ambulatory clinic for production animals or equivalent facilities so that students can practise field VM and Herd Health Management under academic supervision.

Description of how and by who field VM and Herd Health Management are taught to all students.

The Large Animal VTH provides herd management services on a contract basis and a call basis (*Annex* 27). The services are provided both for the farms with herd health problems and farms that need a preventive herd health evaluation. The students are involved in this practical activity. Herd Health Management is taught during the7th and 8th semesters and is integrated into the study subjects of Internal Medicine and Preventive Veterinary Medicine. The practical training is done on the 5–6 different Lithuanian farms (Padovinio, Lytagra, Minija, Vazniškiai, Skierus, etc.), housing from 200 to 3000 dairy cows and using the GEA, Dairy plan C21, DeLaval (Herd Navigator), Lely (Time4cow) herd management programmes (*also see Standard 5.2*). The group of 5–6 students travels to the farms with a lecturer. There they analyze cattle herd housing/keeping, feeding, disease diagnoses at the herd level. All analyses are based on computerized herd management programmes. The VM students have the opportunity to study independently, get practical knowledge of different herd management systems, and develop practical skills in using the obtained data.

Description of the vehicles and equipment used for the ambulatory clinic See Standard 4.8

Standard 4.8: The transport of students, live animals, cadavers, materials from animal origin and other teaching materials must be done in agreement with national and EU standards, to ensure the safety of students and staff and to prevent the spread of infectious agents.

Brief description (number, size, equipment, ...) of the vehicles used for: -) transportation of students (e.g. to extramural facilities); -) transportation of live animals; -) transportation of cadavers/organs.

At the direct disposition of the VEE, for clinical and study activities there are 12 various size vehicles (111 seats in total): 4 minibuses have seven seats, two -15 seats each, one bus with 28 – seats, and five cars (5 seats each), those are used for mobile outpatient activities. The vehicles carry a computer, ultrasound and X-ray diagnostic equipment, instruments for treatment, rapid tests, medications, and injections/ injection devices to provide professional veterinary care depending on a situation. During mobile clinic visits, surgeries such as castration, cesarean section, abomasum dislocation, dentistry procedures, wound treatment, and other VM activities are performed. In case of increased need for transportation, more LSMU owned vehicles can be used. Each car has a GPS and a user identification programme installed. The vehicles can be reserved using the LSMU Electronic process and document management system (PDVS) system or the online Eco-Fleet booking system www.ecofleet. The LSMU Property Management Service coordinates booking and use of the university transport. The Large Animal VTH also has two trailers: one for the transportation of horses and another – for cattle. The trailers are equipped with video cameras to monitor animals during transportation. The personnel of the VTH follow and ensure biosecurity. Routinely, the customers of VTH transport their animals personally. During the such arrangement of the arrival, biosecurity related information is gathered. The carcasses from the VTHs to the Pathology Center are transported using hand carts, trailers, plastic boxes, and bags of various capacities. Animal carcasses intended for study from the outside clinics and farms and carcasses and organs from slaughterhouses are delivered by suppliers in plastic bags or boxes following the current veterinary legislation in force in Lithuania. VEE manages utilization of waste of animal origin (carcasses, organs, etc.) following the requirements of the national legal acts.

Standard 4.9: Operational policies and procedures (including e.g. biosecurity, good laboratory practice and good clinical practice) must be taught and posted for students, staff and visitors and a Biosafety manual must be available. The Establishment must demonstrate a clear commitment for the delivery of biosafety and biosecurity, e.g. by a specific committee structure. The Establishment must have a system of QA to monitor and assure clinical, laboratory and farm services, including a regular monitoring of the feedback from students, staff and clients.

Description of how (procedures) and by who (description of the committee structure) changes in facilities, equipment, biosecurity procedures (health & safety management for people and animals, including waste management) good laboratory practices and good clinical practices are decided, communicated to staff, students, stakeholders (and, if appropriate, to the public), implemented, assessed and revised.

The requirements for biosecurity and biosafety followed at the VEE are described in the Biosecurity and Biosafety SOP (*Annex 30*). The VEE Committee for Biosecurity and Biosafety is responsible for the fulfillment and timely development adjusting to new risks and needs of these requirements. The Committee sets the main requirements at the VEE level and collaborates with each VEE unit. There are 11 members of the Committee, including two student representatives and two representatives of administrative units. The requirements framed in the Biosecurity and Biosafety SOPs are compulsory for the VEE academic and support staff, students, and visitors/guests. Every VEE unit has a person responsible for the coordination of the requirements in the unit. These persons shall ensure the implementation of biosecurity in a unit, proper compliance with the requirements, identify new risks on site, and communicate them to the Committee for Biosecurity and Biosafety. For operative solution of issues related to biosecurity, an e-mail address va.biosauga@lsmuni.lt is used for the VEE staff, students and responsible persons. Any individual who has questions, suggestions, or complaints regarding biosecurity issues at the VEE can immediately address them to the VEE Committee for Biosecurity and Biosafety. The Committee regularly organizes biosecurity seminars and training (compulsory for the VEE staff).

The Committee for Biosecurity and Biosafety conducts audits in the units once per year. The Dean and VA Chancellor are informed about the audit's outcomes. The Committee has a meeting to discuss the issues related to biosecurity strategies at least once in four months or more frequently if needed. In December of each year, a Committee for Biosecurity and Biosafety activity plan for the upcoming year is prepared. The Committee submits the audit conclusions to the VEE Dean, who takes into consideration the conclusions and plans relevant budget for procurement of tools. When there is an urgent need for an investment in biosecurity and biosafety, the

necessary funding can be allocated from the VEE reserve funds. The **LSMU SHSD** is responsible for the safety of the personnel, students, and visitors/guests. This Service works out annual plans for the staff's health examination. The occupational safety is regulated by the LSMU Rector's order prepared following the LR Law on Safety and Health at Work and general rules of fire prevention and protection. The heads of structural VEE Units are responsible for introducing staff members to the rules and signing in journals. Each VEE Unit also instructs and trains the staff on working with elevators, lifts, hoists, and autoclaves. The Service controls whether the rules are obeyed and is responsible for the appropriate management of hazardous waste in the LSMU Units. VEE has concluded the contract with a certified company on removing and utilizing the VEE hazardous and biohazard waste. All VEE Units comply with the current safety requirements in effect. The facilities using chemicals are equipped with special eye showers marked with special signs (the staff members are trained how to use the eye showers in emergency cases). All VEE buildings have emergency exits, fire extinguishers, and first aid kits. The Service is also responsible for controlling extreme situations, if any, and has concluded the contracts with certified companies to inspect radiation dosimeters every three months.

At the VEE, the storage and disposal of waste of animal origin are done through the Pathology Center following the national legislation requirements (for more details, *see Standard 5.1 Sub-standard 5.1.4*).

The students are introduced to the principles of Biosecurity and Biosafety SOPs in the first months of their studies in Introduction to the Studies of VM. Next, they are instructed on biosecurity measures and possible threats and risk factors when they do laboratory work and carry out research activities for each study subject (where applicable) and sign the letters of conversance. Before starting work in all laboratories and centers, the students are introduced to occupational safety rules, procedures, use, and handling of chemicals or hazardous substances. The students' workwear includes the VTHs' uniform clothing, robes, shirts, disposable gloves (during the COVID-19 pandemic, and face masks). Special attention to students' knowledge and awareness of biosecurity requirements is paid before any activities in the VTHs, Pathology Center, during Anatomy practice, and the clinical services provided outside the VEE. Before any study subject students are introduced to the biosecurity and biosafety requirements by a responsible lecturer. To ensure biosecurity requirements, at the VTHs and on outpatient visit trips, the VM students wear only the Clinics' work clothes. There is a mandatory dress code for students' workwear and free laundry service is provided at VEE campus. Shoe disinfection equipment is installed in both VTHs and the Pathology Center for drying and disinfecting the work footwear. The Anatomicum, the Pathology Center, and the VTHs' changing rooms in the biosecurity zone display the instructions on complying with biosecurity requirements before entering study and work premises.

The students sign the letters of conversance on the possibilities to get vaccines (stored in the Dean's office) against rabies and tetanus. All VEE students are electronically repeatedly informed about these vaccination possibilities twice per year before the beginning of each semester. The information is communicated to students by the academic staff orally and electronically before starting clinical activities that can pose health risks. Since 2013, all VM students have been covered with annual insurance against accidents during studies (lectures, laboratory work, and practice) and when traveling from a student's residence location for study and practice purposes and back. The Dean informs students about the insurance policy verbally and by the LSMU intranet.

The descriptions of procedures used in clinical laboratories and work procedures have been prepared, and equipment has been calibrated and maintained to ensure good laboratory and clinical practice. During the rotations and laboratory work, the students get acquainted with the laboratories' work procedures, methods, and work organization. Clinical work uses standardized protocols (first aid, anesthesia, clinical examinations, etc.) to standardize the service quality and student practical training. The VEE VTHs have implemented a Smiley count programme for rating customer satisfaction with the Clinics' services. The Study Center, in cooperation with SPC, conducts student surveys to get feedback. Also, public lectures to school students are given regularly.



Fig. 5. PDCA cycle of biosecurity and biosafety at LSMU VEE

Comments on Area 4

In recent years, the focused attention to the renovation of buildings and equipment has significantly improved the working conditions of students and teachers. LSMU Council funds for the renewal of clinical equipment have allowed the purchase of new modern equipment, such as Veterinary arthroscopic and laparoscopic equipment sets, Open MRI system Hitachi Aperto Lucent, etc. (*Annex 29*). The development and implementation of a Biosecurity and Biosafety SOP and the installation of infectious disease isolators for small and large animals ensured the development of appropriate skills for students and staff, and the demonstration of biosecurity principles to VEE customers and visitors. The implementation of the dress code in VTHs, the renovation and extension of the changing rooms, and the installation of the new laundry are also important parts of the implementation and promotion of the biosecurity culture in VEE.

The decisions adopted by the LSMU Council created preconditions for starting the development of the infrastructure required for the VM study programme – preparation of project proposals for the animal hospital, purchasing technical project preparation services, other engineering services and starting contract works. In 2021, a working group was formed by the order of the Rector in order to assess the possibilities of developing further the infrastructure of the PMBC experimental base. The development was discussed in the LSMU Council in 2021, tentatively planned decision date is January 2022.

Suggestions for improvement in Area 4

- 1. To complete Animal Registration and Information System implementation and its incorporation into the VM curriculum.
- 2. To implement as soon as possible of the LSMU Council decisions regarding the construction of the new Small Animals VTH and the renewal of infrastructure of Large Animals VTH.

AREA 5. ANIMAL RESOURCES AND TEACHING MATERIAL OF ANIMAL ORIGIN

Standard 5.1: The number and variety of healthy and diseased animals, cadavers, and material of animal origin must be adequate for providing the practical and safe hands-on training (in the areas of Basic Sciences, Clinical Sciences, Pathology, Animal Production, Food Safety and Quality) and adapted to the number of students enrolled. Evidence must be provided that these data are regularly recorded and that procedures are in place for correcting any deficiencies.

Description of the global strategy of the Establishment about the use of animals and material of animal origin for the acquisition by each student of Day One Competences (see Annex 2)

The planning the number and variety of animals, cadavers, and material of animal origin is performed in advance following the approval of the VM study plan and considering the number of students. The logbooks serve as the basis for purchase planning, resumption, and a conclusion of the agreements. Contracts with the slaughterhouses to purchase animal carcasses, organs, and by-products are prepared. Animal cadavers are obtained from the VTHs, LSMU Biological Research Center, Vivarium, private clinics, and farms. All waste disposal of animal origin at VEE is managed through the Pathology Center, ensuring compliance with

Biosafety requirements. VEE is registered as a Category I and III Animal Material User, approved by the Directors orders No. 33ĮV-430, 26-03-2020 and No.33ĮV-294, 07-06-2017 of SFVS Kaunas department.

Assurance of the necessary number of patients for clinical studies is provided for in a task of the VEE Strategy. The VTHs are requested to increase the number of animal patients by at least 5% every year. It is achievable by extending the qualifications of veterinarians, offering new modern treatment methods, and upgrading the clinical equipment. These tasks are directly related to the main objective of the VTHs to enlist as many clinical cases as possible to ensure the VM studies. The heads of the VTHs are in charge of the implementation of these strategic tasks. Live healthy animals used to acquire pre-clinical (**Table 5.1.2**) and clinical skills of students are kept at the Large Animal VTH and PMBC assuring suitable animal keeping conditions and welfare. The number of patients in the VTHs is adequate (**Table 5.1.3**). VEE also has signed a sufficient number of cooperation and service agreements (*Annex 27*) with the external farms and companies of different animal species, where the students are trained under the VEE academic staff supervision (**Table 5.1.4**), and shelter (presents companion animals for treatment). All patients of the VTHs are registered in the Electronic Patient Record System and are used in the teaching process. The owners sign a consent form allowing the participation of students in the animal treatment process.

The animals and material of animal origin are used for teaching the following specific veterinary subjects: Anatomy (cadavers of euthanized animals, animal carcasses and organs from slaughterhouses, organs, bones, skeletons, dummies, veterinary simulation models, virtual programmes, alternative methods); Physiology (healthy laboratory animals, alternative methods); Veterinary Hygiene and Animal Welfare, Animal Production and Breeding (healthy animals); Preventive Medicine, Therapy and Propaedeutics (healthy and diseased animals, veterinary simulation models, alternative methods); General and Special (Diagnostic) Pathology (cadavers, organs with pathologies from slaughterhouses, fixed organs (macro samples) and histological slides); Veterinary Parasitology and Parasitic Infections of Domestic Animals (organs with pathologies from slaughterhouses, Food Hygiene (carcasses and products of animal origin), Surgery and Anesthesiology (organs from slaughterhouses, cadavers of euthanized animals, alternative methods, veterinary simulation models, diseased animals); Clinical Practical Training (diseased animals), Obstetrics, Reproduction and Reproductive Disorders (healthy and diseased animals, organs from slaughterhouses, veterinary simulation models), Elective Clinical Subjects (healthy and diseased animals, organs from slaughterhouses, veterinary simulation models) (Table 5.1.1A and Table 5.1.1B). To control the process and timely eliminate the detected weaknesses, the VEE conduct students' surveys to gather information about their satisfaction with clinical studies. Any critical comments and recommendations are immediately considered, discussed and appropriate actions are taken at all levels. The heads of the VEE units annually report to the VEE Council, providing the information about the studies organization, number and varieties of treated animals, generated incomes, procured equipment, and the OA of students' clinical skills. The future potential needs are also indicated. Depending on the issue, it is addressed by involving all relevant levels of the University.

Description of the specific strategy of the Establishment in order to ensure that each student receives the relevant core clinical training before graduation, e.g. numbers of patients examined/treated by each student, balance between species, balance between clinical disciplines, balance between first opinion and referral cases, balance between acute and chronic cases, balance between consultations (day patients in the clinic) and hospitalizations, balance between individual medicine and population medicine.

To ensure that each student has received relevant core clinical training before graduation, the Descriptions of Clinical Rotation and Practice provide mandatory competencies to be acquired and a required minimum number of different animal species to be examined, diagnosed, and treated. After preclinical preparation from the 3rd study year, students start clinical studies and clinical rotation, which lasts until the end of the 5th-year of the studies. Clinical Rotation of the 3rd year students take place at the VEE VMSC and the VTHs and PMBC. The 4th- and 5th-year students have a weekly clinical rotation in small groups, including night shifts (**Table 5.3.1**). Students register their acquired competencies and the number of clinical cases in the clinical rotation logbooks. At the end of the 4th study year, the students have practice in the Veterinary Laboratory. Here they register clinical cases, learn to interpret tests' data, and diagnose. At the beginning of the 6th year students perform an External Clinical Practice. In the clinical practice students register their patients in a patient's registration journal (*see Standard 3.7*). The Small Animal VTH carries out an expert forensic examination in resolving disputes. The VM students participate in the procedures. The VEE Large Animal VTH is the only large animal hospital in LT, so the most complex cases are treated in a hospital involving students.

A wide collaboration with the external farms and enterprises (Annex 27) increases the opportunity that

each student receives the relevant core clinical training before graduation on all common domestic animal species. This ensure students' participation not only in animal treatment but also in herd health management veterinary training. Students in groups of 2–4 participate in all mobile ambulatory clinic service cases and make a clinical examination under the supervision of academic staff. The above measures allow ensuring a balance between complex referral and first-opinion cases, the balance between acute and chronic cases, and the balance between consultations and hospitalizations.

Description of the procedures developed to ensure the welfare of animals used for educational and research activities.

All procedures with live animals used for educational and research purposes and activities are based on sound scientific practice and conducted following the LR Law of Animal Welfare and Protection and the Order of the SFVS Director, complying with the <u>EU Directive 2010/63</u>. LSMU Vivarium has the SFVS permission (Order No. LT-59-101 and No. LT-61-102, 2011-12-23) to house and breed laboratory animals. The animals are used under strict control, following the legislation ensuring Animal Welfare and Biosafety. VEE has a permit issued by the Lithuanian Experimental Animals Ethics Commission at SFVS on using laboratory animals for studies (No. B1-272, 2018-03-22). From April 27, 2021, each LSMU Unit independently applies to SFVS to permit using animals for studies and research purposes.

The researchers and Ph.D. students planning to research animals shall have completed courses of "Keeping, Care and Usage Requirements for Animals Used for Scientific and Educational Purposes," organized by VEE. They submit the requests to the SFVS Commission to confirm the research and must receive an ethical study approval number. Procedures with laboratory animals are conducted according to the requirement to implement the 3Rs principles set out by Directive 2010/63 / EU. The LSMU Board of the Bioethics Center performs an ethical evaluation of students' research. In studies, where possible, alternative teaching methods are used (*Standard 6.3*).

Description of how the cadavers and material of animal origin for training in anatomy and pathology are obtained, stored and destroyed.

Animal carcasses and organs for **Anatomy studies** are purchased from slaughterhouses. The cadavers of euthanized after experiments (non-infected) large and laboratory animals are obtained from the LSMU Biological Research Center and Vivarium. The cadavers of euthanized companion non-infected animals (with the animal owner's agreement) are obtained from the VEE VTHs and private veterinary clinics. The animal carcasses, cadavers, and organs are stored in refrigerators and/or freezers until they are used. Depending on the practice topic, students work on different varieties of carcasses and organs (**Table 5.1.1**). From 4 to 5 students work in each sub-group, and the same animal carcass or organ is used repeatedly to make full use of it. The used carcasses and anatomical material are handled complying with the Biosafety requirements and are disposed of using the VEE Pathology Center services. Alternative study methods also are used for Anatomy studies. Students are provided with a set of desiccated, macerated, or plasticized specimens to be studied during the practical training and on-demand.

The VTHs, private veterinary clinics, animal, poultry, and fur animal farms, zoos, and other enterprises provide cadavers for Pathology studies (Table 5.1.6). The cadavers delivered to Pathology Center for diagnostic purposes are also used for studies. The by-products with pathologies are obtained from slaughterhouses. The head of the Center is in charge of ensuring a sufficient number of cadavers. Each necropsy carried out at the Center is recorded in the registration system, used also by students. The animal by-products are documented, allowing planning the quantities of carcasses and organs needed for the upcoming year. Proper storage of cadavers, body parts, and organs in refrigerators or freezers endure the sufficiency of animal origin teaching material to purposeful use, which leads to practical training stability and control. VEE follows the requirements of LR legal acts regulating the use and waste disposal of animal origin. The Pathology Center holds the permits of waste management Category 1 and Category 3 issued by the SFVS. After use, waste of animal origin is placed in special containers and stored at -10°C temperature in the refrigerator room (21.5 m²) until disposal. Under contract No. P17-514 (2021) with a certified company JSC BIOVAST, the service for the proper removal and utilization of biological waste of animal origin is regularly provided. Cadavers, body parts, organs after post mortem examination are never returned to a private person. An exception is an owner's request: companion animal cadavers (non-infected) can be returned to the owner for an animal burial or cremation.

		0	-	0
Species	2020-2021	2019–2020	2018–2019	Mean
Cattle	1	5	5	3.7
Small ruminants	11	12	18	13.7
Pigs	4	7	9	6.7
Species	2020-2021	2019–2020	2018–2019	Mean
Companion animals	11	12	12	11.7
Equine	4	5	5	4.7
Poultry & rabbits	11	11	11	11
Others: Tongue	10	13	15	12.7
Stomach	4	9	21	11.3
Liver	6	16	16	12
Lungs	12	17	16	15
Testicles	*	8	8	8**
Penis	*	14	12	13**
Hooves	6	6	4	5.3
Urinary bladder	4	4	4	4
Kidneys	16	15	20	17
Uterus	*	14	14	14**
Heart	10	12	12	11.3
Spleen	*	14	15	14.5**
Intestine	8	8	12	9.3
Udder	5	8	8	7
Bones	1150	1150	1150	1150
Moulages	13	32	32	25.7
Skeletons	16	16	16	16
Macerated organs	20	50	54	41.3

Table 5.1.1.A. Cadavers and material of animal origin used in practical anatomical training

*Due to the changed Curriculum (from 2020), the <u>Infection and Immune Response</u> module has been moved to the 4th semester and will be teachted in the spring of 2022, and the <u>Reproduction</u> module has been moved to the 3rd semester and is teaching in the autumn of 2021. **The MEAN was calculated using only 2 accademic years (2018/2019 and 2019/2020) information.

Table 5.1.1.B. Organs used in practical clinical hands-on training

Course	Species	Used organs	2020-2021	2019–2020	2018–2019	Mean
Animal obstetrics,	Cow	Uterus, cervix,	65	45	50	53.3
reproductive disorders	Sheep	ovaries	65	58	50	57.7
	Pig		28	35	30	31
	Mare		15	15	20	16.7
Animal obstetrics,	Bull	Testicles	40	35	30	35
reproductive disorders	Sheep		40	35	30	35
	Boar		15	25	20	20
	Stallion		15	25	10	16.7
Large animal Surgery	Cattle	Testicle	40	35	30	35
		Udder	28	25	20	24.3
		Uterus	40	35	30	35
		Intestine	10	15	10	11.7
		Claw	40	35	30	35
Small animal Surgery	Pig E	Ear	150	160	130	146.7
		Foot	500	250	130	293.3
		Trachea	_*	160	130	96.7
		Urinary bladd.	_*	160	130	96.7
		Stomach	140	80	130	116.7
		Intestine	_*	10	6	5.3

* Due to COVID-19 quarantine in the country, the studies were remote.

Table 5.1.2. Healthy live animals used for pre-clinical training: animal handling, physiology, animal production, propaedeutics, etc.

Species	2020–2021	2019–2020	2018–2019	Mean		
Cattle	296	153	133	194		
Small ruminants (sheep)	110	35	35	60		
Pigs*	Due to the epizootic of African swine fever, the pig farms for all visitors were closed from 2015 until Autumn of 2021					
Companion animals	61	97	105	87.7		
Equine	37	25	38	33.3		
Poultry & rabbits	102/22	32/47	12/17	48.7/28.7		
Exotic pets	25	10	11	15.3		
Others: Alpacas	15	0	0	5		
Aquatic animals	10	10	10	10		
Lab. animals	10	27	27	21.3		

Table 5.1.3. Number of patients** seen intra-murally (in the VTHs and LSMU PMBC) Image: Comparison of the second seco

Species	2020–2021	2019–2020	2018–2019	Mean	
Cattle	32	25	69	42	
Cattle (PMBC)	53	52	59	54.7	
Small ruminants	82	19	32	44.3	
Pigs*	Due to the epizootic of African swine fever, keeping pigs in VTH clinics was not allowed				
Companion animals	10420	9094	8577	9363.7	
Equine	221	200	253	224.7	
Poultry & rabbits	147	163	49	119.7	
Exotic pets	385	349	153	295.6	
Others (specify)	5 (2 lions, 2 pumas, 1 monkey)	0	1 deer	2	

Table 5.1.4. Number of patients** seen extra-murally (in the ambulatory clinics)

Species	2020–2021	2019–2020	2018–2019	Mean
Cattle	5212	5317	3110	4546.3
Small ruminants	1560	501	1653	1238
Pigs	Due to the epizootic o	f African swine fever, visiting pigs farms	was not allowed 3	1
Companion animals	52	124	119	98.3
Equine	709	684	804	732.3
Poultry & rabbits	10	61	2	24.3
Exotic pets	6	2	1	1.3
Others (specify)	20: bison, roe-deer,	20: 3-bison, 10 - deer, 1- camel,	5: $1 - \text{bison}$, $2 - \text{deer}$,	15
	a bear, a donkey)	1 - peacock	1 - donkey	

** The number of patients listed in tables 5.1.3 and 5.1.4 reflect the total number of animals treated (ambulatory clinics services) in VTHs.

Table 5.1.5. Percentage (%) of first-opinion patients used for clinical training (both in VTH and ambulatory clinics, i.e., Tables 5.1.3 & 5.1.4)

Species	2020–2021	2019–2020	2018–2019	Mean, %
Cattle	14	14	12	13.3
Small ruminants	20	23	19	20.7
Pigs	0	0	100	33
Companion animals	58	55	59	57.3
Equine	34	31	32	32.3
Poultry & rabbits	56	55	76	62.3
Exotic pets	44	36	42	40.7
Others (specify)	80	67 – bison, deer, camel,	30 - bison, deer, camel,	59
		bear, donkey	bear, donkey	

Table 5.1.6. Cadavers used in necropsy

Species	2020-2021	2019–2020	2018-2019	Mean
Cattle	27	14	13	18
Small ruminants	32	11	7	16.7
Pigs	59	39	51	49.7
Companion animals	213	210	207	210
Equine	16	19	13	16
Poultry & rabbits	379	244	299	307.3
Aquatic animals	12	39	20	23.7
Exotic pets	10	9	8	9
Others (specify) – Deer	1	2	1	1.3
Macerated and fresh organs with gross lesions (livers, lungs, ect.)	370	380	400	383.3

Cable 5.1.7. Number of visits in herds/flocks/units for training in Animal Production and Herd Heal	th
Management	

Species	2020–2021	2019–2020	2018–2019	Mean
Cattle	364	352	269	328.3
Small ruminants	109	82	91	94
Pigs	0	0	3	1
Poultry	1	3	2	2
Rabbits	1	1	1	1
Aquatic animals	14	14	16	14.7
Others (mink)	0	0	7	2.3
Exotic pets	1	2	2	1.7
Equine	349	322	329	333.3
Others	9: 3 follow-deer, 3 bears, 3 camels	6: 3 bison, 3 deer	3: 1 bear, 1 deer, 1 donkey	6

Table 5.1.8. Number of visits in slaughterhouses and related premises for training in FSQ

Species	2020-2021	2019–2020	2018–2019	Mean
Ruminant slaughterhouses (horses included)	6	6	6	6
Pig slaughterhouses	6	6	6	б
Poultry slaughterhouses	0	1	1	1
Related premises *	1	1	1	1

* Premises for the production, processing, distribution or consumption of food of animal origin

Description of how (procedures) and by who (description of the committee structure) the number and variety of animals and material of animal origin for pre-clinical and clinical training, and the clinical services provided by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The SPC is responsible for the planning and upgrading the VM Curriculum. Among the members of SPC there are representatives of Small and Large Animal VTH and Center of Pathology who supervise issues ensuring proper number of animals, material of animal origin etc., for the study purposes. Planning is carried out in advance following the approval of the VM study plan and taking into consideration the number of students. Annually, the person appointed by the Dean prepares contracts with the slaughterhouses to purchase animal carcasses, organs, and by-products. The VTHs and Pathology Center, are responsible for planning and providing sufficient number and type of patients, animal material, and cadavers for pre-clinical and clinical studies to enable students to achieve the intended competencies. The heads of the VEE Units have the persons responsible for administering the supply process in the Unit. This process includes gathering and providing information on the purchases of animal materials and the demand for carcasses, registering the trips to farms, transport booking, delivering carcasses and used materials of animal origin to the Pathology Center, etc. To provide a sufficient number of patients the VTHs organize clinical activities, initiate contracts with external farms, ensure electronic patient registration, monitor data and analyze it. Feedbacks are performed in direct communication with students, stakeholders, PMBC, academic staff, administration staff through evaluations and discussions at the all levels. The Unit heads present the results and emerged needs

in the annually reports submitted to the Dean and VEE Council based on the evaluation results. When the needs for improvement is identified new plans are designed, appropriate measures are implemented.



Fig. 6. Processes ensuring the necessary number of animals and material of animal origin for studies

Standard 5.2: In addition to the training provided in the Establishment, experience can include practical training at external sites, provided this training is organized under direct academic supervision and following the same standards as those applied in the Establishment.

Description of the organization and management of the external sites (teaching farms, ...) and the involvement of students in their running (e.g., births, milking, feeding, ...).

To ensure a sufficient number of animals necessary for the VM student practical training, the VEE uses animals kept on the LSMU-owned farms (PMBC and Baisogala Center and external sites specializing in breeding different animal species). Therefore, the students develop practical skills in Veterinary Hygiene, Animal Welfare, Animal Production and Breeding, Propaedeutics, and, with a direct participation in providing veterinary services, in Large Animal Internal Diseases, Surgery and Reproduction. The Food Hygiene studies and practice take place in three slaughterhouses. **PMBC** works in the fields of education, studies, science/research and agricultural production, and sustainable agriculture, is engaged in animal husbandry (450 dairy cattle (milk yield 10.782 kg/year) are kept and bred). The Propaedeutics and pre-clinical studies in Veterinary Hygiene, Animal Husbandry and Breeding, Milking Technology and Feeding, and Animal Welfare studies take place on these sites. Students perform daily veterinary procedures (disease prevention, diagnosis, calving detection, etc.), analyze storage, feeding impact on the health of dairy cattle. Students apply theoretical knowledge to practice by performing individual tasks: assessing housing conditions, health status, and animal welfare (nine animals per student at a time). During animal husbandry practice, students evaluate the parameters of dairy and beef cattle management, veterinary and animal science (farm type, animal composition, breed characteristics, milk production possibilities, milking procedure, etc.). Two students assess one animal. Students complete a logbook of their practical skills.

Local breeds of the LT farm animals (pigs, sheep, goats, cattle, birds, horses) have been preserved and researched at the **Baisogala Center.** The institute has a specialized testing farm, carries out animal nutrition and organic animal husbandry and welfare research technologies, and performs embryo transplantation and related research. Students get acquainted with these technologies, different animal breeds, and species during the visits and analyze their specifics. Students practice under the supervision of an accompanying lecturer. The external cattle farms: Lytagra – houses 3,000 cattle, Skierus – 500 cattle, and Minija – 700 cattle, Vazniskiai – 1,600 cattle, Padovinys – 1,200 cattle. All farms house high productivity (>12.0 kg/year) dairy cows. The farms use the latest and most advanced herd management systems: Lytagra farm – Lely milking robots, feeding system and herd calving programme, Minija, Vazniskiai and Padovinys farms – *GEA milking, feeding, and heard management system*, Skierus farm – *DeLavalHerd Navigator* herd management system. On the farm Lytagra, the cows are milked using the free-traffic *Lely Astronaut*® *A3* milking robots. Parameters such as rumination time, milk yield, body weight, milk lactose, milk somatic cell count, milk electrical

conductivity of all udder quarters, milk fat/protein ratio and consumption of concentrates are registered with the help of this equipment each time a cow is being milked. The temperature, the pH of cow reticulorumen contents and cow activity are recorded using specific SmaXtec boluses, specially manufactured for animal care. SmaXtec Animal Care Technology® enables continuous real-time monitoring of various data such as ruminal pH and temperature. On this farm, from 80 to 100 cows calve per month. The farm has a separate calving space where the practicing students can observe the calving process and, if necessary, assist. The farm uses the TMR feeding system, which allows the students, under the lecturer's supervision, to perform the evaluation of feed and the analysis of ration efficiency according to the mentioned parameters recorded by milking robots. The farm Skierus uses the DeLaval milking robots with free traffic combined with the fully automated real-time milk analyzer *DeLaval Herd Navigator*. The innovative real-time analyzer *Lattec I/S Herd Navigator*™ is combined with the *DeLaval* milking robot to detect milk beta- β-hydroxybutyrate concentrations, lactate dehydrogenase activity in milk and body condition scores. The milk samples are then transferred into the Herd NavigatorTM for further analysis. Cow body condition is scored using the *DeLaval* body condition scoring 3DBCS cameras. On this farm, there are 40-50 calving cases per month. The farms Minija, Vazniskiai and Padovinvs use the GEA milking system and the GEA DairvPlan herd management programme. They also use two RumiWatch devices: a noseband sensor containing a fluid-filled silicone tube with a built-in pressure sensor. This system is used for measuring cow rumination and activity behavior. Monthly, the Minija farm deals with 60–70 calving cases. At these farms, the students analyze programme data and use it to identify sick animals. They evaluate the effectiveness of cattle treatment and prevention programmes, cow milking efficiency, identify cow oestrus and possible reproductive system disorders, and perform vaccination, analyze vaccination schemes and disease eradication efficiency. Additionally, the students do practical training in animal welfare and hygiene, animal feeding and rearing and breeding, husbandry and milking techniques, knowledge and skills in health management of bovine herds. At the farms, the students get practical knowledge of different herd management systems and acquire and develop practical skills in using the data obtained. The sheep farm UAB Genetiniai ištekliai is engaged in preserving the Lithuanian black-headed sheep genetic fund, breeding, and selling offspring bred. The farm works according to the established breeding selection programme, ensuring the purity of breeding sheep by four genealogical lines available. The sheep herd is constantly improving and increasing. On this farm, the students gain practical skills in sheep breeding, husbandry, feeding, reproduction, treatment, etc. The stud farm of UAB Lietuvos žirgynas has the largest indoor manage in the country and a racetrack and playgrounds where horses are trained. Moreover, international-level competitions and horseraces are organized here. The stud farm has a horse semen storage center and stores semen of over 300 horses and stallions. This farm breeds horses of Žemaitukai, large Žemaitukai, Arab, and Traken breeds. In addition to the usual clinical equine treatment skills, the students acquire equine health assessment competencies needed when preparing horses for sale, skills in performing Xrays, diagnose limping. The cases of colic are treated at the VEE Large Animal VTH (horses are usually brought here). At the UAB Litgenas (breeding boars; sperm bank), the VM students get acquainted with sperm production technologies and sperm evaluation. The slaughterhouse UAB Utenos mesa slaughters on average 203 cattle and 581 pigs per day where the students acquire many specific competencies in reproduction diseases: performing rectal palpations of uterus and ovaries, diagnosing the diseases of reproductive organs of female and male cattle and pigs. Healthy and pathological organs are compared in situ using rectal palpation and ultrasound examination. This practical training site is the main practice base of the VM subject Food Hygiene (Standard 3.1). The AB Vilkijos ūkis (fur animals) breed and grow about 35,000 mink females, produce a high-quality mink feed to supply the market for sale. Visiting the mink farms allows the students to acquire the specifics of mink breeding and learn infectious disease prevention principles. Since 2021, the contracts have been renewed with UAB Vyturys, UAB Bridimeksas, UAB Biržų bekonas, UAB Kontvainiai, and UAB Girkalnio full-cycle pig farms housing from 3,000 to 25,000 pigs. Groups of up to 10 students, under the supervision of a lecturer spend all workday on the farm. The students participate and develop DOCs in treatment procedures, vaccination, castration, insemination, assist in pig farrowing, etc. The students gain significant practical experience in biosecurity and biosafety, in particular. The quality of such student competencies acquired at these farms is unique because the pig farms (due to the African swine fever) are maintaining extremely stringent biosecurity requirements.

Standard 5.3: The VTH must provide nursing care skills and instruction in nursing procedures. Under all situations, students must be active participants in the clinical workup of patients, including problem-oriented diagnostic approach together with diagnostic decision-making.

Description of how and by who the nursing care skills are implemented and taught to undergraduate students

Students gain their first nursing skills in the 3rd-4th semesters by studying Veterinary Hygiene and Animal Welfare. At the end of the 4th semester, the students complete a compulsory preclinical Practice of Production Animals and significantly improve the nursing skills already acquired. During the practical training, an experienced, well-qualified veterinarian (working under a tripartite contract) supervises the students' performance. The students get practical experience and acquire a range of special abilities such as recognizing sick animals in natural conditions, animal feed peculiarities under different physiological conditions, e.g., pregnancy, lactation, post-partum, etc., performing hygienic examinations of animal housing environment, organizing the implementation of animal protection measures to ensure animal health and welfare, controlling the compliance with animal health and welfare requirements, making innovative decisions, advising the animal breeder on principles of breeding/husbandry and health care for individual animal species and/or groups, monitoring the behavior of animal species in their housing spaces, identifying uncommon or inadequate (pathological) animal behavior and its causes, etc.

General veterinary nursing skills are acquired in the 5th-6th semesters by studying Propaedeutics, performing the compulsory practical classes at the VMSC, and studying electives such as Small Animals Clinical Procedures, etc. The students learn animal's fixation, recognize atypical behavioral changes, care for healthy and sick animals in natural conditions, perform injections, and more. At the end of the sixth semester, the students have a mandatory Practice of Companion Animal Nursing at the external small animal clinics to acquire veterinary nursing competencies. At the end of the practice, the student reports to the VTHs' veterinarian-lecturer and, practically demonstrates the acquired competencies in the VMSC (OSCE principe). The student also develops special nursing competencies during the 4th- and 5th-study-year clinical rotations (*see Standard 3.1*). The students of all study years are invited to volunteer at the VTHs. Here they have the opportunity to work with a veterinarian, perform nursing and other various veterinary functions and thus study effectively. The students can also study/practice at the VMSC independently in their free time from studies, or they can register for an additional practice administered by the LSMU Career Center.

Description of the group size for the different types of clinical training (both intra-murally and extra-murally) to guarantee hands-on training of all students.

The standard student group size is 10–12 students. In the 6th to 10th semesters, they are divided into subgroups of 5–6 students for studying clinical subjects. Two-four students participate in the mobile ambulatory clinic activities (in one vehicle). In providing night veterinary services every student takes part individually. Extra-mural practice is organized on an external practice bases and is also completed individually. The average number of students per practice base ranges from 1 to 3. How many students can practice at the base depends on the number of veterinarians who can lead the EPT and the number of clinical cases at the clinic (**Table 5.3.1**).

Type of clinical training, place, year of studies	Group size	Number of students per lecturer
Clinical rotation (Small and Large Animal VTHs) (3 year)	5–6	1–2
Clinical rotation (VMSC, PMBC) (3 year)	5–6	2–5
Clinical rotation (Small and Large Animal VTHs) (4 year)	5–6	1–2
Clinical rotation (Small and Large Animal VTHs) (5 year)	5–8	1–2
Extra-mural practical training (mobile ambulatory clinic (Large Animal VTH) (4–5 years)	2–4	2–4
Night shifts (Small and Large Animal VTHs (4-5 years)	1–2	1–2
Extra-mural practice in veterinary laboratories (4 year)	1–2	1–2
Extra-mural clinical practice (6 year)	1–3	1–2
Practical classes of the subjects: Propaedeutics, Internal Medicine, Surgery, Obstetrics.	10–12	5–6

Table 5.3.1 Types of clinical training and number of students

Description of the hands-on involvement of students in clinical procedures in the different species, i.e., clinical examination, diagnostic tests, nursing and critical care, anesthesia, routine surgery, ... (both intra-murally and extra-murally).

Intra-mural. The students get the primary knowledge about Biosecurity and Biosafety SOP requirements by studying Introduction to VM studies. The academic staff of the respective unit or laboratory lead the students into the detailed presentation on the biosafety/biosecurity requirements to be applied in practice and teach how to assure their compliance. At the VTH, the students get acquainted with biosecurity requirements, the general procedure, and the rules organizing the Hospital's work, and sign a commitment to comply with the Biosecurity and Biosafety SOP requirements. Intra-mural clinical practical training is performed at the VEE Small and Large Animal VTHs and PMBC. The course of Clinical Rotation is described in the Procedure of Clinical Rotation (Annex 15). Clinical rotation is integrated into clinical modules and is compulsory for all students. It is implemented at different sections of the VEE VTHs and lasts from the third to the fifth year of the studies. Such duration of clinical rotation ensures achieving the minimum level of competencies by each student, as prescribed in the ESEVT DOCs. Beginning with the third study year, every student fills a personal logbook registering the achieved clinical practical competencies. Initially, the students practice at the VMSC, where they learn the basic techniques to perform the following procedures: blood sampling, SC/IM/IV injections, fixation, suturing techniques, catheterizetion, positioning techniques, ultrasound imaging techniques, etc. Then the students apply their acquired skills to the practical training at the VTHs. The students rotate in different sections of the Hospitals and get directly involved in daily clinical practice under the constant supervision of clinical academic staff. The students practice participating in communication with a client, recording a medical case history of patients (anamnesis), performing a clinical examination, and nursing the hospitalized patients, sampling blood, and inserting an intravenous catheterization also reviewing medical history, writing case reports, developing prevention and treatment plans, prescribing medications. The international students learn to collect a history with the help of a VM resident or a lecturer because their LT speaking is not yet fluent (they study Lithuanian language 11 ECTS in the first and second years). The students use the standardized protocols in LT and EN for collecting medical history and treatment. The students participate in emergency and infectious case management, perform radiodiagnostics, assist and individually perform ultrasound, participate in clinical examinations of new cases, or are involved in laboratory and surgical procedures such as administering anesthetics, learning suturing techniques, aseptic preparation, performing soft tissues surgery (abomasa displacement, cesarean sections, castrations), odontology, orthopedic procedures, rectal palpation and examination of ovaries, semen evaluation and other procedures. The VM undergraduates provide nursing and intensive care of the hospitalized patients having the opportunity to observe their treatment and progress the entire week. During clinical rotation and practical classes at the Large Animal VTH, the students also visit the farms. They have the opportunity to encounter various clinical situations, including reproduction, diagnostic, surgery cases, metabolic diseases, hoof and calf diseases, the herd health management, herd health examination, including diagnostics and laboratory test findings, interpreting and summarizing them in a report. The students also take part in decision-making on euthanasia and its performance where necessary.

During **extra-mural** clinical practical training, students' involvement is the same as in intra-mural practical training. Extra-mural clinical practical training is performed by The Large Animal VTH through the mobile ambulatory clinic activities where the students acquire clinical practical competencies in specific examination techniques, diagnostics, disease prevention and treatment, nursing, metabolic diseases, doing injections and surgery, equine dental care, osteopathy, rectal examination, mastitis detection, herd health management, communication with animal/farm owners, etc. **External practical training** is conducted following the Procedure of Clinical Practice (*Annex 31*), the annexes of which provide the compulsory acquisition of DOCs and a number and species of animals to be examined (*Standard 3.1*).

Description of the procedures used to allow all students to spend extended periods in discussion, thinking and reading to deepen their understanding of the clinical case and its management

According to the LSMU SR, at least 30% of the subject studies are intended for student self-learning, most of which are supervised self-learning. Students' discussions, critical thinking, and reading to deepen their understanding of the various physiological processes begin during pre-clinical studies. Students prepare presentations on relevant topics assigned by the lecturer or chosen individually. Studying General Pathology, Clinical Microbiology, and Parasitology enables students to begin examining, discussing, and analyzing the first clinical cases. As a result, their understanding of the causes of pathological processes and the importance

of the main pathogenetical link to the disease development mechanisms. Before commencing clinical studies, students study Veterinary Professional Ethics and Communication and learn the ethical norms regulating the treatment of animals, acquire knowledge on how to address ethical issues in veterinary practice, learn code of communication with animal/farm owners, professional colleagues, and respective authorities. Clinical studies cover collecting medical history and its evaluation, analyzing and presenting specific clinical cases to the groupmates and lecturers, and performing self-assessment/ analysis based on which and depending on the subject, the students write a report focusing on the diagnostic plan and differential diagnosis (for this purpose, the test results/records stored in the VTHs' registration systems are used). The analysis of the disease causes, symptoms, and pathogenesis of their occurrence, providing adequate treatment, methods of anesthesia, postsurgical period (in case of surgery), the discussions on preventive measures, and/or nursing are included in the clinical studies content. Through discussions, the students give questions and answers, raise problems, critically evaluate each other. The discussion process is supervised by a clinician in the relevant study field, who joins the discussion when needed to avoid a wrong course of making a final decision. These discussions enable students to read further, ethically discuss, encourage critical clinical thinking and deepen their understanding of the clinical case and its management. Special e-learning tools (image recording programme in a surgery room, clinical case video bank, the Moodle, Teams, Kahoot platforms, etc.) are used for this purpose. The VEE VMSC students can access necessary additional information using the QR code system. The literature to prepare for and perform a quality discussion can also be found in the VA library (Standard 6.2).

Standard 5.4: Medical records must be comprehensive and maintained in an effective retrieval system (preferably an electronic patient record system) to efficiently support the teaching, research, and service programmes of the Establishment.

Description of the patient record system, its completion, its availability to staff and students and how it is used to efficiently support the teaching, research, and service programmes of the Establishment

Currently, the VEE VTHs are using the electronic patient record systems GYKIS (Large Animal VTH) and JAKOVO, including the registration in Google Drive and X-ray images in PACS (Small Animal VTH). The systems store information on the medical history of all patients, the anamnesis, tests performed, the results obtained, symptoms, diagnosis, prescribed treatment, performed procedures and applied preventive measures, and information on follow-up check-ups. Using these systems, the students can learn about and analyze clinical cases and patients' medical history, collect data from ongoing clinical and laboratory examinations, predict further treatment, view and analyze X-ray images. All work stations in the clinical treatment rooms are equipped with computers having a patient registration programme with the data installed. The data on clinical cases is available for students and clinicians and can be used to prepare for discussions and write the reports required in preparing a master theses. Virtual clinical case databases are created for students in the OneDrive system. The Small Animal VTH operating/surgery room has a special videorecording system installed, which transmits the live surgery view to the study rooms, and the students and a lecturer have the opportunity to watch, analyze and comment on the surgery process instantly. The video recordings are stored and later used in the teaching process to further analysis of surgical cases. Presently, the purchase of the new Animal Registration and Information e-monitoring system is in progress. The system's purchase concept and funding was validated by the LSMU Council's decision and coordinated with the IT Center and Accounting Service. The monitoring system will include the Hospital Information and Patient Registration Systems, Image Archive, and Communication System. This system is intended to calculate clinical caseload and register the students involved in each clinical case. This novel system will allow more statistical calculations, facilitating the analysis of obtained results and preparation the master thesis, scientific publications, and reports. The programme is expected to be installed in the Spring of 2022.

Comments on Area 5

The amounts of healthy and sick animals, cadavers, carcasses and material of animal origin are sufficient for basic, pre-clinical, and clinical training enabling all students to acquire the ESEVT DOCs. VEE plans and has a clear operational strategy for acquiring and disposing of the cadavers, carcasses and material of animal origin. The appointed responsible staff estimate the number of patients and ensure its increase plans and strategy, record, regularly evaluate and monitor the entire clinical training process. The cooperation agreements signed with external companies (farms) and slaughterhouses assure an increase in the number of patients and clinical cases. We are pleased to be allowed to renew our contracts with pig farms. All procedures with live animals used for educational and research activities are evidence-and research-based and are conducted following the Law of Animal Welfare and Protection. VEE strives, where possible, to ensure the acquisition of competencies using alternative teaching/learning methods. Students' practical training under the direct supervision of academic staff is ensured at the university-owned PMBC and on the external sites/farms. In this way, a repeated student contact with the same animals, resulting in stress on these animals, is minimized. Thus, for more experience, the students are provided with the opportunity to acquire pre-clinical skills in natural environments. The second-year students acquire primary nursing skills. From the third to sixth study year, they master the obligatory hands-on clinical competencies by studying in small groups under the direct supervision of experienced lecturers. Practical training at the external practice bases is organized following the same standards as those applied at the VEE VTHs. The VM students are always active participants in the clinical work, problem-solving, discussions, and making a diagnosis. In addition to the adjustments to the study process caused by the COVID-19, VEE was facing an epizootic of African swine fever for several years, which restricted the use of pigs for training. Notably, during the last five years, due to this virus epidemic in LT and the stringent quarantine, VFVS was not issuing permits for purchasing and housing pigs in the VTHs or visiting pig farms with students. As a result, the Large Animal VTH had few veterinary cases on pigs during this period than usual. This deficiency was compensated using alternative methods, e.g., the internal organs, body parts, and cadavers of pigs supplied from healthy farms to assure a comprehensive and continuous study process. Due to the transportation restriction, the number of pig carcasses provided was lower than usual. Since September 2021, those permits have been allowed to renew, and the students, subject to exceptionally high biosecurity requirements during the clinical rotation, have been transported to pig farms for practice.

Suggestions for improvement in Area 5

- 1. To continue the development of the PMBC, started in 2021, which will ensure the most advanced feeding, milking, and herd health management systems and provide the possibility to set up training herds housing all common animal species.
- 2. To complete procurement procedures and implement a new Animal Registration and Information emonitoring system, which will reduce the costs of working time and increase the availability and use of data for studies, teaching, and research.

AREA 6. LEARNING RESOURCES

Standard 6.1: State-of-the-art learning resources must be adequate and available to support veterinary education, research, services and continuing education. When the study programme is provided in several tracks/languages, the learning resources must be available in all used languages. Timely access to learning resources, whether through print, e-media or other means, must be available to students and staff and, when appropriate, to stakeholders. State-of-the-art procedures for bibliographical search and for access to databases and learning resources must be taught to undergraduate students.

Description of the general strategy of the Establishment on learning resources

The development of learning resources, IT systems, and the infrastructure that meets the needs of the students, staff, and administration is one of the five necessities for achieving the objectives of the LSMU Strategic Development Directions. Therefore, the LSMU is consistently developing the learning resources, IT, and infrastructure that meets modern requirements for studies, research, practice, and administration and is increasing students' and employees' general and digital competencies. These strategic priorities are implemented in synergy within all the LSMU establishments and systems: LSMU BIC, VA Library, Department of Library information systems, Research Information System (CRIS), a comprehensive LSMUSIS, PDVS, Procurement System (EcoCost), Staff and Remuneration system (PADUS), Microsoft (MS) *Office 365*, including all other IT systems used in the LSMU administrative activities enabling a quick and transparent implementation of the administrative functions which allow a smooth administration of the study process and a provision of teaching aids. The university students and staff have constant access and connection to the Library and the other IT systems for study both from work and personal computers. For the convenience of the students and lecturers, a free Wi-Fi network is available at the VEE campus and dormitories. The University has a qualified service that administers the update, acquisition, and maintenance of all e-equipment, tools, devices, networks, and programmes.

Description of how the procedures for access to and use of learning resources are taught to staff and student

LSMU creates an MS Office 365 account for each new academic employee who has signed an employment agreement and a student who has signed a study agreement via the admission information system or LAMA BPO (Standard 7.1), and it grants unified access to all LSMU systems which are available in both Lithuanian and English languages. All mentioned systems have the textual and video user instructions of using, operating, placing material, and testing. Students and employees can find the instructions on using the information systems on a particular website https://pagalba.lsmuni.lt/en. This website also allows registering faults and receiving online help contacts. Meantime, a compulsory subject, "Development of General Information, and Communication Competencies of the Profession," which is included in the first-year students' curriculum, introduces the VM students to LSMU, its structure, and study organization, and instructs how to use the LSMUSIS and Moodle systems. The Academic Information Department provides methodical assistance on the issues related to study courses and organization as well as administrative services on the phone and through e-mail (infos@lsmuni.lt). In addition, the Library gives annual presentations designated for first-year students (acquaints the students with the main operating principles of the Library, a search of the information and bibliographic data in Library Service Platform, databases (PubMed, MEDLINE), and usage of reference manager tool RefWorks). The information about these presentations is provided on the LSMU BIC website and/or BIC Facebook page. The Library provides consultations on how to search the articles in full-text databases, create bibliographic descriptions, and make lists of references, etc. The InoEdu, unit of LSMU Study Center, plans, develops, and implements e-studies (Moodle, MS Teams, Google Zoom, etc.) and e-administration of the study process. It regularly organizes educational competence courses to improve lecturers-beginners and experienced lecturers, and support staff (Area 9).

Description of how (procedures) and by who (description of the committee structure) the learning resources (books, periodicals, databases, e-learning, new technologies, ...) provided by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Strategic planning of the university's provision of Learning Resources is carried out centrally. The University allocates funds for the purchase of equipment in accordance Strategic guidelines set priorities. Considering the need for hardware, software, and modernization, the relevant LSMU units, including VEE, plan the equipment acquisition and services needed for the upcoming year (*Standard 2.2*). The ITC director is responsible for coordinating the acquisition of learning resources (databases, e-learning platforms, new technologies, etc.). He is acting under direct subordination to the LSMU Director of Administration and Finances. ITC centrally analyzes the functioning, development, and needs of all LSMU IT systems and implements the projecting, exploitation, and development of technical equipment, installing computer network and IT system software, ensuring the functionality of study, research, and administration activities at LSMU. Based on Strategic guidelines set priorities and the condition of equipment used in the LSMU establishments, the allocation of books and other study literature at LSMU is executed centrally. The LR Government financially supports the academic libraries by allocating targeted funds to acquire learning resources (textbooks, e-databases, etc.) (*Standard 6.2*).

Lecturers make a list of needed learning recourses relevant to the VM curriculum and student needs. Students' opinions and wishes are obtained by student feedback on the Library activities and the evaluation of study subjects in the LSMUSIS. New demand for learning literature is provided to the VA Library (VEE) and the BIC Department of Document Acquisitions and Storage. Library staff according Establishments requests and allocated funds annually prepares the plan based on the specificity of the study programmes and individual needs of separate academic units. The relevant recommendations of the CMSQA and/or SPC are also taken into account. The annual plan of acquisitions is approved by the Vice-rector for Studies. LSMU BIC procures the required scientific publications, the latest edition books, and periodicals centrally. Information on new databases and newly acquired printed material are regularly communicated to the community through the e-Forum lsmuva@lsmuni.lt, LSMU Virtual Library, and are displayed on the "*New Books*" stand. The LSMU BIC Director, a qualified librarian who reports directly to the Vice-Rector for Studies, is solely responsible for these processes.



Fig. 7. PDCA Cycle Learning Resources

Standard 6.2: Staff and students must have full access on site to an academic library administered by a qualified librarian, an IT unit managed by an IT expert, an e-learning platform, and all the relevant human and physical resources necessary for the development of instructional materials by the staff and their use by the students. The relevant e-information, database and other intranet resources must be easily available for students and staff both in the VEE's core facilities via wireless connection (Wi-Fi) and from outside the VEE through a hosted secured connection, e.g. VPN.

Brief description of the main library of the Establishment: -) opening hours and days; -) staff (FTE) and qualifications

The LSMU BIC is open round the clock (24/7). The LSMU BIC **Library of VA** is open from 8.00 am to 8.00 pm on workdays and from 10.00 am to 6.00 pm on Saturdays. Thirty-five library staff members are working at BIC. All of them hold university degrees in Librarianship, IT, Social, and/or Health Sciences. The VA Library staff is composed of five members, and they all have higher education: two of them hold university degrees in librarianship, and one holds a Ph.D. degree.

-) annual budget

The LR Government financially supports the academic libraries by allocating targeted funds to acquire learning resources (textbooks, e-databases, etc.). LR MESS allocates more than half million EUR for BIC each year to acquire information resources. LSMU supports the BIC's needs with adequate funding as well. The BIC's annual budget for acquisitions is over 1 mln EUR and it completely meets University needs. Fund allocations for VEE learning resources are provided regarding numbers of FTE students. VM students form 24% of total University FTE students, so the appropriate part of the budget for VEE resources are allocated each year. The annual plan of acquisitions is approved by the Vice-rector for Studies.

-) facilities: location in the campus, global space, number of rooms, number of seats;-) equipment: number of computers, number of electrical connections for portable PC

LSMU BIC is located in Kaunas city center. The BIC library area intended for student use occupies 4000 m² and has 544 workstations (including 143 computerized workplaces), five group-study rooms, two workshop rooms, four open-stock reading rooms. There are 72 computers available in the Library (20 of them have the SPSS software installed). The VM students prefer using the **VA Library** located **on the VEE campus**. The area for the student use of this Library is 578 m². It has 138 workplaces for students with electrical sockets for portable PCs. Therefore, students can use their laptops and smartphones. The Library has two open-stock reading rooms with 70 workplaces, a check-out area with ten workplaces, a computer zone with 24 computers (five of them with SPSS), four group-work rooms seating 26 visitors, a seminar hall with eight seats, and Self-Check In/Out equipment. The VA Library has special auxiliary equipment for students with special needs (Services for Students with Disabilities at LSMU). The Library also has a student lounge area. Students can use printers (two workplaces for student self-printing), free scanning devices, document binding equipment, wired and wireless (Wi-Fi) internet connections. The VA Library has recently been completely renovated, making it even more modern and convenient for the academic staff and student's

needs. The library building is accessible and fully equipped for the convenience of students and other academic community visitors with disabilities or special needs.

-) softwares available for bibliographical search.

The new generation cloud based Library Service Platform (LSP) ALMA/PRIMO (ExLibris) is being implemented currently and go live since 20th of December. It is one of the best LSP in the world. The ALMA/PRIMO LSP services ensure state-of-the-art searching for print, electronic and digital resources in local and external licensed databases, as well in institutional repositories. Students and staff can create personal accounts, reserve, extend loans, request to acquire new resources, check their fines, and send a feedback. Searching results can be exported to personal reference manager tool such as *RefWorks*, *EndNote*.

The reading lists have been created for every study module where students can directly access to mandatory and optional education resources recommended by staff. Access to information resources is available for remote users as well by University unified login system.

The E-Thesis and Dissertation (ETD) information system is managed by BIC and all LSMU thesis and dissertations are being submitted (ETD Submision) to institutional e-repository for open access worldwide. All ETD documents are checked with the plagiarism detection system *Oxsico* (Oxsico usage guide) also is managed by BIC staff. All LSMU scientific publications are registered in the University CRIS and full text articles are submitted according Open Access policy and copyright issues. CRIS is integrated with University IT and Library Service Platform. Each academic staff person has researcher profile where information about their education and research activity is open worldwide. The CRIS data is used for evaluation of personal and University research output for University purposes, reports to Ministry and LMT, etc.

Description of the accessibility for staff and students to electronic learning resources both on and off campus (Wi-Fi coverage in the Establishment and access to resources through a hosted secured connection, e.g. Virtual Private Network

In total, LSMU has 145 Wi-Fi access points in the university areas of everyday use. Wi-Fi is freely accessible in the VA Library and all VEE premises. Furthermore, the VPN and *Eduroam* services are provided at the entire LSMU, including VEE. All student dormitory rooms also have access to the Internet. All BIC information systems have LT and EN interfaces. Remote access from other computer networks is possible using <u>Remote Access DB Service</u> or VPN (LSMU VPN Instructions).

Brief description of the IT facilities and of the e-learning platform (dedicated staff, hardware, software, available support for the development by staff and the use by students of instructional materials).

Computer classes with relevant software for the studies are used in each LSMU establishment. VEE has four computer classrooms with 79 computers (22 of them with SPSS and 20 of them have PhysioEx and Physiology Simulators). Additionally, a computer zone with 24 computers (5 of them with SPSS) is located in the VA Library. VEE uses six co-university computer classrooms with 149 computers equipped with video projectors and installed R Statistical Package, SPSS, and NetSupport School software, located in the VPH Faculty located in the VEE campus area. All VEE classrooms, auditoriums have computers equipped with projectors (three of them have interactive whiteboards). All academic staff's workplaces are IT-equipped. Depending on the departments' needs, specific IT programmes, such as SPSS Statistics or PhysioEx, can be installed on a work computer. Computer class software is constantly being updated to meet all the latest safety requirements. The LSMU ITC specialists manage and project the exploitation and development of technical equipment and installation of computer network and IT systems' software, ensuring the functionality and productivity of the study process, research, and administration activities. The ITC staff includes 25 specialists (FTE), namely programmers, analysts, engineers, audiovisual operators, and the IT system and computer network administrators. Two of the IT team, a programmer and a computer network administrator work full-time on the VEE campus. Upon the need, the IT support/assistance service can be expanded by sending more specialists to provide and maintain the quality and smooth IT service.

LSMU uses LSMUSIS (<u>https://lsmusis.lsmuni.lt</u>) and e-learning environment platform – *Moodle* (<u>https://moodle.lsmu.lt</u>). LSMUSIS provides access to all academic documentation of every study subject and information related to organization, implementation, and assessment of the study process and information about the feedback, study guide, student questionnaire results, etc. Students remotely connect to the LSMUSIS and can manage their credit book, control progress, submit requests, provide recommendations, etc.
VEE has been using a unified open-source web-based virtual learning environment *Moodle*. LSMU uses the Integrity Assurance Programme *Smowl* in the *Moodle* platform. MS *Teams* is used as an alternative for distance learning at LSMU. InoEdu regularly organizes training in improving the academic staff's and students' skills in using *Moodle* and MS *Teams*. All systems are accompanied by textual and video instructions. On a particular website (<u>https://pagalba.lsmuni.lt/en</u>) students and employees can find the instructions on using IT systems and the contacts for assistance (also *see Standard 6.1*).

Standard 6.3: The VEE must provide students with unimpeded access to learning resources, internet and internal study resources, and equipment for the development of procedural skills (e.g. models). The use of these resources must be aligned with the pedagogical environment and learning outcomes within the programme and have mechanisms in place to evaluate the teaching value of changes in learning resources.

-) the number of veterinary books and periodicals -) the number of other (e)books and (e)periodicals

The VA Library has a fund of information sources that complies with the requirements of the VM study programme. The open VA library book repositories consist of 11,760 items. The VA library repositories also store over 25,092 titles/76,534 copies of printed documents. The documentation repositories are regularly updated with the latest printed publications/books. In the last three years, new 1,136 items, including 313 titles of printed editions, were added to the VM section. In 2020, the Library provided users with 17,768 documents. The number of visits amounted to 39,767. Students can read books and scientific journals in the reading rooms and/or may borrow and take them home. A reservation in advance of the needed literature is also possible. Inter-library loans (book borrowings) also are available via the Interlibrary Loan System.

The VA library databases include over 22,000 e-books and about 550 titles of e-journals (keywords: veterinary medicine, veterinary science, animal). The VA Library subscribes to the special VM database *Vetstream*'s digital reference services, Canis (dogs), Felis (cats), Exotis, Lapis (rabbits), Equine, and Bovine are subscription-based online encyclopedias, offering point-of-care clinical information for the diagnosis and treatment of companion animal diseases. In addition, two collections (Nutrition and Food Sciences and the Descriptions of Fungi and Bacteria) of *CABI* database have been subscribed.

In total, LSMU BIC subscribes to 65 databases providing access to 21,951 titles of full-text e-journals and 355,368 e-books. LSMU CRIS currently hosts 102,033 university research publications, 6,726 master's theses, 619 doctoral dissertations, and 240 books published by university researchers.

-) the available learning resources to students, including electronic information and e-learning courses (and their role in supporting student learning and teaching in the core curriculum)

VEE has 70 licenses of 3D software to study equine, bovine, porcine, canine, feline, avian, and rodent anatomy using the virtual models (<u>https://biosphera3d.com</u>). The applications display the anatomy of these species with high specificity and enable viewing the different types of tissues and individual organs: the software is beneficial to students to understand the locations and relationships of the different animal body structures. The programme licenses are installed on computers in the Department of Anatomy and Physiology, VTHs, and the VA Library with free access to students. The VA Library has 3D anatomy models of animals: domestic cat, domestic hen, fish, horse's hoof, cow's hoof, cow's teeth, used for the VM students' learning process.

Small Animal VTH uses tablet computers for student contact work in groups or subgroups. Large Animal VTH uses the *eKuore*, Vet Electronic Stethoscope, which features the assisted auscultation filtering sounds and recording directly from the e-stethoscope; created a Cloud database of clinical cases with anamnesis data, photos, videos, sound recordings, medication descriptions, etc. The VM students have access to this database and actively use it. The surgery room of Small Animal VTH has special surgery equipment with a video-recording system, which transmits the view directly to the training classes. The video recordings are stored and used in the teaching process of surgical cases. During laboratory work, VEE uses interactive whiteboards connected to a computer and a projector to demonstrate educational materials on anatomy, morphology, and histology. Anatomical autopsies, muscle preparation, and other anatomical practical works are filmed, and developed teaching material is uploaded to the *Moodle* system for distance learning students. During the practical training in Physiology, the VM students' laboratory skills developed using 20 computers with the installed programmes *PhysioEx* and *Physiology Simulators*. The programme HYBRIMIN® Futter is used for the VM students. The VM students use three places herringbone and tandem type milking parlors, vacuum pump milking machines, cow udder models to acquire the milking technology and process skills in

the compulsory subject "Animal Production and Breeding". Different educational videos such as "*Inside the Factory*" (Committee for Biosecurity and Biosafety) or "*Food Insider*" (YouTube) are used for Food Hygiene and Technology lectures and distance practical learning of the VM students. The *Kahoot* application is used as a training tool for solving tests and analyzing them later in various VM subjects. Many other different programmes, software, and databases relevant to the VM curriculum are used for the versatile training of the VM students: *e-tar.lt* (Register of National Legislation), *EUR-lex* (Register of EU Legislation), *OIE-WAHIS* (OIE World Animal Health Information System), *RASFF* portal (Rapid Alert System for Food and Feed), Animal Breeding Information System (available at https://www.vic.lt/ and https://e.kinologija.lt/ etc.

-) the organisation and supervision of the skill labs

The Veterinary Medicine Simulation Center occupies 172.17 m² and is equipped with 24 lockable individual lockers for personal student's belongings. The entrance to VMSC is adapted for visitors with disabilities. The VMSC working hours are from 9 am to 5 pm on workdays. Two lecturers consult the students during self-learning activities. The activities of VMSC are performed complying the Regulations of VMSC. VMSC is divided into four different rooms: Large Animals and Ultrasound (4 stations), Internal Medicine and Surgery (15 stations), Propaedeutics and Microscopy (17 stations), and a room for the completion of the OSCE tasks (10 stations) (Annex 32). An online registration form monitors student's access to VMSC; the MS Bookings system is used. The students book a station for one hour, for the OSCE tasks - one and half hours. The information about the VMSC, registration, and available stations (Booking to VMSC) is provided on the LSMU website. All stations are equipped with the required working tools and manuals (LT and EN). The QR code technology allows the students to get access to extra video tutorials via smartphones or tablets, supplementing the information provided in the VMSC learning manuals. The QR codes with self-assessment tests are also provided, and the MS Forms system is used. The self-assessment questions include the assessment of skills before and after work and theoretical questions related to the station. The lecturers can also book the rooms or individual animal body part models for the student's preclinical and clinical laboratory works and practices.

Comments on Area 6

LSMU consistently develops the learning resources, IT, and infrastructure that meet the modern requirements for studies, research, practice, and administration. Strategic planning of the LSMU Provision of Learning Resources is carried out centrally. ITC, considering the needs of the establishments, analyses the functioning, development, and the needs of all LSMU IT systems and implements projecting, exploitation, and development of technical equipment and installation of computer network and information systems' software. The library resources are reviewed and renewed according to recommendations elaborated in close collaboration with the experienced librarians in the field of veterinary sciences, with the academic staff, and students. The Library offers courses the textual and video guidance to support using the electronic 'facilities' for students and staff.

For each academic employee and student, an MS *Office 365* account is created, and it grants unified access to all LSMU systems. A digital study platform, LSMUSIS, is used to organize the study process and its QA. The virtual learning environment *Moodle* is fully implemented. The students and staff have free access to the e-learning platform from any location, whereas Wi-Fi is freely accessible in the Library, all VEE classrooms, auditoriums, and VTHs. All student dormitory rooms have internet access.

The VEE Library holds a comprehensive and up-to-date range of educational and research literature covering the VM curriculum. The flexible opening hours and book borrowing arrangement, modern online communication, and free access to the databases are available for the teaching staff and students and meet self-learning needs. The Library is completely renovated, modern and convenient, and satisfying the academic and scientific needs of the staff and students. The library building is accessible for visitors with disabilities. VMSC is integrated with the curriculum of VM and ensures the continuous training of practical skills in VM by using veterinary medical simulation methods.

The online registration form monitors student's access to VMSC, and the VMSC entrance is adapted for the disabled. One of the planned tasks of the new 2022–2026 LSMU strategy is to develop the concept of a virtual and open university by implementing the development of simulation teaching systems. It is planned to upgrade the simulation equipment required for VEE, to develop the number of simulation training systems in study subjects/modules.

Suggestions for improvement in Area 6

To further develop the VMSC following the planned 2022–2026 LSMU Guidelines.

AREA 7. STUDENT ADMISSION, PROGRESSION AND WELFARE

Standard 7.1: The Establishment must consistently apply pre-defined and published regulations covering all phases of the student "life cycle", e.g., student admission, progression and certification. In relation to enrolment, the Establishment must provide accurate and complete information regarding all aspects of the educational programme in all advertisings for prospective national and international students. Formal cooperation with other Establishments must also be clearly advertised.

Description of how the educational programmes, learning outcomes, admission procedures and requirements for national and foreign students, progression and certification, tuition fees, academic calendar, collaborations with other establishments, etc. are advertised to prospective students

Prospective students and others interested can find information about the VM content of the programme, study results, admission procedure (in LT and EN), and the requirements for the national and international students, tuition fee, study plan and calendar, cooperation with other institutions, QA and the improvement of the study process on the: LSMU website, VEE website, IRSC, Dean's Office, Career Center (they also provided information by phone or e-mail); during Doors Open Days, regularly organized visits to schools, students' visits at the Faculty, and the projects publicizing the programme; at LSMU Career Days, Study Fairs, organized by Career Center, Association of HEIs for General Admission (LAMA BPO) and the LSMU Admission Commission; in the press, on the internet portals such as "Reitingai", "Lietuvos rytas", "Lietuvos sveikata", "Kur stoti" and others, in the LSMU weekly Ave Vita. The motivational success stories of the graduates are posted on social networks *Facebook* and Instagram. Similarly, the publicity process for the VM study programme is arranged and performed for the international students. They receive the information about the study programme from student search agencies abroad, at IRSC and VF, during the annually organized *Doors Open Days for Foreigners* and through social networks. The IRSC employees participate in Doors Open Days abroad and attend schools. Each step of the admission procedure is described in the Student Guide. The study programme is also advertised on the global portals Keystones, Educations, Studyportals and others, including the local portal StudyinLT. The advertising of the VM programme on these sites yields excellent results for future international student recruitment and marketing. The University runs an Ambassador Programme and a Parent Ambassador Programme. The VM studies and experience for prospective students are voluntarily presented by the students and their parents in various foreign countries. The respondents participating in the regular surveys note that the social networks and LSMU websites are the most informative sources.

Standard 7.2: The number of students admitted must be consistent with the resources available at the Establishment for staff, buildings, equipment, healthy and diseased animals, and materials of animal origin.

Type of students	2020-2021	2019–2020	2018–2019	Mean
Standard students	110	78	74	87
Full fee students	14	35	68	39
Full fee foreign students	32	33	32	32
Total	156	146	174	158

Table 7.2.1. Number of new VM students admitted by VEE

Table 7.2.2. N	umber of the	VM undergraduate	students registered at	t VEE
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Type of students	2	2020-202	1	2019–2020		2018-2019			Mean			
	LT	EN	Total	LT	EN	Total	LT	EN	Total	LT	EN	Total
I year	125	33	158	122	33	155	145	31	176	131	32	163
II year	102	28	130	112	25	137	131	24	155	115	26	141
III year	112	21	133	130	25	155	117	22	139	120	23	143
IV year	131	24	155	114	22	136	144	14	158	130	20	150
V year	117	22	139	144	12	156	111	11	122	124	15	139
VI year	143	12	155	115	8	123	145	8	153	134	9	143
Total	730	140	870	737	125	862	793	110	903	753	125	878

Table 7.2.3. Number of the VM students graduating annually

Type of students	2020–2021	2019–2020	2018–2019	Mean
Standard students	81	63	63	69
Full fee students	57	42	80	60
Full fee foreign students	12	8	8	9
Total	150	113	151	138

Table 7.2.4. Average duration of the VM studies

% of the students who graduated in 2021					
	Lithuanian students	Foreign students			
– 1 year	0	25.00			
+ 0**	91.3	75.00			
+ 1 year	6.52	-			
+ 2 years	1.45	-			
+ 3 years or more	0.72	-			

Table 7.2.5. Number of postgraduate students registered at VEE

Type of students	2020-2021	2019–2020	2019–2020 2018–2019	
Interns	-	-	-	-
Residents	30	27	25	27
PhD students	28	27	27	27
Others (specify)	-	-	-	-

Standard 7.3: The selection and progression criteria must be clearly defined, consistent, and defensible, be free of discrimination or bias, and consider of the fact that students are admitted with a view to their entry to the veterinary profession in due course. The Establishment must regularly review and reflect on the selection processes to ensure they are appropriate for students to complete the programme successfully. If the selection processes are decided by another authority, the latter must regularly receive feedback from the Establishment. Adequate training (including periodic refresher training) must be provided for those involved in the selection process to ensure applicants are evaluated fairly and consistently.

Description of the admission procedures for standard students: -) selection criteria

The requirements for admission to the VM study programme establishes by LR LHER, the Order of Minister of LR MESS and the LSMU Rules of Student Admission. The competition is open to all entrants with an adequately documented education of at least high school/secondary education or its equivalent. The competitive score is the main criterion for admission. The subjects selected as competitive are announced publicly two years before the entry. The competitive score is calculated assessing the grades of the state maturity examinations in Biology, the Lithuanian language, and literature and assessments of the state matriculation examinations in Chemistry or Mathematics and of one chosen optional subject or the annual grades of these subjects. Applicants for state-funded places shall have passed the state maturity examination in Mathematics. Additional points to the competitive score are added for the winners of the international and national Olympiads and competitions and for those who have completed basic military training or completed compulsory military service. In the application, an entrant participating in the competition may indicate up to nine study programme preferences in total. Satisfying the highest priority in the study programme and considering the set number of places in the programme, the entrants with the highest scores are selected and invited to study. The entrants, both applying to state-funded and not funded by state places, are admitted according to the same criteria and following the same procedure.

-) policy for disable and ill students

At the time of admission, proof of health state is not required. Entry is open to all eligible persons, regardless of their state of health or disability. Applicants who are exempted from the maturity exams due to the illnesses specified in the Order of the LR Minister of Health and the LR MESS are not subject to the minimum entrance competition score. Disabled people are exempted from the admission fee if they submit documents proving the disability. The information about the available financial support and other measures

for the disabled, which are applied at the University, can be found on the <u>LSMU website</u>, in the section Support for the Disabled, or these students can apply to the Admission Commission and the VEE Dean's Office. The applicants with health problems in the EN study programme who may have issues during the examination shall inform the Admission Commission and provide supporting documents accordingly. Depending on the reason, the examination time may be extended, and the necessary tools may be used, etc. Information on this matter is provided to entrants by IRSC.

-) composition and training of the selection committee

The Admission Commission of LSMU is composed of a Chairman of the Commission – the Rector of the University, and the following members: Vice-Rector for Studies, Head of Study Center, Executive Secretary of the Admission Commission, Deans of the Faculties (including VEE), and a student representative delegated by SU. The Admission Commission is approved annually by Order of the Rector, and it operates following the rules of student admission to LSMU approved by the Resolution of the Senate. The Commission considers the issues related to the entrance, makes decisions, approves the admission results, and deals with cases that are not framed in the Regulations for Admission. The members of the Admission Commission improve their qualifications by attending training organized by LAMA BPO and LR MESS (6-8 times a year). The selection of prospective international students, assessment, and academic recognition of their qualifications following the provisions of admission procedures are conducted by an International Student Admission Commission (a constituent part of the LSMU Admission Commission. It also promotes study programmes in other countries, consults the applicants, pursues the admission procedures, prepares admission reports, and submits them to the Executive Secretary of the LSMU Admission Commission. The members of the Commission possess are highly and appropriately qualified and experienced in the assessment and recognition of the qualifications acquired abroad. The training of the members is a constant process involving participating in national training workshops and internationally arranged traineeships. Both Commissions delegate their representatives to the Admission Appeal Commission of LSMU.

-) appeal process

The national and international applicants have the right to appeal against admission decision to the Admission Appeal Commission. The Commission is composed of no less than three representatives delegated by the faculties, a SC representative, and a lawyer. The Commission is approved by order of the LSMU Rector. The appeal shall be addressed to the Committee and include personal data, a valid form of identification, an explanation for why the decision is contested, and all the supporting documentation. During the past four years, none of the appeals regarding the findings on the admission have been received. The academic recognition decisions made by the University on the qualifications acquired abroad can be appealed to the SKVC Appeal Committee for the Academic Recognition of Foreign Qualifications Concerning Higher Education.

-) advertisement of the criteria and transparency of the procedures

When selecting the prospective students, the University observes the principle of non-discrimination on the grounds of gender, race, language, religion, national or social origin, or any other reason not related to academic qualifications. Student admission in Lithuania is an entirely transparent process performed centrally digitally in the LAMA BPO General Admission Information System (BPIS). All information about admission rules and procedures, tuition fees, competitive score calculator, competitive subjects, minimum score, last year's admission results for entrants is available in advance on the University website in the Section *for Entrants* (LT and EN, and LAMA BPO page). Admitted students sign an electronic study agreement with the University, and the Rector issues an admission order. The registered students are given access to the University's information systems (for more details, *see Area 6*). The admission results are discussed annually at the LAMA BPO Board meeting with the university Vice-Rector for the Studies. If there is a necessity, the admission rules can be improved and/or adjusted (adjusting a minimum, competitive score, and/or changing of competitive subjects).

Description of the admission procedures for full fee students (if different from standard students

Additional university admission is organized at the end of the general admission and when places not funded by the state are still available. Only those individuals, who applied to the general admission but did not sign the study agreement, can repeatedly apply at this entry stage. To reach an objective decision on

which entrants to admit, a motivational interview is organized to assess the applicant's perception, aspiration, and motivation to study. Other admission criteria are no different from the applied ones to standard students. Motivation interviews are conducted by a Motivation Commission formed by order of the Rector, chaired by the Dean of VEE, following the description of the standardized motivation interview evaluation procedure. This way, on average, 0–5 students are admitted every year.

International students applying to the VM study programme (taught in EN) are enrolled in parallel to the national admission platform (automated, unified for all HEIs) because of the specifics of different educational systems. The admission procedure of international students is a part of the Admission Rules approved by the Senate. There are four main criteria for admission of international students: 1. Higher education eligibility according to the past education (verified by the qualified personnel at LSMU in cooperation with SKVC); 2. The minimum, competitive admission score is determined by the entrance examination calculated from the respective subject grades in the maturity certificate gained from the trusted/recognized educational systems and high grades in school graduation (countries and the required grades for admission are stated in the Admission Rules); 3. Motivation interview for studies in the specialty, at LSMU, in Lithuania (face-to-face, obligatory for all applicants); 4. Ability to communicate in English (official certificates of language proficiency, LSMU language testing, etc.). Final enrollment is succeeded by completing all admission procedures and is based on the final competitive score accumulated following the criteria above. The qualification evaluation procedure for enrolling students corresponds to the models of education systems applied internationally, their specifics, and the regulated level of education. The applicable evaluation criteria are clearly defined, rational, applied consistently, and publicly declared in the Admission Procedure approved by the Senate. Each decision on recognizing past education is made based on the international recommendations, national legislation, internal LSMU documents, available information, and documents submitted by a prospective student. If past education was gained outside the EU, in the UK, ELPA countries, Canada, or the USA, an applicant shall submit documents verified by the Apostille. All applications shall be submitted electronically.

Description of how the Establishment adapts the number of admitted students to the available educational resources (facilities and equipment, staff, healthy and diseased animals, material of animal origin) and the biosecurity and welfare requirements

The University Council, on the proposal of the deans, approves the total number of students planned to be admitted each year. The order of the LR MESS Minister confirms the preliminary number for admissions. When planning the number of students to be accepted, VEE assesses the material needs and human resources and the possibilities to ensure the quality of studies provided for veterinary studies by the national and EAEVE requirements. The number of academic staff is planned by strategically planning the training of young veterinarians and residents who supplement or replace their lecturers with fixed-term employment contracts if necessary (*Area 9*). The number of animals treated at VTH is accounted for in e-registration systems. The VEE strategy envisages an annual increase in their number, which is estimated in reports from the VTHs heads and the Dean. The sufficiency of healthy animals, animal raw materials, and carcasses is ensured by pre-agreed contracts with slaughterhouses, small animal clinics, farms (*Standard 5.1*). The Biosecurity and Welfare Provision Requirements are regulated by the inventory and the legislation described in *Standard 4.1*. Internal and external audits are executed, and mandatory training is organized for all employees every two years (*Standard 4.9*). The University has a sufficient number of student dormitories.

Description of the prospective number of new students admitted by the Establishment for the next 3 academic years

The LR MESS allocates funds for the VM studies based on the SFVS and LR Ministry of Agriculture demand for specialists in veterinary sciences. In 2020–2021, due to a shortage of veterinarians in animal farms in the Eastern Lithuania region, the LR MESS increased the number of state-funded places for veterinary studies by an average of 36.05%. And since 2021, the tuition fee of the VM programme has been significantly increased. Therefore, in the three years, VEE does not plan to increase the number of students be accepted to the VM study programme. It is intended to admit 120 students studying in LT and 30 students studying in EN languages.

Standard 7.4: There must be clear policies and procedures on how applicants with disabilities or illnesses are considered and, if appropriate, accommodated in the programme, considering the requirement that all students must be capable of meeting the ESEVT Day One Competences by the time they graduate.

Description of the policies and procedures devoted to applicants with disabilities

LSMU is an open university and assures equal opportunities/conditions for all students. VEE considers the students' individual needs arising in the context of the study due to disability or special educational needs. It ensures that all students can meet the ESEVT DOCs by the time they graduate. The LSMU SR provides students with disabilities or special learning needs, who cannot be assessed under the established procedure, with the opportunity to submit their tests, assignments, and study tasks in alternative ways, still ensuring that the study results are obtained. The Procedure of Submitting Documents and Reporting by the LSMU Students with Special Learning Needs in Alternative Ways (LT and EN) regulates the processes mentioned above (*Standard 1.7*). This regulation is approved by order of the Rector complying with the Law on Social Integration of the Disabled in LR. The *Moodle*, LSMUSIS, and CRIS systems used at the University allow all students to make assessments, monitor their study results, participate in surveys and access learning resources, and use various compensatory techniques (*Standard 6.2*). LSMU has a Coordinating Commission for Students with Disabilities, which coordinates and provides consultations on the study process of students with special learning needs and manages receiving financial aid to students eligible for State support.

LSMU participated in the measure 09.3.1-ESFA-V-708 "Increasing the Availability of Studies" of the project of the EU Structural Funds Investment Operational Programme Priority 9 "Public Education and Increasing the Potential of Human Resources". Under this project, the Establishment purchased a part of the required equipment, and the responsible staff had special training in using this equipment. For lecturers, training "Increasing the Accessibility of Studies for Students with Special Needs" is also organized by InoEdu regularly. Although many of the VEE premises is a part of the heritage, the physical surroundings are adapted to the needs of the disabled through alternative means such as wall and mobile lifts, installed ramps, elevators. The audible signals are installed to call for assistance personnel in case of emergency, etc. The staff is also trained to assist the disabled. The number of premises for the VEE studies is sufficient. Therefore, it is possible to organize the study process in premises adapted for the disabled if necessary. The acquisition of equipment for students with special needs is run annually. Students with disabilities also have the opportunity to be accommodated in dormitory rooms that are adequately adapted to their particular needs. Complying the procedure established by the State, national students with disabilities have the opportunity to receive targeted benefits to meet their particular needs, partial reimbursement of study expenses, acquisition of necessary equipment, and a social scholarship. The disabled students who have studied in a state-funded place and have terminated their studies are exempted from paying back the tuition fee to the State (coordinated by the SSF). This group of students is eligible for an additional grant for the Erasmus Mobility programme. The students studying in a foreign language also receive financial support according to their national rules.

Standard 7.5: The basis for decisions on progression (including academic progression and professional fitness to practice) must be explicit and readily available to the students. The Establishment must provide evidence that it has mechanisms in place to identify and provide remediation and appropriate support (including termination) for students who are not performing adequately. The Establishment must have mechanisms in place to monitor attrition and progression and be able to respond and amend admission selection criteria (if permitted by national or university law) and student support if required.

Description of the progression criteria and procedures for all students

The monitoring of academic achievement is an essential mechanism for assessing a student's progress. The departments and the SPC analyze the results of the studied subjects, the numbers of students who have passed, failed, left the studies, academic debt, the value distribution curve of grades, etc. The results are compared with the same period of the previous three years, and the progress is evaluated, problems are identified, measures are recommended to ensure progress. The Dean presents the analysis results at the VEE Council and Rectorate for a specific study year. The result summary enables identifying the students who need help to ensure further success in the study process right in time and in various aspects. If there is no progress in monitoring student progress detected, SPC initiates the discussions with the subject lecturers whose assessment grades are the lowest or exceptionally high and who have the highest number of students with study subject debts. Consequently, the lecturers of subject to improve the structure of a subject and

review the assessment strategy. The university Monitoring of Students' Academic Progress and Procedures are described in the <u>LSMU SR</u>, Chapter X. These regulations, followed university-wide, allow attributing study results achieved by a student to the achievement level. According to the assessed study results, students are attributed to a certain level of achievement. The assessment of subjects is summarized, and the level of study achievement within the period evaluated is determined after each academic year. The three levels of study achievement are distinguished: excellent, typical, and threshold. Students are considered academically successful provided they have no academic failures/debts, have implemented all the requirements set for the study programme during the evaluated period, and have achieved an excellent or typical level of study achievement has not reached the typical level is considered to have reached a threshold level of study achievement. Failed academic examination/test during the evaluation period is regarded as an academic study failure/debt and is not subject to last more than one academic year.

-) Description of the remediation and support for students who do not perform adequately

A student is eligible for a higher study year because they have fulfilled all the requirements for the current academic year provided for in the study programme and have passed the exams/tests of all studied subjects. Therefore, VEE operates a flexible system of remediation and support for students who do not perform adequately. The procedure mechanisms include suggested consultations of each study subject, extra classes for students (*Annex 18*), the possibility to register to VMSC, improvement of teaching-learning strategies. In 2020, the VM students performed the clinical rotation remotely at the end of the quarantine in the spring semester due to the quarantine restrictions. Also, they were allowed to perform the rotation during the summer, and the students could choose the rotation time convenient to them. The improved and excellent academic performance of the students also serves as a significant motivational factor. Constantly advancing students tend to use all the remediation means, activities, and support the University has to offer to improve the learning process and academic performance of the students and reach the intended learning outcomes and quality education.

Study progress criteria and procedures are regulated in the LSMU SR, Chapter IX. Students are provided the opportunity to redo the hours of missed classes, listen to audio lectures at their convenience, one time to retake the failed interim assessment/test, and two times to take the exam. A student who fails a subject exam shall repeat a subject course. A student, who has missed no more than 25% of contact study hours, is provided and granted the opportunities to work them on under the conditions provided for in the subject description evaluation strategy. A student may be allowed to study according to an individual study schedule. One time within the period of studies, a student can take an academic leave for personal reasons, two times – for illness, childbirth, and childcare. During academic leave from the studies, a student may repeat a course of a subject they have failed and have academic debts. If a student does not prepare their final thesis on time and/or does not defend it, the conditions are created to resume the studies. They re-defend the final paper/thesis not earlier than three months after removing a student from the studies not earlier than one year later by admitting them to a study year that corresponds to the study results. Students also perform a self-assessment by providing feedback and evaluating lecturers in LSMUSIS. Students with difficulties can use a psychological support and adaptation system. They are also consulted by the Dean's Office, lecturers, curators, and coordinators.

-) the advertisement to students and transparency of these criteria/procedures

To identify problems on time and increase students' opportunities to achieve study results and progress, starting from 2018, for the first-year students, VEE appoints a lecturer-curator and a mentor(s), who performs following the Regulations of the VMF Student Mentoring Activities. The lecturer-curator meets their group of students at least once a month and advises them. During the subject course "Introduction to Veterinary Studies," the Dean presents the provisions of the LSMU SR he leading general rules of studies, assessment, and progress, and the procedure for granting student support. The chairperson of the Biosecurity Committee introduces students to the Biosecurity and Biosafety SOPs used at the VEE (thereafter Biosecurity SOP). Study, and assessment schedules are published in LSMUSIS no later than one month before the beginning of the semester and examination session. Students have the right to submit suggestions to the SC regarding the times and schedule of the exams.

The study, assessment information, and assessment procedures are available to all students. Students use

Moodle, LSMUSIS, and CRIS. These e-tools allow them to access timetables, subject and assessment descriptions at any time, observe the study results, participate in surveys, request required certificates and the records of transcripts, submit applications, etc. During the meetings with a lecturer-curator, through student surveys conducted by the SC and SPC, and during the Dean and Administration office meetings with the students, it is clarified if students receive adequate information promptly. Information on academic affairs is provided sufficiently to all students by the Dean's Office Administration, SPC, IRSC, and SC by phone, e-mail, regular mail, or direct communication. With the onset of the pandemic, distance meetings with students are organized more frequently, meeting separately with the different year students.

Description of the rate and main causes of attrition

The VM study programme in Lithuania is among the top ten preferences of study programmes by prospective students. Since the government has allocated more state-funded places, the number of individuals admitted to state-funded places has been gradually increasing compared to the number of places not funded by the State. In 2018, 2019, and 2020, 52.1% of all entrants were accepted to state-funded places. In 2019 and 2020, this percentage increased up to 69.0% and 88.7%, respectively. This tendency shows a good change because the students with reasonably better academic results are first in line to take state-funded places, and 96.11% of them complete their studies on time, whereas only 51.23% of not funded by state students manage to complete the studies on time. With the increased minimum, competitive score for admission, the number of students who tend to discontinue the studies has decreased from 7.13% (2018– 2019) to 3.6% (2020–2021). Students usually drop out of their studies for personal reasons that they are reluctant to disclose. The main official grounds to terminate the studies are the tuition fee and challenging studies. Many different measures have been taken to control these causes: additional consultations, the possibility to repeat the subject courses and retake examinations/tests, updated curriculum structure, many different social and financial support measures have been offered. The monitoring results revealed that most of the dropouts from the studies occur in the first year of study. On average, 6.72% of the international students discontinued their studies for personal reasons in the last two years.

Description of how (procedures) and by who (description of the committee structure) the admission procedures, the admission criteria, the number of admitted students and the services to students are decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

The national Student Register LR MESS registering the students of the LT HEI, collects, systematizes, and stores the recorded data. The LSMU students are also registered with LSMUSIS.

Student admission to the VM study programme is performed thoroughly and transparently. The admission process follows the Procedure depicted in *Annex 33* complies with the Provisions of the LR LHER. The Order of the LR MESS, and the Rules of Student Admission approved by the Senate. All these documents set out the requirements for entrants. Admission to all Lithuanian higher education establishments is managed by the LAMA BPO institution authorized by LR MESS. Applications and documents are submitted electronically only. Based on the deans' recommendations, the University Council approves the total number of students to be admitted each year. A preliminary number of state-funded places is approved, and a minimum competitive entry score is set by order of the LR MESS Minister. The University serves the right to increase a minimum, competitive score if there is a necessity. To accept and select properly and well-prepared entrants for the VM studies, the minimum, competitive score for the VM study programme has been increased to 6.0 points by the decision of the Senate. Entrants with a lower score cannot participate in the competition. A competitive score of the last applicant admitted to the VM study programme in 2018 was 4.58 points, in 2019 – 6.03, and 2020 – 6.90 points. The structure of the student LSMU Admission Commission and the publicity of criteria for admission, including the number of admitted students and services provided to students, are described in *Standard 7.3*.

Description of the mechanisms for the exclusion of students.

Student representatives participate in preparing study-related documents, including LSMU SR. The mechanisms for student expulsion are described in the LSMU SR. The Regulations are publicly available, ensuring that all students are adequately informed on this peculiar matter. Students can be expelled from the University following the Procedure stipulated in the LHER and LSMU SR (*Chapter VIII, Section 3*) in case of the following conditions: have committed a severe violation of the LESS provisions, the University Statute; have breached the acts defining an internal order at the University; have violated student duties

and/or ethical principles (the most common reason is a violation of the Code of Ethics namely fair competition, copying, plagiarism or other academic dishonesty cases related to the student assessment during examinations/tests, etc.); have failed to pass the required exams at the final attempt (which is only allowed after the repetition of the studies); have registered to the study subject courses but are not taking part in the study process and are unreachable for more than 30 days. In all these cases, a student may still resume their studies but not funded by the State and no earlier than after one year and only from the beginning of the semester. After receiving an official report on unfair/dishonest academic behavior during the examination process, the Dean forms a commission of 3 students, three lecturers, and three administration representatives to investigate a case. If such a case is confirmed, a decision to expel a student from the University is made. The order of the Rector, stating the reasonable grounds for such a decision, finalizes and closes the case. The Dean informs a student about the decision made no later than within two working days. A student who disagrees with the decision has the right to appeal.

Standard 7.6: Mechanisms for the exclusion of students from the programme for any reason must be explicit. The Establishment's policies for managing appeals against decisions, including admissions, academic and progression decisions and exclusion, must be transparent and publicly available.

Description of the appeal processes

The policies for managing appeals against academic dishonesty, decisions on academic progress, and/or expulsion from the university are transparent and described in the <u>LSMU SR</u>, Chapter IX, Section 8, Chapter XII, Section 3, and Chapter XIV. The request to impose an expulsion is submitted through the Dean, and the Rector makes a final decision to expel and formalizes it by the Order. If a student disagrees with the decision applied as a type of punishment to be expelled (LSMU SR, Chapter XIV), no later than in ten days, they have the right to appeal to the LSMU Commission of Dispute Settlement, to the Senate, or the LR Court. Student appeals regarding the records of study results are examined by a Commission of Appeals formed by the Rector and consists of three university employees and three student representatives (LSMU SR Chapter XII, Section 3). The Commission of Appeals makes its decision based on the number of votes within 15 workdays after a student has submitted the appeal. The Commission of Dispute Settlement does not examine the appeals regarding the records of study results. Student appeals regarding the decisions made on academic dishonesty and academic progress are described in *Standard 8.2 Substandard 8.2.4*.

Standard 7.7: Provisions must be made by the Establishment to support the physical, emotional and welfare needs of students. This includes, but is not limited to, learning support and counselling services, career advice, and fair and transparent mechanisms for dealing with student illness, impairment and disability during the programme. This shall include provision of reasonable adjustments for disabled students, consistent with all relevant equality and/or human rights legislation. There must be effective mechanisms for resolution of student grievances (e.g. interpersonal conflict or harassment).

Description of the services available for students (i.e. registration, teaching administration, mentoring and tutoring, career advice, listening and counselling, assistance in case of illness, impairment and disability, clubs and organisations.

Students are registered for the first study year by the Student Admission Commission. At the end of the semester, advanced students are registered for the next semester by the Dean. Every year, the data on the number of students are transferred to the LR MESS Student Register. 1) LSMU has implemented a developed network of services for students. The first-year students have an introductory week, and an e-guide for firstyear students is published on the admission webpage for entrants. The SU appoints trained senior students as volunteers for each group of national students, and IRSC does the same for international students. VASA and IRSC organize camps for freshmen. Attending the camps helps freshmen integrate into the university's academic community and social activities. 2) At VEE the freshmen are assigned lecturers-curators. 3) A free personal LSMU e-mail account and the information processing and managing account in the LSMUSIS system are created for all enrolled students to share/ receive/send information. Students can ask questions at any time, register for a meeting, and receive timely answers and the information provided by the Dean's office, lecturers, administrators, the SC, stakeholders, etc. LSMUSIS is accessible to all students and stores all study information: subject descriptions, assessment strategy, study results, schedules, location/room and time of lectures, personal assessments, etc. Calendar thematic plans, study materials, and tasks are uploaded and available in the Moodle. 4) The SC administers schedules and other LSMUSIS functions; The Student Information Department provides academic information; IRSC assists students and staff in submitting the Erasmus applications and provides the necessary services to foreign language students. At the Dean's Office,

students directly and by e-mail are consulted on all the issues related to the studies. In the departments, students are advised on the study issues by study administrators. The teaching staff provides information on the teaching methods and assessment of a subject they teach both in writing and directly through face-to-face communication. In personal matters, students are consulted by the Vice-Deans, Dean, and Vice-Rector for Studies. 5) All students meeting the requirements can get a wide range of support from the University or the LR Government. SSF grants and administers state-funded loans. The State may reimburse the total tuition fee paid for studies. Following the LR regulatory documents, a full refund for study tuition is granted upon completing the studies. The University appoints a person responsible for the administration of issues related to student support and students with special needs. For students from large families, orphans, or those parenting children, the tuition fees may be reduced following the Order framed by the University Council. 6) Students are eligible for incentives and nominal scholarships. An incentive scholarship is awarded for the students the best study results. A one-time social scholarship can be granted in the event of childbirth, or a natural disaster. Nominal scholarships are established by physical or legal bodies of Lithuania or foreign countries. Advanced, achieving the best study results students are eligible to receive these scholarships provided a student meets a scholarship founder's criteria. Information on financial support for the disabled is provided in Substandard 7.4.7) The students can be accommodated in the dormitories, managed, and provided according to the "LSMU Regulations of the Student Dormitories". The University has 9 dormitories. The 4 dormitories are close to VEE. 8) For objective reasons, the students can apply to the Dean for transfer to another group of students or for a lecturer change. 9) During clinical subjects, all students are equipped with special clothing and footwear. Students are transported to practical training on farms by university transport. 10) Students receive sufficient information about career opportunities at the LSMU Career Center. This Career Center performs the functions of future employment guidance, career counseling and career-monitoring, administration of additional internships, promotion of entrepreneurship of students and doctoral students, coordination of relations between the University, graduates, and external institutions; publicizes job advertisements and internships, organizes the event Career Days and the meetings with alumni, gives the lectures in different topics regarding to career, advises and instructs how to prepare and write a successful CV, powerful cover letter and other documents. If necessary, the Center can evaluate personality traits: NEO PI-R, whose questionnaire is based on the Big Five Personality Dimensions. During the meetings organized by VEE, students are consulted about career opportunities by social partners (SFVS, UAB Agrokoncerno grupė, etc.), lecturers share their experience. 11) When necessary, students can get professional psychological assistance provided both in LT and EN. Free individual psychological consultations, participation in psychological recovery groups, training in the use of preventive measures, and instructions by professional psychologists are available to all students (click for more information about psychological consultations and other important information). If a student or their relative/close person is in a suicide crisis, there are available help options provided by the <u>You are programme</u> (LT, EN) in Lithuania. 12) All VM students annually get covered with accident insurance during the time of studies. 13) Students confirm by their signature that they were informed about vaccination possibilities against rabies and tetanus. This information is reminded twice a year electronically before the beginning of each semester. In the zones with high risk, the information is additionally communicated to students by academic staff through direct communication or by posting on the internet. 14) Students have the right to select a health care establishment and receive free health care services. Personal health insurance is mandatory for all international students. Upon arriving for the studies and having formalized their residence status, the international students are issued a national ID code enabling them to register to some Family Medicine Clinic/Center. Students may choose the Clinic of the University Hospital or any other from the network of primary health care institutions. International students receive the same health care services as national students. The EU citizens get access to health services after officially declaring their residence in Lithuania and getting Temporary Residence Certificate and their state ID code. The non-EU students shall be covered by private health insurance. Health insurance status and registration to a family physician is monitored by the IRSC to assure that all students are registered for primary health care and can get quick and proper access to the health services needed in a case of illness accident or health emergency. If there is a necessity, students are allowed to take an academic leave due to illness. 15) The University has created conditions for student self-governance. LSMU hosts a SU, VASA, IVMSA, IVSA. These organizations deal with and meet the needs of students' self-expression. The University supports the SU activities. To the extent possible, VEE financially endorses the activities of VASA and IVSA. 16) On the VEE campus, there is a university sports complex, outdoor/indoor gyms where

students do/play sports in their free time under the supervision of sports and health professionals. In addition, the University has several student arts groups: choir, folk dance, dance, band, etc. The Rector and/or the Dean express official gratitude and appreciation to the students for their achievements, excellent learning, and active engagement in student activities.

Description of the mechanisms for resolution of student grievances.

It is proposed to resolve the issues within the University by contacting the SU office, the faculty dean and/or administration, the Senate. A student may apply to the LSMU Dispute Resolution Commission, where various disputes are resolved following the <u>Procedure for the Analysis of Disputes</u>. In case of a complaint about ethical violations, the <u>Senate Commission of Low and Ethics</u> complying with the procedure provided in the <u>Code of Ethics</u> analyzes and investigates. Such complaints are a rare case. When/if necessary, a student can get help in the occurrence of sexual harassment, assault, mobbing, or violence under the <u>prevention rules</u> (there were no such cases at VEE). If responsible bodies cannot resolve the issue at the university level, the next competent body for analyzing and resolving_student complaints is <u>SKVC</u>. SKVC acts according to the LR Law on Public Administration and the <u>Rules</u> approved by the Government (there were no such cases detected at the VEE).

Standard 7.8: Mechanisms must be in place by which students can convey their needs and wants to the Establishment. The Establishment must provide students with a mechanism, anonymously if they wish, to offer suggestions, comments and complaints regarding compliance of the Establishment with national and international legislation and the ESEVT Substandard.

Description of the mechanisms allowing students to provide their needs, complaints, comments and suggestions to the Establishment.

The University manifests and has legitimized a full democracy. Students' rights are listed in Chapter III of the <u>LSMU_SR</u>, to which the Dean introduces students at the beginning of their studies. Student representatives, actively involved in all university governance structures, become temporary and permanent commissions members, engage in working groups, participate in law-making, decision-making, activity planning, and resolving disputes. Due to this student activity, the number of unclear, contentious, critical student issues reduces, and students find out how the University works. Every semester, the Dean, SPC, lecturers, and the SC have meetings with students. "Informal Conversations with a Cup of Tea" have been taking place since 2020. At the meetings, students convey the relevant issues, discuss and resolve them. Suppose a student has got particular needs, controversial questions, comments, and/or suggestions. In that case, they can address all university levels from the SU to the Rector, and the media, if necessary. Where and on what issues to apply, the VM students find out in the first-year study subject 'Introduction to the VM studies". The Dean's office, SU, International Veterinary Students Association, IRSC, and Students Information Services also provide this information.

For an issue raised by a student, it is recommended to contact a chain that manages the problem initially. Students can submit any questions, reports, and suggestions in person or, on behalf of the group, convey them through student group leaders, also by e-mail, or anonymously. Students usually ask open-ended questions and make their comments and suggestions. Anonymous reports are thoroughly checked before making a decision.

An anonymous e-system allowing the students to make suggestions, comments, and complaints has been functioning at LSMU since 2014. In 2019, this system was improved and updated. Currently, LSMUSIS features a formal e-qualitative feedback system called "Quality Thermometer," which analyzes and evaluates the study subjects and the lecturers who teach those subjects. A student can anonymously evaluate the study subject and the lecturers individually and submit their suggestions, comments, and/or complaints. Each lecturer can view student feedback only relevant to themselves, whereas the Dean, SPC, the heads of the departments, and the SC can access all the evaluation results. SPC conducts the analysis and initiates discussions with targeted lecturers and, after the evaluation of information adequacy, makes decisions and gives recommendations on improvement.

Comments on Area 7

The Government determines the number of state-funded places, and VEE does not influence it in any way. VEE has the possibility to plan and suggest a certain number of study places to the LSMU Council. For the

year 2021, the state budget's financial support for the VM studies has been increased significantly. An increasing number of foreigners wishing to study VM at VEE proves and affirms the programme's popularity. However, the number of students is not likely to expand in the next three years unless the LR Government continues increasing the number of state-funded places. More state-funded places result in the enrollment of academically better-prepared students and reduce the number of expelled students in the future.

The programme's publicity is performed using distance and contact methods, is comprehensive, and covers a wide range of activities for both national and international students. The admission process is conducted following the principles of transparency, equality, clarity, reliability, consistency, and non-discrimination. Admission criteria are published two years in advance, and admission rules are drawn up following the national law and reviewed and updated annually. LAMA BPO assists in organizing admission to higher education establishments, achieving the highest levels of impartiality by selecting the best-prepared entrants and simplifying the admission procedure. The qualification evaluation procedure for those entering the VM programme in a foreign language corresponds to the models of education systems applied worldwide, their specifics, and the regulated level of education. The applicable evaluation criteria are clearly defined, rational, applied consistently, and publicly declared by the Admission Procedure approved by the Senate.

At the University, all study-related procedures are regulated. These regulations are available to the students and the Faculty. LSMU has clear policies and practices regarding the admission of entrants with disabilities or illnesses. The procedure regulating process is performed with the requirement in mind - the disabled students must acquire and develop the ESEVT DOCs skills by the time they graduate. VEE has mechanisms to monitor student study process progress and regress in place. These mechanisms allow identifying the factors influencing the study process and provide necessary measures and appropriate, timely support (including the discontinuation of the studies, if needed) for the students whose academic performance is failing and/or is not adequate. For the timely identification of such problems and for the enhancement of student opportunities to achieve good study results and progress, VEE has launched an updated tutoring system. Constant and continuous academic progression stimulates and motivates the students to seek the best study results and preserve the status of a successful student. The mechanisms for the expulsion of students from the study programme are explicit. The policies for managing appeals against the decisions on admission, academic progression, and student expulsion are transparent and publicly available. Sufficient social, physical, emotional support and welfare are available for all students. It also includes the provision of reasonable adjustments for disabled students. The mechanisms for resolving student complaints are effective. Students receive information and advice at all levels. They are involved in the course of decision preparation and can influence decision-making.

Suggestions for improvement in Area 7

- 1. To include a student motivational interview for all entrants admitted to the VM programme in the future because it is currently limited by the national legislation.
- 2. To further digitize the administrative and study processes related to academic activities to save human resources and reduce natural pollution.

AREA 8. STUDENT ASSESSMENT

Standard 8.1: The Establishment must ensure that there is a clearly identified structure within the Establishment showing lines of responsibility for the assessment strategy to ensure coherence of the overall assessment regime and to allow the demonstration of progressive development across the programme towards entry-level competence.

Description of the general student's assessment strategy of the VEE

VEE has a clearly defined assessment strategy conforming with the intended learning outcomes. Student assessment rules and decision-making on student progression are specified in the <u>LSMU SR</u> (*Chapter IX*), set up following the University Statutes and legal acts of LR LHER. The students' assessment strategy is competencies based and enables assessing specific learning outcomes through the mid-term tests and examinations of all study subjects. By this strategy, it is evaluated whether the students have acquired the subject-specific knowledge and competencies. By the OSCE and master's thesis the cumulative value of a student's knowledge and DOCs are evaluated. The questions and tasks for examinations and tests are focused on interconnected Learning outcomes (*Annex 19*). The methods for assessing study progression are selected to assess the intended subject learning outcomes and student acquired competencies and are in coherence

with the study subject content. The strategy of a subject examination, the procedures and assessment of Clinical Rotation, Practice, OSCE, and the Master's thesis defense are described in the subject descriptions in LSMUSIS and specific Procedures approved by the VEE Council. A diagnostic assessment is used to evaluate the initial level of students' knowledge and skills for future study progress evaluation and to help the teaching staff adapt and adjust the study content and select the study methods, enabling students to achieve the intended learning outcomes and acquire the competencies effectively. A formative assessment is applied to evaluate and improve the students' study results in subjects where practical skills are essential (problem-solving, clinical practices, etc.). The formative assessment is performed using a multiple-sources feedback method (lecturer-group-individual self-assessment, 360-degree assessment, etc.) to evaluate assessment. A cumulative assessment is dominating in the VM study programme for student assessment. A cumulative score is a part of the summative assessment. Different learning outcomes on the programme subjects are assessed as components of a summative assessment. The cumulative part is at least 50% of the final subject/module exam grade. Considering the provisions of the LSMU SR and the ECTC recommendations (ECTC User's guide, 2015), a scale of exam achievement assessment and a table of results are created in which the scores are equated to a percentage (min-max) and a grade (*Annex 34*).

The VM studies take place in semesters. After completing studies of the respective year (not less than 60 ECTS credits), a student is transferred to the next study year. At the end of each semester, one week is designated for the academic debts' liquidation of the semester. The last week of August is intended to eliminate the debts of the academic year.

Description of the specific methodologies for assessing the acquisition of: -) theoretical knowledge, pre-clinical, clinical, soft skills (communication skills, team player, dealing with pressure, strong work ethic, positive mental attitude, flexibility, time management, self-confidence, dealing with criticism, ...)

The VM students' study results and achievements during each academic year are assessed using the following assessment forms: paper and internet-based and oral examinations, an oral presentation, a project for a summative assessment, written essays, reports, filled logbooks, short tests, multiple-choice tests and homework assignments through e-learning systems (the Moodle) for a formative assessment. Specific methodologies are used for assessing: Theoretical knowledge is assessed according to the acquired knowledge, its understanding, and its application. Since 2020, the theoretical knowledge has been tested in writing, using e-tests, the *Moodle* system, and questions to assess professional and cognitive knowledge. To assess the theoretical achievements, the following assessment forms are used: colloquiums, mid-term tests, analyses, reports, oral presentations, essays, reflections, control works, projects, final written papers, and etests. A Ouestion Bank is created for the assessment of theoretical knowledge. The assessment content is chosen by a group of subject lecturers considering the intended learning outcomes for a particular subject. After the assessment, based on student feedback and the statistical distribution of exam grades, the questions are reviewed and adjusted. The most used question types in e-tests are essays, multiple-choice tests, short answer questions, and matching type tests. The theoretical knowledge is also evaluated through continuous assessment of tasks performed under the lecture's supervision and case analysis and is a part of the subject's cumulative assessment. Pre-clinical practical competencies are assessed by the acquired skills and results, which conform to the content of the Basic Sciences studies. The learning outcomes achieved during seminars are assessed as theoretical knowledge, whereas the outcomes achieved during laboratory work and practical training reflect the acquired competencies. The applied assessment is summative in nature. The assessment forms are a defense of practical work, a case analysis, and a final practical test. The defense of practical work may include learning outcomes but shall not exceed the competencies for the defense of practical work specified in the subject description. The pre-clinical practical competencies acquired for the Production Animal and Companion Animal Nursing Practices are evaluated through supervised practical training (Logbook), written report and reflection, and Directly Observed Procedural Skills (DOPS) at the VMSC (Companion Animal Practices). The principle of OSCE is also applied. Consistency of study results and competencies and their correlation with the theoretical knowledge serve as a basis for assessing practical work. Clinical practical skills are assessed by summative and formative assessments through student monitoring and obtaining feedback. In clinical studies and clinical rotation, the assessment is continuous. The clinical practical skills are assessed collectively in the oral-practical formats based on the OSCE principle, using DOPS, and applying a mini-clinical evaluation. The students gather information on the patient's medical history, perform clinical examination, propose differential diagnosis, and investigation

examination plan, summarize findings and diagnose the disease, suggest treatment and give feedback to the patient. During clinical rotation, the students have to perform the same clinical task three times. Two times they get progressive grades, and the third time – the final grade for a respective task. During the practice in veterinary laboratories, the students demonstrate the acquired practical skills by performing laboratory testing and properly interpreting the findings for a correct diagnosis. They also fill in the logbook, prepare a report, and are assessed by the practice supervisor. The prepared report and the logbook are evaluated by a commission consisting of experts in the field. In the sixth study year, the students have a clinical practice. In natural, hands-on conditions, they perform and register the clinical tasks provided in the plan, fill the patients' registration journal and prepare a report. The students are assessed by the practice supervisor and the evaluation commission, which consists of the academic staff from all clinical fields. Upon receiving a positive assessment, a student has the right to take the final OSCE examination, which covers the DOC intended by the ESEVT SOP. The OSCE tasks are prepared by the lecturers coordinating the modules. Each task is evaluated respectively in a standardized way according to the scoring checklist (Annex 35): welldone, partly done, not done/poor attempt (failed). The evaluation results are processed by a specialized computer programme, applying a cumulative assessment. The exam is considered passed if a student accumulates at least 50% of all possible scores.

The students acquire theoretical and practical Soft skills and are assessed while studying the subject of Professional Ethics and Communication. During State Veterinary and Public Health study, the students acquire the knowledge of veterinary management, the concept, rights, and duties of an official veterinarian, the skills of inter-institutional cooperation, and interaction of medical and veterinary specialists in solving emergent problems, and these abilities are evaluated. Other communication skills are integrated into the VM curriculum and assessed cumulatively using team projects (team plays, simulating situations), problemsolving, case analysis, team presentations, the OSCE communication stations, etc. The students' ability in their time management is evaluated during the examination and/or tests, where the tasks and examinations must be completed in a fixed time frame following the examination schedule. The results of students' assessments reflect their learning outcomes and study achievements. Self-confidence and the ability to deal with criticism are evaluated during the defense of the master thesis when the student answers the questions asked by the reviewers and the members of the commission. The self-confidence, strong work ethics, and positive mental attitude skills are demonstrated by the students and evaluated through the DOPS and miniclinical tasks intended for the assessment and practice of a study subject. The master thesis is assessed according to the standardized master thesis assessment criteria described in the master thesis preparation procedure. The master thesis is reviewed and defended publicly in front of the commission of 7 members. The reviewer's given grade is 30%, the Commission's grade -70% of the final grade of the master thesis assessment. Both assessments are compiled, and a final grade is entered in LSMUSIS.

Standard 8.2: The assessment tasks and grading criteria for each unit of study in the programme must be published, applied consistently, clearly identified and available to students in a timely manner well in advance of the assessment. Requirements to pass must be explicit. The Establishment must properly document the results of assessment and provide the students with timely feedback on their assessments.

Description of the processes for ensuring the advertising and transparency of the assessment criteria / procedures

A timetable of student assessments and elimination of academic debts is published in the LSMUSIS and on the LSMU website at least two months before the end of the semester. The study subject lecturers prepare assessment criteria, structure, and procedures approved by SPC. Subject assessment criteria are published in the LSMUSIS and uploaded in the *Moodle* subject file. Before starting subject studies, a coordinating lecturer introduces the students to the assessment criteria. The student consultations on the upcoming assessment are also organized before the assessment. The content of colloquiums, tests, and assessments is uniform for all students to assure the same learning outcomes and transparency. The order of questions and individual multiple answer choices are randomized to ensure a fair examination process. The duration of preparing for the exams is one or two workdays depending on the volume of the subject ECTS credits. The clinical rotation, practice, master thesis, and OSCE evaluation strategies and implementation procedures are described in the Procedures developed by SPC and approved by the VEE Council. They are published on the LSMU website. Before the clinical practice begins, the practice-coordinators arrange the meetings to introduce the students to the procedures. The vice-dean presents the procedure of the master thesis to the lecturers and students. The master thesis supervisors provide further related information to the students. The OSCE examination procedure is

additionally uploaded in the Moodle file folder, and repeated operational and procedural consultations are organized. At the VMSC, the students have access to the examples of OSCE assignments. All responsible persons preparing the OSCE tasks, the evaluators, and the support staff sign a confidentiality agreement.

Description of the processes for awarding grades, including explicit requirements for barrier assessments.

Student learning outcomes and acquired competencies are assessed on a ten-point scale, and the lowest positive grade is 5 points (50–54%). The assessment scores (grades), their meanings, and their correlation to the level of achievement are presented in the LSMU SR, *Chapter IX, Section 6 (Annex 34)*.

Student participation in contact classes is compulsory. The students who miss no more than 25% of contact study hours of a subject (a part of the module) can work them out on an individual schedule, following the conditions outlined in the assessment strategy, and the students who miss more than 25% of contact hours must repeat the study subject. The final assessment of the subject (examination grade) is the sum of the cumulative grade and final test grade.

If the students have not participated in a part of the cumulative assessment or received a negative grade, they have a one-time opportunity to be assessed on that missed part before the scheduled final test date. In cases of failure (not achieving the lowest passing grade), the students shall retake this part of the cumulative assessment during the week scheduled to eliminate academic debts. If academic debts are not liquidated before the end of the semester, the students shall eliminate them following the procedures outlined in the LSMU SR, *Chapter IX, Section 9*. If the final test is failed, the student is allowed to retake it twice. If the student fails the second retake of the examination, the subject course must be repeated and the student is not transferred to the higher study year. Failing to pass the OSCE exam or not taking it, defending poorly or not attempting to defend the master thesis, a student is excluded from the student lists and the study programme is terminated. A student has the right to renew the studies, take the exams and defend the master thesis at the earliest than three months after the expulsion.

Students with disabilities and/or special needs who cannot attend the examination according to the established procedure are provided with the opportunity to be assessed in alternative ways, still ensuring that the intended learning outcomes of the study programme are achieved. It is regulated by the <u>Procedure for</u> <u>Submitting Documents and Reporting by LSMU Students with Special Learning Needs in Alternative Ways</u>, which complies with the LR Law on the Social Integration of the Disabled. Each person's special learning needs are individual. As a result, particular alternative assessment methods are selected and applied in each case. <u>Alternative assessment methods</u>, which are of a recommendatory nature and can be chosen according to the emerging needs of a particular student, are presented in the Procedure.

Description of the processes for providing to students a feedback post-assessment and a guidance for requested improvement

The grades are entered in the LSMUSIS database within five days after the assessment date has been indicated in the e-register. When the examinations are performed in the *Moodle* system, the students see their results immediately after completing the tasks. Oral or written feedback after the assessments is provided to students within one working day after releasing the assessment results. At the student's request, the explanations of the assessment grade are provided individually. The lecturers use the assessment analysis as a tool in developing and improving the subject assessment methodology.

Since 2019, the updated e-feedback system "Quality Thermometer" has been operated in the LSMUSIS environment. Students evaluate the subject's content, the quality of learning materials, schedule, and assessment methodology. Also, they can evaluate each lecturer individually. At the programme level, SPC analyze the evaluation results of the subjects centrally and, if necessary, provide recommendations to the lecturers on improving the assessment strategy or its content. After getting acquainted with the feedback summary the academic staff makes appropriate improvements in case of objective recommendations and suggestions. The CMSQA evaluates the assessment strategy at the university level and then present it to the SPC, deans and the LSMU Rectorate. The changes are approved by the Senate.

Appeals procedures for assessment of student achievement

Policies for managing appeals against academic and progression decisions are transparent and available in the LSMU SR, Chapter IX, Section 8. Submitting appeals is allowed in the cases regarding: 1) the results of the credit test; 2) the exam results; 3) the assessment procedures; 4) the OSCE and the master thesis assessment results and methods. For investigating the appeals of cases 1–3, the Appeal Commission, composed of two

student representatives delegated by SU and five academic staff members and/or administration, is established. In appeal case 4, the appeal commission is constituted and approved in advance. It is composed of three student representatives delegated by SU and six members of academic staff or administration. In all appeal cases, the appeal commission follows the LR LHER, the LSMU SR, and other internal legal acts of the University in its activities. The Decisions made by the Appeal Commission can be as follows: denying the appeal and leaving the previous assessment grade; approving the appeal and changing the assessment grade (if the assessment was held in writing or audio recorded); approving the appeal and allowing retake of the examination; approving the appeal and allowing repeat of the master thesis. The appellant is informed about the Commission's decisions electronically within two workdays after the decision has been made. The decisions regarding the appeal type 3 may be appealed to the Commission of the LSMU Dispute Settlement.

Standard 8.3: The Establishment must have a process in place to review assessment outcomes, to change assessment strategies and to ensure the accuracy of the procedures when required. Programme learning outcomes covering the full range of professional knowledge, skills, competences and attributes must form the basis for assessment design and underpin decisions on progression.

Description of how (procedures) and by who (description of the committee structure) the students' assessment strategy is decided, communicated to staff, students and stakeholders, implemented, assessed and revised

The general student assessment strategy of the VEE was described in *Standard 8.1, Substandard 8.1.1*. The subject lecturers groups and SPC are involved in evaluating whether the student assessment strategy plan is implemented successfully. The lecturers analyze the outcomes of subject assessment, provide feedback to the student and get student feedback (LSMUSIS questionnaire survey). The performance of the assessment strategy on the programme level is evaluated by SPC according to the assessment outcomes of the students accumulated in the LSMUSIS every semester and at the end of study year. SPC analyzes the results of students' responses to the CMSQA approved and organized questionnaire survey, which allows evaluation of the quality of implementation of the assessment strategy. When, based on the results of the analysis of students' progress indicators and surveys the progress criteria are achieved, this improvement phase is considered to be completed, and the VEE Council approves the successfully achieved goals.



Fig. 8. QA of assessment strategy

If the progress criteria have not been achieved, the causes are analyzed by SPC. SPC improves and updates the assessment strategy plan, agrees it upon with the Dean and the VEE Council approves the plan. Following the SPC's suggested updated guidelines, the lecturers groups responsibly select the appropriate subject assessment methods to determine whether students have acquired the DOCs covering the professional knowledge, skills, and professional attitude, required for further studies and for professional practice. The Units executing the studies ensure the quality implementation of the updated assessment strategy, and the Dean's Office ensures administrative support. The intended changes in the study assessment strategy are

implemented within the following teaching cycle of the subject. The academic staff introduces the updates to students by uploading information in the Moodle subject file and subject description in the LSMUSIS. The groups of subject lecturers and SPC further annually review the assessment strategy (**Fig. 8**).

Standard 8.4: Assessment strategies must allow the Establishment to certify student achievement of learning objectives at the level of the programme and individual units of study. The Establishment must ensure that the programmes are delivered in a way that encourages students to take an active role in creating the learning process, and that the assessment of students reflects this approach.

Description of the system to certify student achievement of learning outcomes in the different subjects, years of study, etc.

The studies of each subject/module are finalized by an examination or assessment of the student's independent work following the procedure for assessing students' learning outcomes approved and publicly announced by the University. The assessment systems and criteria in each subject/module ensure that the students achieve the learning outcomes intended in the curriculum. The exam is considered as passed when it has been assessed at least by 5 points on a ten-point scale. The exam is assessed by at least three lecturers-assessors. The OSCE and master theses defense assessments are standardized and considered by respective commissions. Upon passing the OSCE exam and defending the master's thesis, a Master of Veterinary Sciences degree and the Qualification of Veterinary Doctor are awarded.

The grades of all assessments are entered in the LSMUSIS database, where the students view their assessment results; the lecturers can view and assess student knowledge in the subject taught; SPC views the assessments of all students of the entire VM study programme. The causes of students' failure to fulfill the requirements for the respective study subject are thoroughly analyzed. The recommendations are provided, and if necessary, the content of the subject and the assessment methodology are updated. The Dean presents a report on the learning outcomes assessment to the VEE Council, the Rectorate, and the students at the end of the study year.

Description of the strategy to encourage students to take an active part in the learning process

The VM programme students are encouraged to take part in the learning process in various ways actively: obligatory and optional use of the VMSC to gain and improve acquired practical skills; optional use of virtual models to study anatomy and topographic anatomy of different species of domestic animals and poultry; use the 3D anatomy models in the VA Library, etc.

In the course of the VM studies, the particular methods of engaging students in the learning process are left to the discretion of the subject lecturers as they are experts of the taught subject matter and format. Flash *Poll* and/or *Kahoot* quizzes on the subject accelerate theoretical preparation and allow the students to stay (inter)active during the entire class. A Flipped Classroom method allows acquiring skills needed for case analysis and problem-solving. Individual and group/team tasks, presentations, and discussions encourage individual, and team works, as well as being active during the class, and understanding the topic studied comprehensively. Such methods of students 'engagement can be assessed as a separate portion of the cumulative score/grade, as they can be in the case of individual or group presentations and projects or as a part of the cumulative assessment/grade assessing student's engagement/performance during the entire semester. In addition, the students perform self-testing on a subject/topic/practical skills, which enhances monitoring of their knowledge and abilities not assessed by grades. This way, the students can detect their weaknesses, identify their strengths, and make correct further decisions. The exam/test schedule, topics, general questions of the compulsory subjects are announced in advance, encouraging planning, managing, and using the time effectively to achieve the intended learning outcomes and study results. The students who are not performing adequately the VEE has procedure, which support and help students to improve their learning outcomes (Annex 18).

Standard 8.5: Methods of formative and summative assessment must be valid and reliable and comprise a variety of approaches. Direct assessment of clinical skills and Day One Competences (some of which may be on simulated patients), must form a significant component of the overall process of assessment. It must also include the quality control of the student logbooks to ensure that all clinical procedures, practical and hands-on training planned in the study programme have been fully completed by each individual student.

Description of the assessment methodology to ensure that every graduate has achieved the minimum level of competence, as described in the ESEVT Day One Competences (see Annex 2)

Comprehensive formative and summative subject/module assessment methods covering different methods critically assess student achievements and DOCs individually. The student assessment methods conform to the intended learning outcomes outlined in the subject description, correspond to the content and methods of the study subject, and are based on the required competencies to gain. The formative assessments are used to assess theoretical student knowledge, general competencies, and they include pre-clinical practical skills quizzes, discussions, voting in the lab-works, class works, exit surveys. The Cumulative grade, that includes colloquiums, case analysis, surveys, practical assignments, final testing, the assessment of independent individual tasks and group/team projects, etc. must form at least 50% of the final assessment grade. The summative assessment is used not only to assess competencies achieved during the subject studies but also to evaluate competencies acquired during clinical rotation and clinical practice. The assessment of competencies achieved during clinical rotation is the mean sum of the competence assessment grades obtained assessing the individual mandatory competencies provided in the Clinical Rotation Logbook, prepared according to ESEVT DOCs. During rotations, most of the DOCs are acquired by the students working with live or simulated patients. During clinical rotation and clinical practice, all patients are registered in the individual student patients' registration journal. The procedures of filling the Logbook and the assessment plan for acquired competencies are specified in the specific Procedures. The assessment methodology OA is ensured by individually evaluating student skills, and giving feedback directly to the student. Every student's performance regarding each task and acquired skills is evaluated and confirmed by the lecturer. The acquired competencies also are self-evaluated by the student indicating the acquired competencies, number of practical cases/simulations, and self-support level of their performance. The lecturers-supervisors assess the outcomes of the practical training in grades. If there is a need to improve practical skills, the students can use VMSC individually, do additional practices, or volunteer in veterinary hospitals. When the students obtain all the assessments of the competencies required in the study programme, they are allowed to take the final OSCE. During OSCE, the knowledge and competencies acquired by a student during the VM studies, such as abilities to communicate, carry out clinical research, properly perform the procedures, interpret research data, and make reasonable decisions, etc., are assessed in a structured way. The exam results are calculated using the e-examination system. The OSCE principle is also applied to assess the colloquiums.

Comments on Area 8

There is an explicit formal and objective VEE strategy for the assessment of learning outcomes. Learning outcomes covering the professional knowledge, skills, competences and professional attitude are the basis of assessment strategy to determine whether students have acquired the DOCs, required for further studies and for professional activity. VEE assures that information on the assessment procedure and times and dates is announced publicly and timely. During the assessment, all students receive the same assignments. If necessary, there is the opportunity to be assessed in an alternative way, still ensuring that the same learning outcomes are achieved. VEE uses various measures and ways to encourage the students to actively develop and improve the learning process. The implemented digital students' assessments procedures enable an easy and transparent student assessment as well as continuous self-assessment. Students' clinical skills and competencies are recorded in individual logbooks and assessed directly by the lecturers. The assessments confirmed by grades prove that each student has achieved the intended learning outcomes. Feedback on assessment is given to students promptly. VEE has regulated the rules that allow the students to improve and make further progress in case of academic failure. In case of disputable questions, a student has the opportunity to submit an appeal on the assessment result and its procedures. The quality of the assessment strategy is evaluated and updated regularly, considering the student assessments outcomes and surveys. The results registration e-system ensures the transparent availability of the assessment results to all stakeholders, including the students, teaching staff, SPC, etc., and the implementation of the OSCE principles throughout the entire curriculum along with the assessment of the DOCs.

Suggestions for improvement in Area 8

- 1. To update the assessment strategy regularly and search for new assessment methods involving the VM students and standardization of feedback.
- 2. To implement the planned standardized assessment system in the VM study programme.
- 3. To further develop the qualification training for the teaching staff on new assessment methods.

AREA 9. ACCADEMIC STAFF

Standard 9.1: The Establishment must ensure that all staff are appropriately qualified and prepared for their roles, in agreement with national and EU regulations and must apply fair and transparent processes for the recruitment and development of staff. A formal training (including good teaching and evaluation practices, learning and e-learning resources, biosecurity and QA procedures) must be in place for all staff involved with teaching. Most academic staff (calculated as FTE) involved in veterinary training must be veterinarians. It is expected that more than 2/3 of the instruction that the students receive, as determined by student teaching hours, is delivered by qualified veterinarians.

Description of the global strategy to ensure that all requested competences for the veterinary programme are covered and that staff are properly qualified and prepared for their roles (e.g. good teaching and assessing practices, knowledge of up-to-date (e-)learning resources, biosecurity and QA procedures, ...).

One of the prerequisites for implementing the VEE's strategic objectives is to mobilize academic staff of the highest competence to ensure high-quality training of veterinarians. For this purpose, VEE performs consistent planning and needs analysis. As a result, these activities allow creating an attractive working environment, a transparent system for academic staff and other employee selection, recruitment, assessment, and promotion complying with the national and EU legislation and ensuring the development of academic staff general and professional competencies. In the VM study programme, more than 2/3 of all academic staff are veterinarians with proper qualifications. The rest of the lecturers are specialists in other fields according to their competent capabilities. The list of academic staff, qualifications, teaching responsibilities and departmental affiliations is presented in Annex 36. The list of scientific publications from the academic staff in peer reviewed journals is presented in the Annexes 37 and 37A. LSMU plans the need for human resources (in quantitative and qualitative terms) under the LSMU Statute, the Guidelines, and implements this following the EC Recommendation on the European Charter for Researchers, Code of Conduct for the Recruitment of Researchers (2005/251 / EC), LR Labor Code, LR LHER, Description of Minimum Qualification Requirements for Research Positions of the State Research and Study Institutions, and Methodology for Assessing Real Resources of Higher Education Institutions. The selection and recruitment of employees and academic staff are conducted out in accordance with the LSMU Rules of Operating Procedure and Staff Selection and Evaluation Procedure. A pedagogical, research, and practical experience of academic staff is evaluated by conducting a lecturer certification every five years following the **Procedure** of Qualification and Attestation (hereinafter – the Procedure). In terms of visiting lecturers, the LR LHER procedure is followed respectively. To develop the educational competence of academic staff, the LSMU Study Center has established an InoEdu. InoEdu constantly monitors the needs of training of teaching staff, organizes, implements, and improves their training following the set Procedure for Ensuring the development of Educational Competencies of the LSMU Lecturers. The heads of the units acquaint the employees with the job descriptions, internal documents regulating the employee's work, train, and instruct on how to work safely. The employee is introduced to the general rules of university work safety, fire safety, and the Biosafety and Biosecurity SOP implemented by VEE. Mandatory fire safety, biosecurity, etc., trainings are provided to all employees regularly (responsible bodies: Division of Work Safety and Health, and VA Biosecurity Committee). Lecturers-practitioniers are obliged to raise their professional qualifications following the Procedure established by Order of the SFVS Director This way, it is ensured that the quality qualifications of all lecturers are proper and aimed to achieve the set programme objectives and results and that the field of their qualifications correspond to the subjects they teach. The University has approved an organizational Procedure for Organizing Feedback on Study Quality at LSMU, which specifies how the Establishment must organize surveys of students, graduates, lecturers, staff, and social partners. The InoEdu unit presents the results of the surveys to the dean and the heads of the study units. Personnel surveys allow evaluating employee satisfaction with working conditions and environment. The Human Resources Department (HRD) submits the results of the surveys to CMSQA, which offers suggestions to the responsible

faculty. The analysis results on the staff development and their professional competencies are publicly available in the annual reports of the Dean and Rector.

Standard 9.2: The total number, qualifications and skills of all staff involved with the programme, including teaching staff, 'adjunct' staff, technical, administrative and support staff, must be sufficient and appropriate to deliver the educational programme and fulfil the Establishment's mission. A procedure must be in place to assess if the staff involved with teaching display competence and effective teaching skills in all relevant aspects of the curriculum that they teach, regardless of whether they are full or part time, residents, interns or other postgraduate students, adjuncts or off-campus contracted teachers.

Table 9.2.1. Academic staff* of the VEE

Type of contract	2020-2021*	2019–2020	2018–2019	Mean
Permanent (FTE)	146.65	146.25	132.75	141.88
Temporary:	29.7	35.225	43.25	36.06
Residents (FTE)	2.75	3.5	3	3.08
Ph. D. students (FTE)	4.75	5.25	9	6.33
Others: assistant, lecturer, prof. emeritus, FTE	22.2	26.475	31.25	26.64
Total (FTE)	176.35	181.475	176	177.94

* All staff included in this table have received a training to teach and to assess undergraduate students. Practitioners involved with EPT are not included in this table;

Table 9.2.2. Percentage (%) of veterinarians among the academic staff of the VEE

Type of contract	2020-2021	2019–2020	2018-2019	Mean
Permanent (FTE)	68.4	66.2	62.9	65.8
Temporary (FTE)	63.6	61	65.9	63.5

Table 9.2.3. Support staff of the VEE

Type of contract	2020-2021	2019–2020	2018–2019	Mean
Permanent (FTE)	94	91.5	89	91.5
Total (FTE)	94	91.5	89	91.5

Table 9.2.4. Research staff of the VEE

Type of contract	2020-2021	2019–2020	2018–2019	Mean
Permanent (FTE)	13	13.5	13.2	13.2
Temporary (FTE)	5.97	6.75	4	5.57
Total (FTE)	18.97	20.25	17.2	18.80

Prospected number of FTE academic and support staff of the veterinary programme for the next 3 academic years.

VEE does not plan any significant changes in the number of academic and support staff in the next three academic years. The number of FTE academic and support staff is prospected to remain stable or increase slightly. A decreased number of students in 2021 has not affected the number of lecturers because the LR Government has raised the normative tuition fee of VM studies.

Description of the formal programme for the selection and recruitment of the teaching staff and their training to teach and assess students (including continuing education).

According to the <u>Procedure</u> for selecting and recruiting academic staff and researchers, open competitions for a position at VEE are announced publicly in the LSMU weekly *Ave Vita* and on the LSMU website. The qualification requirements and the course of attestation are described in the <u>Procedure</u> for each position separately – starting from a professor's position and to the assistant and researcher positions. The LSMU Committee for Recruitment and Assessment of Professors and Senior Researchers considers the suitability of professor candidates for the offered positions. The VA Committee for Recruitment and Assessment of Lecturers and Researchers considers and makes decisions on other candidate: associate professors, lecturers, assistants and researchers. A candidate who won the competition is recruited in a relevant department on a five-year contract. At the end of the five-year term, assessment of academic staff or researchers' conformity with the qualification requirements during the period of office takes place. Academic staff fills a spreadsheet

indicating their activities, number and quality of scientific publications, participation in the preparation of prospect researchers, and nature of improvement of educational activity. To ensure the proper educational competence of the academic staff, lecturers within five years shall take a minimum of 30 hours of educational competence training course. The training shall cover the quality of teaching and student assessment, study management improvement, teaching in a virtual <u>E-learning</u> environment, study QA, communication, stress management, and other respective topics. Each VEE lecturer improved their educational qualification during the period 2018–2021, ~17.07 hours per year.

Attestation and competition ensure the progress of lecturers' educational competence, the performance of research activities, and the publication of scientific articles. This way, it is guaranteed that research-based study subjects are appropriately taught by lecturers who are well-prepared for this purpose and improve consistently. According to the Statute of LSMU, the procedure for appointment to positions established by the Statute does not apply to visiting lecturers (temporary contract). However, even when selecting employees for a fixed term, employees shall meet the qualification requirements set for the position. The heads of the units review and evaluate the candidate's CV, and compliance with the job requirements. With the dean's approval, they submit a proposal to the rector. The employees are adequately acquainted with the job descriptions that they sign.

Description of the formal programme for the selection, recruitment and training to perform their specific duties (including continuing education) of the support staff.

All support staff work under a permanent employment agreement. The support staff is recruited following the <u>LR Labor Code</u>, and <u>The Lithuanian Classification of Occupations LPK 2012</u> approved by the Minister of LR Economy, and the <u>Staff Selection and Evaluation Procedure</u> and <u>Rules of Operating Procedure of LSMU</u> (No. UT1-36-6, 06-03-2020). These documents provide not only a formal programme of the selection, recruitment, and training and state the specific duties (including continuing education) of the support staff but also the terms of modification and termination of employment contracts, the principles of pay, the general rights and obligations of employees, etc. The required competencies of the support staff are formally set out in the position's job descriptions. The information for support staff job vacancies is announced publicly on the CVonline.lt. The head of the department selects the most suitable candidate after an interview and submits a proposal to the dean. The Rector confirms the candidate based on the dean's approval. The support staff as well as teaching staff is provided regular training organized by the Committee for Biosecurity and Biosafety. The support staff of the VTHs is provided regular training organized by VTHs.

Description of the formal rules governing outside work, including consultation and private practice, by staff working at the Establishment.

According to the <u>LR Labor Code</u> and the LSMU Rules of Operating Procedure, the employees have the right to work outside the University if their total workload does not exceed the maximum 1.5 FTE. Additional jobs must be coordinated and approved by the head of the unit. It may not interfere (including conflicts of interest) in the performance of the duties held at the University. VEE has only several employees who have an additional (outside) employment contract while working at the Establishment.

Standard 9.3: Staff must be given opportunities to develop and extend their teaching and assessment knowledge and must be encouraged to improve their skills. Opportunities for didactic and pedagogic training and specialisation must be available. The Establishment must clearly define any systems of reward for teaching excellence in operation. Academic positions must offer the security and benefits necessary to maintain stability, continuity, and competence of the academic staff. Academic staff must have a balanced workload of teaching, research and service depending on their role. They must have reasonable opportunities and resources for participation in scholarly activities.

Description of the peculiarities of the work contract for academic staff (e.g. permanent versus temporary, balance between teaching, research and services, continuing education, ...).

The lecturers, who won a position by public competition, work under permanent employment contracts for a period of five years. Some lecturers are invited to work under fixed-term employment contracts for a maximum of two years (later, to continue working at the University, a person must participate in the competition). The veterinarians of VTHs work only under permanent employment contracts. The number of academic staff within the structure (both in a permanent and on a fixed-term contract) is well-proportioned and balanced. The head of the Unit is responsible for this distribution based on the job description, and ensures the effectiveness of the study process and study-related activities, follows the Establishment requirements of the Procedure for Organization of Competitions and Attestation of Researchers. The academic staff organizes and conducts the studies, carries out research, is involved in the animal health care activities related to the study process, including creative and other activities intended to improve the Establishment significantly. According to the order of MESS "<u>The Recommendations for the Workload Structure of Higher Education Teachers</u>" and confirmed timetable, and individual workload agreed with the head, the academic staff working week shall not exceed 30 hours. The workload includes 67% of teaching, preparation, and educational development and 33% research activities.

The System of remuneration of LSMU employees manages and the entire salary structure: amounts of salary coefficients (limits), quantities of hourly salary (and limitations), parts of the additional wage to the basic salary (and bonuses), summed salary accounted by total working time, annual paid vacation allowance and the cases when one-time financial and material benefits/awards that may be granted. The remuneration and award procedure of the LSMU lecturers, researchers, administration, and other employees is approved by the LSMU Council Decision No. UT1-26-2, 29-11-2018. The applied remuneration system has been prepared following the provisions of the LR Labor Code and legal acts implementing it, the LR LHER, the LSMU Statute, and other legislation.

Standard 9.4: The Establishment must provide evidence that it utilises a well-defined, comprehensive and publicised programme for the professional growth and development of academic and support staff, including formal appraisal and informal mentoring procedures. Staff must have the opportunity to contribute to the Establishment's direction and decision-making processes. Promotion criteria for academic and support staff must be clear and explicit. Promotions for teaching staff must recognise excellence in, and (if permitted by the national or university law) place equal emphasis on all aspects of teaching (including clinical teaching), research, service and other scholarly activities.

Description of the programmes devoted to academic and support staff for:- their professional growth and development.

The VEE academic staff must improve their qualifications constantly in the subject taught and/or the research carried out. The following forms of training are regarded as an improvement of employee qualifications: participation in internships, conferences, courses, etc., reading a report, delivering lectures in the professional development courses, giving presentations that are related to their subject taught, and/or research field in various seminars, conferences, etc. The regular organization and implementation of professional development of the VEE academic staff are provided by the <u>Regulation on Professional Development of Professional Qualifications</u>. The InoEdu organizes training for both new and experienced lecturers and staff for professional development. The schedule of training programmes is available on the LSMU website VEE covers all costs for training. Training for the department heads and executive team is organized by the The Human Resources Department. The University conducts the annual two-cycle training for the academic and support staff "<u>Edukacijos pavasaris</u>" and "Edukacijos žiema". This training introduces the academic and support staff to a wide range of relevant topics, including constant training courses in computer literacy.

From 2020–2022, the Establishment ensures the competence development for all lecturers and staff by implementing the project "Improvement of the Quality of LSMU Studies and Related Processes by Increasing the Potential of Human Resources" (No. 09.3.1-ESFA-V-738-04-0001). The University has an Open LSMU Foundation, which supports and covers travel expenses for internships and attending conferences where the lecturers/researchers present their theses. The staff can receive funding for the conference in a virtual space during the quarantine, e.g., the funded conference registration fee. The *Erasmus*+ programme allows the academic staff acquiring skills and knowledge (professional, pedagogical, and practical) needed for a current position and professional development at the University. The mobility opportunities for LSMU lecturers are presented on the IRSC webpage. The practitioners of VTHs can also use these mobility opportunities and train at a partner institution or company.

All licensed practitioners of VTHs taking part in the implementation of the VM studies must improve their educational and subject competencies. Based on the <u>SFVS director's order</u>, every veterinarian shall develop professional competencies by doing at least 32 hours of qualification improving training every two years. Some training courses are obligatory for the practitioners. The practitioners of VTHs also raise their professional qualification at foreign universities and clinics under the supervision of the European specialists in VM.

-) the appraisal and promotion procedures.

The University has the formal appraisal and promotion procedures for academic staff described in the <u>Procedure</u>. After three years, if the lecturer, who won the competition, have fulfilled the needed requirements may be re-evaluated and promoted without waiting for the end of their term. Also, the candidates, who won the competition for the professor's or associate professor's position for the second term, can be awarded a respective academic rank. The academic rank award can also be awarded before the end of the first term if the person has fulfilled the qualification requirements beforehand but not earlier than three years after the recruitment to the position. Those, who won the competition for the professor's position twice, at the end of the second five-year term, participate only in the attestation process, excluding the competition. By the resolution of the Senate, a researcher who has worked at and maintaining scientific relations with the University, but temporarily works outside LSMU may be awarded the rank of a research associate. Perspective young lecturers and lecturers with high achievements in science and VEE and LSMU recommendation can be elected as members of the Lithuanian Academy of Sciences (VEE has two young members and six full members in this Academy). Based on merits to LR and the University, the Senate can award the rank of a Professor Emeritus to professors aged over 65 who have been holding the position of professor for more than 15 years and who have engaged in the educational and research activities for no less than 20 years.

-) the mentoring and supporting procedures.

Academic and support staff is motivated by the possibility of being recognized and awarded honorary ranks, public nominations, and appreciation letters received during the VEE festive events. The distinguished celebrants receive nominations from social partner organizations during the jubilees - the LR MA, SFVS, LR MESS etc. The VEE students propose the nominees for the Best Lecturer and Administrator nominations. There are computer literacy training and the election of the Smartest Scholar. Academic and support staff can be paid a salary supplement to the basic salary (for the employee's performance in current position, performance excellence, leadership development, successful completion of urgent tasks). It is a one-time or periodic part of the salary awarded by order of the Rector. The best researchers are awarded a bonus from the LSMU Science Foundation annually. Academic staff who fulfill the administrative or management functions can have a smaller academic workload and be awarded a premium for implementing essential and complex work. Based on the Resolution of the Council, the 13th salary can be granted and paid to all staff members at the end of year. The University pays close attention to the well-being of employees and their families. LSMU hosts a secondary school (gymnasium), and its branches are elementary school and kindergarten. The University has developed sports, health, and psychological assistance system for students and employees and provides free preventive health examinations for employees. Employees facing difficulties of any nature can seek assistance from the unit head, the Human Resources Department, and the University Employees' Council. In the case of a family disaster, the academic and support staff can receive financial support from the University.

-) their implication in the decision-making processes.

Lecturers and researchers participate in decision-making by voting to elect the Unit head, VEE Council, LSMU Senate and Council. The employees elected as representatives of the Unit participate in decisionmaking activities of these collegial bodies. Thus, lecturers actively participate in various permanent and temporary commissions, committees, or working groups. They can also voluntarily be elected to the LSMU Labor Council, perform the functions of a subject coordinating lecturer, and make decisions on improving subject content or assessment methods.

Standard 9.5: A system for assessment of teaching staff must be in operation and must include student participation. Results must be available to those undertaking external reviews and commented upon in reports.

Students are the members of collegial bodies and commissions at all university levels (**Table 1.2.1**). This way, they participate in the attestation and election of academic staff, have the opportunity to ask questions, make comments during the decision-making process, and vote. LSMUSIS operates a formal e-feedback system "Qualitative Thermometer" to analyze and assess study subjects and the lecturers evaluated anonymously by students. Each lecturer can see relevant feedback. Within two weeks after receiving feedback results, the interested parties provide SPC with information on what actions have been already taken and how the comments are planned to be considered. SPC, the Unit heads, and the Dean of VEE can

view all the evaluation results. In 2020, 22.16% of students voluntarily participated in the lecturer evaluation. At the university level, a 360° assessment tool is used to assess employees.

Description of how (procedures) and by who (description of the committee structure) the strategy for allocating, recruiting, promoting, supporting and assessing academic and support staff is decided, communicated to staff, students and stakeholders, implemented, assessed and revised.

The need for academic and support staff is planned in the VEE Units each year and agreed upon with the Dean. The unit head coordinates this process depending on the SPC recommendations, student number, and under the approved PB by Economics and Planning department. The HRD publicly announces the job position vacancies, executes the recruitment process, organizes 360° feedback. The University Regulations set out the qualification requirements, functions, duties, and responsibilities applicable to academic and support staff. At the end of the five-year term the academic staff fills a spreadsheet indicating their activities. The assessment of academic staff's conformity with the qualification requirements within the term is performed by the Committees (Table 1.2.1) and approved by the Senate on the recommendation of the Rector. The new cycle starts. The support staff employees work under a permanent employment agreement. An open-ended contract may be terminated at the person's request, by agreement of the parties, or by waiving all resulting guarantees for the employee. InoEdu constantly monitors the needs of training of teaching and support staff. The VEE Units train the support staff, and the Committee for Biosecurity and Biosafety is responsible for training both academic and support staff. The HRD organizes the 360° feedback, evaluates employees' satisfaction with working conditions and environment, submits the results of the surveys to CMSQA, which gives suggestions to the responsible units. The Units are accountable for supporting and promoting their academic and support staff, excluding the executives. The academic staff achievements in research activities and the support staff's performance are regularly monitored and presented in the Units' and Dean's annual reports.



Fig. 9. PDCA Cycle Strategy for recruiting, allocating, assessing, promoting and supporting academic, and support staff.

Comments on Area 9

The total number of all recruited teaching staff and their qualifications and competencies necessary to effectively conduct the VM study programme and fulfill the mission of VEE is sufficient and appropriate.

Competitions and assessments of academic staff are implemented following the principles of expedience, publicity, transparency, impartiality, non-discrimination, objectivity, equality, competence attraction, quality, respect for human dignity, and life-long learning. Lecturers participate in the decision-making process by being elected members of collegial bodies, permanent and temporary commissions, working groups, electing representatives to the University's governing bodies and heads of departments, and coordinating the implementation of the curriculum subjects. The VEE employees participate in various working groups of SFVS, LR MA, LVGA, and different animal breeders' associations that present the VEE activities and opportunities. There are formal procedures for the improvement and evaluation of the academic and support

staff. LSMU uses the Employee Experience Platform and a 360° Survey to get feedback from employees and evaluate work efficiency. Students also have the opportunity to evaluate the lecturers. The university strongly focuses on the well-being of the entire staff and their families. Ensuring the appropriate quality of teaching, research, and veterinary practice enhances the integration of studies, research, practical activities. However, despite this fact, the VEE plans to recruit more lecturers holding a EC veterinary specialisations in addition to the two veterinarians currently studying at the European Colleges of Veterinary Neurology (ECVN) and Small Animal Surgery (ECVS) who will re-join the VTH team in 2024.

Suggestions for improvement in Area 9

- 1. To increase the number of the specialized at the European Veterinary Colleges veterinarians in the VEE VTHs.
- 2. It is planned to renew the procedure of salary, qualification, and certification requirements and the employee motivation system to retain the currently working and attract new employees of the highest competence.

AREA 10. RESEARCH PROGRAMMES, CONTINUING AND POSTGRADUATE EDUCATION

Standard 10.1: The Establishment must demonstrate significant and broad research activities of staff that integrate with and strengthen the veterinary degree programme through research-based teaching.

Description of how the research activities of the Establishment and the implication of most academic staff in it contribute to research-based veterinary education

The academic staff of VEE is encouraged to take on high-quality research. Lecturers are committed to integrating research knowledge into the lectures to ensure the integration of the research-based teaching principle into the VM study programme.

The research of the VEE academic staff is focused on the LSMU Senate-approved research priorities, which align with the core demands of veterinary education (**Fig. 10**). According to the national law of classification of research fields and branches, the Veterinary research



Fig. 10. Strategic research priorities of Agricultural Sciences at LSMU (2017–2021) (No 96-08; 2017-12-22)

field is assigned to Agricultural Sciences. The approved research priorities combine vertical and horizontal integration of both Veterinary Medicine, Medicine (human) and Animal Sciences faculties and Animal Science Institute within *One Health* approach. Three approved vertical research priorities are equally important and represent VEE and its specificity in the Veterinary research field. The VEE academic staff annually publish 80-100 research publications on carried out research projects relevant to VM (**Table 10.1.1**). Their results are incorporated into the Curriculum and positively impact the teaching of students. Every five years, a comparative expert Scientific Research and Experimental Development (MTEP) evaluation takes place in Lithuania. International experts carry out the evaluation at the request of STRATA. Evaluation is based on three critical criteria: the quality of the Research and Development (R&D), the economic and social impact of R&D activities, and the potential of R&D activities. The Comparative expert evaluation of R&D organized by STRATA was performed by the international experts in 2018 and revealed the research potential of VEE. The evaluation outcomes in values were as follows: quality of R&D activities – 3 (good); vet development potential – 5 (excellent).

Table 10.1.1. List of the major funded research programmes in the Establishment which were ongoing during the last full academic year prior the Visitation

Scientific topics	Grant/year (K, EUR)	Duration (years)
EU H2020 project "Understanding microbiomes of the ruminant halobiont"	75,000	2021-2026
International project "The edible coating formulated with liquid acid whey protein and bioactive compounds, and bio packaging for safety and quality of probiotic cheese (Bio coat)" funded through the EEA grants. No. S-BMT-21-10 (LT08-2-LMT-K-01-046).	324,510.00	2021–2023
ICRAD project "Development and evaluation of a rapid diagnostic test for caprine viral arthritis- encephalitis (OAE)"	50,000	2021–2024
International project EISuFood – "Study about food habits and knowledge about edible insects as sustainable foods", No. BI06997183	—	2021–2022
"Prototype of (bio) technology for more sustainable feed materials with higher added value antimicrobial properties" EUREKA Network Project E!13309 "SUSFEETECH" (Nr. 01.2.2-MITA-K-702-05-0001)	100,000	2020–2023
Research project "Climate Care Cattle Farming Systems" CCC farming	30,000	2019-2022
Research project "INOCHEESE" funded by the European Regional Development Fund according to the supported activity 'Research Projects Implemented by World-class Researcher Groups' under Measure No. 01.2.2-LMT-K-718	111,179.00	2018–2021
Improvement of Dairy Heard Health through application of bio/fito substances for reduced use of antibiotics and better control of antimicrobial resistance; Project No 35BV-KK-17-1-03773	67,000	2018–2021
Research project "EUNUTRITECH" funded by the European Regional Development Fund according to the supported activity 'Research Projects Implemented by World-class Researcher Groups' under Measure No. 01.2.2-LMT-K-718.	180,000	2017–2021
Research project "Biodiversity within and between European Red Dairy Breeds" ReDiverse.	30,000	2017-2021

Standard 10.2: All students must be trained in scientific method and research techniques relevant to evidence-based veterinary medicine and must have opportunities to participate in research programmes.

Description of how (undergraduate) students: -) are made aware of the importance of evidence-based medicine, scientific research and live long learning; -) are initiated to bibliographic search, scientific methods and research techniques, and writing of scientific papers.

From the first year of studies, students experience research-based teaching and learning, evidence-based research, and practice from the first semester right to the preparation of their master's theses. In 2017, LSMU established the Evidence-Based Medicine Center (EBMC) and had organized theoretical and practical teaching. A representative of the academic staff of VEE represents the Establishment in the Center Council. The EBMC lectures were included in the curriculum of the first and third-year VM students. The compulsory study course as Introduction to Veterinary Studies and Data Management is offered for the 1st-year students, Biomathematics and Statistics – for the 2nd and 3rd-year students, and the optional subject Methodology of Research – for the 4th-year students (however compulsory for students of the 2020-year admission) are aimed to develop students research competencies and skills as an integral part of research-based veterinary education. Students gradually are educated on how to search and analyze published research papers and other information sources, evaluate research methodologies, and generated data. Particular focus is given for good research practice, evidence-based VM, and decision-making with lifelong learning. Students prepare independent case reports and self-reflection as part of their clinical rotations in Small and Large animal VTHs. Writing a master thesis supervised by the experienced academic staff of VEE enables students to develop their research methodology skills and get acquainted with the latest research results. The coherent curriculum enables students to understand challenging evidence-based medicine, research methodology, particular techniques, and the need for lifelong learning with self-assessment.

Description of how undergraduate students are offered to participate to research programmes on a non-compulsory or compulsory basis.

A master thesis research project has been a compulsory part of the VM curriculum since 2007. Students begin preparation of their master's theses in the 10^{th} semester. However, this preparation starts earlier with assisting researchers and teachers in research projects, students volunteering in VTH, performing additional internships, and participating in *Erasmus* international programmes. The VEE students are encouraged to participate in research through engagement in the optional activities of Students' Scientific Society (SSS) at

LSMU. At present, SSS includes 49 groups of different areas of science. The group of Veterinary Medicine had 77 students in 2018, but the group became smaller, engaging 52 active students due to COVID-19 issues caused restricted and declined contact activities. Research leaders of academic staff present their success stories and examples to motivate students and encourage them to join research teams. Up-to-date research is presented and discussed in the form of a journal club. In addition, there are remote meetings with VEE alumni researchers working abroad. Students carry out research, present their studies results, prepare publications, present data at student conferences. During the pandemic, contact international activities have declined significantly while other activities were transferred to virtual space. Students receive extra points added to the competitive score entering the Ph.D. studies and VM residency for publishing research papers and active participation in the SSS activities, respectively. The newly prepared strategic plan of LSMU envisages the creation of a fund to support the research of students of all levels (currently, the preparation of master theses is supported).

Description of the minimum requirements for the graduation thesis (Master dissertation), its supervision and its assessment.

For the master's thesis, 21 ECTS are allocated in the VM curriculum. One and a half ECTS are given for topics about the structure of research work, rules of thesis preparation, analysis and use of scientific information, directions on how to make a research presentation, and scientific writing, etc. The procedures and supervision course of preparation and assessment of the master thesis are described in the Procedure of Preparation, Defense, and Evaluation of the Master Thesis (Procedure) (Annex 38). Supervisor of master thesis must be adequately qualified lecturer in the study field, either have a Ph.D. or its equivalent qualification, either be a veterinarian at VEE VTHs with at least three years of work experience at the Establishment. Student signs a written individual work plan on the research topic, with included underlying objective and tasks, and provisional outline of the thesis. The work plan must be approved by the supervisor and appropriate Unit of VEE. Research carried out by the student must be independent work proving the ability to apply knowledge to research and revealing the abilities to meet and achieve the outcomes of the VM programme. Through this individual research work, the students confirm their abilities to analyze the chosen research topic, assess the research data, apply a research methodology, interpret the research results, formulate research conclusions, and provide practical recommendations on the obtained research results. Students can access the facilities and the equipment of VEE units, necessary for preparing the master theses. VEE allocates funding and supports the preparation of the final thesis. Master thesis is uploaded in CRIS and checked for plagiarism. The master thesis is reviewed and defended publicly in front of the commission of 7 members: researchers, lecturers. The chair of the commission is a veterinarian from outside of the University, holding a Ph.D. in the field of veterinary sciences. The reviewer and commission evaluate the thesis according to the criteria specified in the Procedure. The defended master thesis proves that student has gained scientific knowledge, specific and soft skills, and competencies to carry out research individually. The student, who has failed to defend the master thesis, is removing from the list of students. Student can defend the thesis repeatedly no sooner than three months after the expulsion (LSMU SR, Clause 190). Appeals procedures for assessment of student achievement is described in *Standard* 8.2.

Standard 10.3: The Establishment must provide advanced postgraduate degree programmes, e.g., PhD, internships, residencies and continuing education programmes that complement and strengthen the veterinary degree programme and are relevant to the needs of the profession and society.

Training	2020-2021	2019–2020	2018–2019	Mean
Others (non-EBVS programmes):				
VM Residency programmes (national)				
Small Animal Surgery	4	4	2	3
Small Animal Therapy	3	3	2	3
Cattle Diseases Diagnosis and Treatment	3	4	2	3
Equine Veterinary Medicine	3	2	1	2
Veterinary Obstetrics and Gynecology	3	3	3	3
Veterinary Diagnostic Imaging	2	2	1	2
Veterinary Virology	1	1	-	1
Veterinary Pathology	1	1	1	1
Veterinary Parasitology	1	-	1	1

Table 10.3.1. Number of students registered at postgraduate clinical training

Veterinary Microbiology	1 1		-	1
Veterinary Clinical Hematology and Toxicology	1 1		1	1
Veterinary Epidemiology	4 3		1	3
Veterinary Sanitary of Animal Products	1 1		-	1
Veterinary Non infectious Diseases Therapy	expire		5	5
Veterinary Surgery	expire		5	5
Total	28	26	25	26

Table 10.3.2. Number of students registered at postgraduate research training

Degrees	2020-2021	2019–2020	2018–2019	Mean
Ph.D. students	28	27	27	27

*Postdocs are not considered, as they are not classified as students.

Table 10.3.3. Not applicable.

Table 10.3.4. Number of attendees to continuing education courses provided by the Establishment

Courses	2020-2021	2019–2020	2018–2019	Mean
	Number of attendees			
Keeping, care and usage requirements for animals used for scientific and educational purposes. KMU777	21	20	21	21
Rational use of antibiotics in veterinary medicine	-	-	186	186
Alterantive methods combating antibiotic resistance. LVGA Nr. 283. KMU872.	105	120	-	113
Radiation protection periodic training programme for radiation safety officers in veterinary. KMU861	6	3	6	5
Radiation protection initial training programme for radiation safety officers in veterinary. KMU829	8	4	-	6
Radiation protection periodic training programme for veterinarians working with ionizing radiation sources KMU784	3	3	-	3
Radiation protection initial training programme for veterinarians willing to work with ionizing radiation sources. KMU783	8	6	22	12
Qualification course for obtaining a personal veterinary pharmacy license. KMU830	4	-	4	4
Biosafety and biosecurity during studies and clinical activities. No 21/09/3623	150	95	-	123

Table 10.3.5. Prospected number of students registered at post-graduate programmes for the next 3 academic years

Students	2022	2023	2024
Ph.D. student	4	4	4
Veterinary Medicine Residency (VMR)	14	18	18

The numbers of postgraduate students will remain very similar within the 2018-2021 period, as no significant changes are predicted.

Description of how the postgraduate clinical trainings of the Establishment contribute to undergraduate veterinary education and how potential conflicts in relation to case management between post- and undergraduate students are avoided

VEE conducts the integrated VM studies, so the issue of conflict between different stages is irrelevant. The VTHs have a sufficient number of patients, which is growing every year. In this way, VEE ensures the required number and distribution of animal patient cases among the VM and postgraduate VM Residency students. The number of resident students is relatively small, so the planning and distribution of various and different complexity cases are not complicated. In particularly rare and exceptional cases resident student could be also involved for teaching together with VM students to ensure their experience with such rare clinical example. Since the VM residens students hold a valid veterinary license, they can be invited work part-time as assistants in VTH and assist the lecturers to teaching, when needed. Residency studies and veterinary assistant work do not interfere as both processes follow the well-planned schedules.

Description of how the continuing education programmes provided by the Establishment are matched to the needs of the profession and the community

The LSMU Regulation of Continuing Education defines continuing education process at VEE. VEE Units implement continuing studies by organizing courses, seminars, and scientific-practical conferences. Close cooperation of VEE with LVGA, MoA and SFVS enables to offer relevant continuing education courses. As example, 3 mandatory continuing education courses for veterinarians in practice have been approved at the request of SFVS: 1) Use of Antimicrobials in Modern Veterinary Medicine; 2) Ensuring Pet Welfare during Veterinary Care, and 3) Animal Welfare during Veterinary Care of Ruminants and Horses. And one continuing education course 4) Cats, Dogs and Ferrets Microchipping and Registration programme has been developed under request of the MoA. In total the VEE offers 13 continuing education programmes including those mentioned in Table 10.3.4. The VEE implemented continuing professional education programmes are registered in the LSMU IT system *Medas*. After the programme has been completed, an anonymous survey of programme attendees is performed. The course managing unit and Center of Postgraduate Studies analyze the survey results. Based on the analysis results and considering the recommendations, programme organization and quality, they improve or renew the programme's content. Moreover, the training in biosafety and biosecurity during the studies and clinical activities intended for the VEE staff and lecturers has been updated. In addition to the listed continuing education programmes, VEE holds scientific-practical conferences for veterinary specialists and other interested persons. The Large Animal VTH organizes different one-time practical seminars. The VEE academic staff takes an active part in the projects and educational activities designed to disseminate scientific knowledge and innovations implemented by the LSMU Center for Continuous Education and Consulting in Veterinary Science. The information about the ongoing projects is posted on the LSMU website and released in press. Contracting authorities prepare the reports on project implementation and provide recommendations. The Center arranges training courses and invite the VEE academic staff to deliver lectures on respective topics for veterinarians, farmers, cattle inseminators, animal transporters, slaughterhouses, and milk processing enterprises employees. In total, within 2018–2021 period, VEE academic staff has given lectures for nearly 3000 participants (the list of continuing education programmes lectured by the VEE academic staff is available as Annex 39. Continuing education opportunities are also available for VEE employees. There is an opportunity to improve professional skills applying for mobility fund. The Council of the LSMU made the decision for allocating support for the competencies of the veterinarians of the VTH. The actual expenses on the basis of the Council's decisions for qualifications and trips was 137,230 EUR (2018–2021).

Standard 10.4: The Establishment must have a system of QA to evaluate how research activities provide opportunities for student training and staff promotion, and how research approaches, methods and results are integrated into the veterinary teaching programmes.

Description of the mechanism used by the Establishment to ensure that its research activities contribute to research-based education.

Research-based education with close integration of research and study process is one of the priorities of VEE. The mechanism used to ensure that the research activities contribute to research-based education consist of 1) implementation of research priority areas described in *Standard 10.1*; 2) compulsory and elective study courses related to research and veterinary curriculum described in *Standard 10.2*; 3) motivation of academic staff to integrate research experience into the subject taught content in the form lectures, seminars, and practical courses; 4) through the selection and recruitment of academic staff (lecturers and researchers) based on open competition and the research evaluation indicators, namely the number of publications in the journals of the CA WoS database, participation in research projects, received grants, etc. The academic staff apply their research experience to different veterinary fields with a focus on research and evidence-based teaching approaches.

Description of how (procedures) and by who (description of the committee structure) research, continuing and postgraduate education programmes organised by the Establishment are decided, communicated to staff, students and stakeholders, implemented, assessed and revised

Research strategies as the part of LSMU Guidelines for the Strategic Development (2017–2021) are developed and approved in close collaboration among the University Council, Senate, VA Chansellor, Vice-Rector for Research, Research Center, VEE Council, VEE Dean, units, and senior research staff. The VEE

Council is the main body taking decisions regarding approval of VEE research topics, including new projects for the doctoral studies, respective reviews, and a confirmation of continuing and postgraduate education programmes. Each VEE unit is responsible for the realization of the intended research aims following the Guidelines for the Strategic Development. Every year, the VEE units report to the VEE Council on the ongoing operation and current situation, progress, and emerged new needs.

Permission to launch and operate the **Doctoral study programme in Veterinary Sciences** was approved by LR MESS (2011-06-11). LR MESS also sets the number of positions for doctoral studies. Active researchers also have the opportunity to apply for the EU-funded Ph.D. positions (grants) offered by LT Research Council. The Doctoral Committee of Veterinary Sciences, chaired by the VA Chancellor (**Table 1.2.1**), supported by the LSMU Research Center, provides administrative support to Ph.D. students and supervisors. The Curriculum of the doctoral programme studies is regularly revised. Information on the doctoral study programme is communicated to the internal and external stakeholders and published on the LSMU website. Ph.D. students are admitted by open competition, described in the LSMU Admission Rules applied to each year's newly ongoing admission. The VEE core aspect is to implement the Ph.D. programme in the Veterinary Research field. The implementation process is organized following the <u>Regulation on</u> <u>Doctoral Degree</u> and <u>Regulation of LSMU on Doctoral Degree in Agricultural Research Area</u>. The progress of the Ph.D. students is annually evaluated within the Doctoral Committee of Veterinary Sciences based on the report submitted by the doctoral students.

LSMU VEE was given the right to implement the **VMR studies.** The VMR are of applied nature, oriented toward practical activities and development of the specific practical skills for work and award a professional qualification in the veterinary specialization. The training and certification of the VMR programme are subject to national law. The development of new residency programmes and annual planning of residency places take place after evaluating the country's demand for such specialists, the opportunities for future employment, the demands of SFVS, MoA, and other enterprises and associations.

The Residency Committee (Table 1.2.1) organizes the admission and (re)solves all issues framed in the Regulations of VMR studies. The Residency Committee is supported by the LSMU Center of Pastgraduate studies which responsible for the organization of postgraduate and continuing studies at the University. For coordinating the VMR, a Coordinator (a veterinarian at VEE) is appointed. Information on the VMR study programme is communicated to the internal and external stakeholders and published on the LSMU website. The demand of places of VMR is decided after negotiation between VEE and SFVS and final decision is taken by LR MA according the recommendations of SFVS. VMR students are admitted by open competition, described in the LSMU Admission Rules applied to each year's newly ongoing admission. To be admitted to the VMR programme, candidates must hold a master's degree, a qualification of a veterinary doctor, and a valid license of a veterinary practitioner. The VMR are conducted following the Procedure of VMR implementation requirements and supervision framed by a decision of the LR Government and under the Regulation of LSMU Residency Studies prepared complying LR LHER and approved by the LSMU Senate. The VMR programmes were designed using a bottom-up approach: discussions at the VEE Council, approval up to the LSMU Senate and submitted for accreditation to SKVC with final registration in AIKOS. The VMR programmes are monitored, annually revised and updated by the Residency Commission (Table 1.2.1). The relevant decisions are announced and posted on the LSMU website. The update frequency, if needed, is set by the Residency Committee, considering the evaluation results and the recommendations of internal and external stakeholders.

Fig. 11 provides the description of the procedures and the main drivers responsible for the organization of research, continuing and postgraduate education programmes and communication.

The implementation of the Guidelines for the Strategic Development of LSMU within period of 2017–2021 shape and define the strategy of research activities at national and international levels. As indicated in the **Fig.11**, there are appointed bodies (Senate, Center for Research, Commissions and Committees, etc) including positions (Chancellor, Dean, etc.) responsible for the planning and development of strategy for research, postgraduate, and continuing education programmes. Implementation of the strategy and planned indicators and activities is carried out by appointed and liable persons and units of LSMU (vice-rector for research, deans, etc.) up to the department level including research groups led by senior scientific staff. The progress is checked not only internally by LSMU Center of Research and Centre of Postgraduate Studies, but also externally by the dedicated institutions like STRATA, LMT, etc. Based on the internal and external evaluation results necessary adjustments are developed and offered for the implementation. This step ends

the quality control cycle and initiate a new one starting from the further planning as described above. It should be stressed, that all activities related to implementation, assessment and revision are interlinking and involve well defined interaction among all actors indicated in the **Fig. 11**.



Fig. 11. Procedures and the main drivers responsible for the organization of research, continuing and postgraduate education programmes and communication

Comments on Area 10

Research, postgraduate, and continuing education programmes closely integrate the research and study process, strengthen the VM curriculum, and are relevant to the profession's needs.

Suggestions for improvement in Area 10

- 1. To increase the number of international activities and projects.
- 2. To encourage leadership in international projects leading to higher quality research and international recognition.
- 3. To increase the number of research staff working as full-time employees

ESEVT INDICATORS

Comments on Indicators

Please, see Excel file in the Annex 40.

Suggestions for improvement on Indicators

Not applicable.

ADDENDUM TO SELF-EVALUATION REPORT, 2021

Actions taken by the LSMU Faculty of Veterinary Medicine (VEE) to mitigate and/or compensate for interruptions caused by the COVID-19 pandemic crisis are presented in *Annex 41*.

ABBREVIATIONS

AIKOS	Open Vocational Information, Counselling, and Guidance System
BIC	Library and Information Center
BOVA	Baltic Network of Agricultural, Forestry,
	and Veterinary Universities
BPIS	General Admission Information System
CMSQA	Commission for Monitoring and Study
	Quality Assurance
CRIS	Research Information System
DOC(s)	Day One Competence(-ies)
DOPS	Directly Observed Procedural Skills
DSFV	Descriptor of the Study Field of Veterinary
EAEVE	European Association of Establishments for Veterinary Education
ECCVT	European Coordinating Committee for Veterinary Training
ECOVE	European Committee of Veterinary Education
EFTA	European Free Trade Association
EN	English
EPT	External Practical Training
ESEVT	European System of Evaluation of Veterinary Training
ESG	Standards and Guidelines for Quality Assurance in the EU Higher Education Area
FTE	Full-time Equivalent
EU	European
GRPS	General Requirements for the Provision of Studies
HEI(s)	Higher Education Institution(s)
HRD	Human Resources Department
IT	Information Technology
InoEdu	Innovative Education Department
IRSC	International Relations and Study Center
IVSA	International Veterinary Students Association
LAMA BPO	Association of Lithuanian Higher Education Institutions for General Admissions
LMT	Research Council of Lithuania
LR	Republic of Lithuania
LR LHER	Law on Higher Education and Research of Republic of Lithuania
LR MESS	Ministry of Education, Science and Sport of Republic of Lithuania

LR MA	Ministry of Agriculture of Republic of Lithuania
LSMU	Lithuanian University of Health Sciences
LSMU SR	LSMU Study Regulation
LSMUSIS	LSMU Study Information System
LT	Lithuania, Lithuanian
LVGA	Lithuanian Association of Veterinary Surgeons
NFVRAI	National Food and Veterinary Risk Assessment Institute
MRI	Magnetic resonance imaging
OSCE	Objective Structured Clinical Examination
PACS	Picture Archiving and Communication System
PDVS	Electronic Process and Document Management System
PGSC	Center of Postgraduate Studies
PMBC	LSMU Center of Practice and Experimentation
QA	Quality Assurance
SC	Study Center
SFVS	State Food and Veterinary Service of Lithuania
SHSD	LSMU Staff Health and Safety Department
SKVC	Center for Quality Assessment in Higher Education
SOP(s)	Standard Operating Procedure(s)
SPC	Study Programme Committee
SSF	State Studies Foundation
SSS	Students' Scientific Society
STRATA	Government Strategic Analysis Center
SU	Student Union
SWOT	Strengths, Weaknesses, Opportunities, Threats
VA	Veterinary Academy
VASA	Student Association of Veterinary Academy
VEE	Veterinary Education Establishment (Faculty of Veterinary Medicine)
VM	Veterinary Medicine
VMSC	Veterinary Medicine Simulation Center
VPN	Virtual Private Network
VTHs	Veterinary Teaching Hospital(s)

ANNEXES

Annex 1_Strategic development guidelines of the VEE (Faculty of Veterinary Medicine) and their implementation plan.

Annex 2_Career monitoring and employment data of graduates.

Annex 3_The organizational chart of LSMU.

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Annex 5_The list of the VEE units, their composition, the study subjects taught, and their management.

Annex 6_The list of the units of the other Faculties of LSMU and their study subjects taught for VM.

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Annex 8_The examples of the description of the indicators for strategic objective.

Annex 9_LSMU Study QA Manual.

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Annex 13_Study grid LT, EN_since 2020.

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Annex 15_Clinical Rotation Procedure.

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Annex 37A_List of scientific publications of VM lecturers from other departments who teach VM.

Annex 38_Procedure of Preparation, Defense, and Evaluation of the Master Thesis.

Annex 39_List of continuing education programmes lectured by the VEE academic staff.

Annex 40_ESEVT Indicators 2021, Kaunas.

Annex 41_Addendum to EAEVE Self-Evaluation Report 2021, Kaunas.