"Approved"
LEPL - Shota Meskhia State Teaching
University of Zugdidi
Academic Council
Resolution № 68, 22.12.2021

LEPL - Shota Meskhia State Teaching University of Zugdidi

Program Name	**Integrated Master's Educational Program in Veterinary Medicine**
Language of instruction	**Georgian**
Academic Degree to be Awarded	**Master of Veterinary Code:0841**
Program Volume in Credits	The Integrated Master's Educational Program in Veterinary has been developed considering: the Law of Georgia "On Higher Education," main challenges and development trends in the veterinary field, qualifications to be awarded in this field, and best international practices. Specifically, it takes into account the requirements of the "Field Characteristics of Integrated Master's Educational Program in Veterinary Medicine" (Director's Order №MES 8 25 0000224657, 04/03/2025) developed by LEPL - National Center for Educational Quality Enhancement, university mission, methodology for planning, developing and improving educational programs, documents regulating the educational process, best practices of foreign and domestic educational institutions, particularly the teaching and learning systems in veterinary direction of University of Ghent (Belgium), Estonian University of Life Sciences (Tartu), Latvia University of Life Sciences and Technologies (Jelgava), University of Georgia College of Veterinary Medicine, LEPL - Samtskhe-Javakheti State University, European University LLC, Georgian Technical University, NNLE - Agricultural University of Georgia and others that implement veterinary education, as well as field specifics and requirements of labor market and potential employers. The Integrated Master's Educational Program in Veterinary consists of mandatory courses in the main field of study, elective courses in the main field of study, mandatory and elective courses of the free component, and a research component. **The program includes 308 credits and is presented with the following volume and structure:** **Free component and basic education courses - 77 credits, or 25% of total credits, including:**

	➢ Free compulsory courses - 40 Credit; ➢ Free elective courses - 7 Credit; ➢ Basic education - 30 Credit; **Veterinary - Mandatory/elective courses in the main field of study and research component - 231 credits, or 75% of total credits, including:** ➢ Preclinical Sciences - 45 Credit; ➢ Clinical Sciences - 98 Credit; ➢ Animal Breeding - 19 Credit; ➢ Animal Food Hygiene and Control - 15 Credit; ➢ Specialty Elective Courses - 14 Credit, including: • From Veterinary Direction - 8 Credit; • From Animal Husbandry Direction - 6 Credit; ➢ Specialty (Field) Practice - 20 Credit; ➢ **Master's Thesis -** **20** credit The volume of research components and study courses included in the program is presented according to the European Credit Transfer and Accumulation System (ECTS), and one credit equals 25 astronomical hours. Based on the student's individual workload, the number of credits during the academic year can be less or more than 60 credits, but not more than 75 credits. The courses in the curriculum are arranged according to the prerequisite principle. The standard duration of the educational program is five years, or 10 semesters.
Program Director	Head - Doctor of Veterinary Sciences, Professor **Levan Makaradze;** Co-head - Doctor of Veterinary Medicine, Professor **Nino Milashvili** (For complete information about the program head/co-head, see attached CVs)

Program Qualification Description

Program Objectives	**The goal of the Integrated Master's Educational Program in Veterinary Medicine is:** 1. To prepare a Master of Veterinary Medicine who has modern transferable skills and competencies in accordance with labor market requirements, who will be competitive and who, within the framework of professional ethics, will be oriented towards both theoretical and practical activities, will conduct multifaceted complex activities in the field of veterinary medicine, including participation in the development of legislative and regulatory documentation in the veterinary field. 2. Diagnosis, laboratory and differential diagnostic examinations, treatment, preventive (prophylactic) measures, and determination of expected outcomes for infectious, invasive, non-communicable diseases affecting animal (including domestic

	animal) and bird health and welfare; surgical and gynecological interventions, assessment of patient's clinical status and determination of expected outcomes; 3. Protection of the population from common (zoonotic) diseases of animals and humans and adherence to the principles of the "One Health" concept; ensuring the country's veterinary welfare; 4. Pre-slaughter and post-slaughter veterinary inspection of slaughter animals, inspection and control of food of animal origin for the production of safe animal products; 5. Determination of healthy tissue appearance, organ topography and physiological parameters; performing autopsy and veterinary forensic examination at a qualified level; 6. Preparation of medicinal forms. Organizing experimental, preclinical and clinical trials of new drugs, proper selection of therapeutic and preventive action drugs and prescription writing; 7. Using farming, animal care and production systems that ensure the raising of healthy livestock and poultry, their welfare and protection; Overall, the purpose of the Integrated Master's Educational Program in Veterinary Medicine is to fully express what knowledge, skills and competencies the graduate is aimed to acquire through the program and what contribution they can make to the development of veterinary field, as well as how it ensures the full realization of student's personal potential.
Program Prerequisites	**A student of the Integrated Master's Educational Program in Veterinary can be a person with complete general education or equivalent education and corresponding state-certified documentation, who has passed the Unified National Examinations. Foreign citizens are also admitted to the program in accordance with the current Law of Georgia "On Higher Education."** To enroll in the program, the applicant is required to take the following subjects on the Unified National Examinations: • Georgian Language and Literature • Foreign language (English language, French language, German language, Russian language); • Mathematics and/or History, Biology, Chemistry. (The applicant must exceed the minimum competency threshold established by law). After passing the Unified National Examinations, the student must take a foreign language diagnostic test at the university to determine their level of English proficiency (foreign language compulsory and/or elective subjects will be offered to students according to their knowledge level). Complete administrative registration at the university.
Program Learning Outcomes	The learning outcomes of the Integrated Master's Educational Program in Veterinary Medicine derive from the program objectives and describe the knowledge, skills, responsibility, and autonomy that students will acquire upon completion of the program. The learning outcomes provide opportunities for continuing studies in doctoral programs or engaging in practical activities through continuous knowledge updates. In formulating the learning outcomes, consideration was also given to the requirements of the Field Descriptor for Higher Education in Veterinary Integrated Master's Educational Program developed by the National Center for Educational Quality Enhancement

	(Director's Order №MES 8 25 0000224657, 04/03/2025), the university's mission, methodology for planning, developing and improving educational programs, regulatory documents for the educational process, best practices of foreign and domestic educational institutions, specifically the teaching and learning systems in veterinary fields at the University of Ghent (Belgium), Estonian University of Life Sciences (Tartu), Latvia University of Life Sciences and Technologies (Jelgava), University of Georgia College of Veterinary Medicine, LEPL - Samtskhe-Javakheti State University, LLC European University, Georgian Technical University, NNLE - Agricultural University of Georgia and others that implement veterinary education, as well as industry specifics and labor market and potential employer requirements. Academic/invited faculty, administrative staff, potential employers, and graduates of similar programs were involved in the process of developing the learning outcomes. **Knowledge and Understanding** **1.** Determines the biological characteristics of animals, typical pathological processes and their manifestations in various organs and tissues using transferable skills, identifies norm and pathology; **2.** Recognizes: the importance of diagnostics, treatment and preventive measures for animal diseases; the necessity of veterinary control of food of animal origin and pre- and post-slaughter veterinary inspection, identification and assessment of hazards and risks and their prevention. **Skill** **3.** Based on laboratory and differential diagnostic examinations, diagnoses and treats animal (including pet) and poultry diseases, plans preventive (prophylactic) measures, and evaluates expected outcomes. Performs surgical and gynecological interventions and determines the patient's clinical status. Conducts veterinary forensic examinations. **4.** Protects the population from animal and human common (zoonotic) diseases and ensures the country's veterinary welfare in accordance with the principles of the "One Health" concept. **5.** Prepares and/or receives pharmaceutical forms. Organizes experimental, preclinical and clinical trials of new preparations, correctly selects therapeutic and prophylactic medications and writes prescriptions; **6.** For the production of safe animal food products, performs: pre-slaughter and post-slaughter veterinary inspection of slaughter animals, inspection and control of food products of animal origin; **7.** Uses such systems for animal breeding, care and production that ensure the raising of healthy livestock and poultry, their welfare and protection; **Autonomy and Responsibility** **8.** Based on professional knowledge in veterinary field, transferable skills, own research and experience, and adhering to professional ethics, participates in developing legislative and regulatory documentation in veterinary direction. Contributes to the development of veterinary practice, takes responsibility for others' activities and professional development; independently plans and conducts own studies at the third level of higher education - in doctoral studies and/or through continuous knowledge update in practical activities.
Teaching and learning methods	**The transfer of knowledge to students by persons implementing the educational component under the Integrated Master's Program in Veterinary Medicine is carried out through such means as: lectures, working in groups, laboratory work, practical work, seminars, etc. The teaching-learning method may include relevant activities (discussion, debates, demonstration, presentation, seminar,**

essay, etc. as specified in the course syllabi).

The organization of the teaching/learning process aims to use such teaching methods that ensure the achievement of knowledge, skills and competencies corresponding to the master's academic degree as a result of program implementation.

Specific methods are used in the teaching process, such as:

A lecture is a creative process in which both lecturer and student participate simultaneously. The main purpose of the lecture is to understand the idea of the provisions of the study course, which implies creative and active perception of the delivered material. Additionally, attention should be paid to the main provisions, definitions, notations, and assumptions of the material to be transmitted. Critical analysis of main issues, facts and ideas is necessary. The lecture should ensure scientific and logically consistent understanding of the main provisions of the study course without overloading with excessive details. Therefore, it should be logically complete. Moreover, facts, examples, schemes, drawings, experiments and other visuals should serve to explain the lecture idea. The lecture should provide correct analysis of the dialectical process of science and should be built on the possibility of students' free thinking in a specific environment, oriented towards understanding and comprehension of basic scientific problems. The material heard in the lecture forms into a complete knowledge system through student's independent work. The student should be motivated to develop interest in books and other information sources and desire to study issues independently, which is a means of stimulating independent thinking, analysis and making conclusions. When developing methodological issues of the lecture, the teacher should focus on the sequence of material delivery, lecture style, connection with the audience. The lecture should proceed with active student participation, using wide range of methodological tools and visuals. Theoretical material that is delivered in lectures is well perceived through working in groups, laboratory and practical exercises.

The purpose of working in groups is to give students the opportunity to deepen the topics heard in the lecture. Under the guidance of the leading professor or group work/practical/laboratory exercise instructor, the student or group of students finds and processes additional information, prepares presentations, writes essays, etc. where reports are heard, discussions are held, analysis and synthesis are made, conclusions are drawn. The professor/teacher coordinates purposeful direction of these processes.

The purpose of practical/laboratory exercises is to gradually study theoretical material through solving specific tasks, which is the basis for developing skills of independent application of theoretical material. The purpose of practical and laboratory exercises is to deepen and reinforce theoretical knowledge through practical tasks, which forms the basis for developing skills of independent application of theoretical knowledge.

Working with books - Review and study of mandatory and additional literature provided in the syllabus by the student, as well as finding literature and developing specific topics using sources. This facilitates preparation of presentation reports, essays and discussion-debates, and also develops student's skills in both mastering the material and finding, studying and evaluating relevant sources;

Written work - Taking written notes of material explained in lectures, writing key aspects of topics to be processed in thesis form, completing essays, papers or other assignments in writing;

Practice is an important part of the learning process and represents planned and purposeful activity of the student, reinforcing theoretical knowledge gained in academic environment and acquiring practical skills. The goal of practice is to equip students with practical skills and prepare them for future independent professional activities. Three parties are involved in implementing practice: university, student and

potential employer/host organization/practice site, therefore it is important for all three parties: connecting academic education and theory with the real world; involvement in work environment, establishing business relationships; exercising competencies developed during studies in practice; developing new competencies; updating educational programs according to rapidly changing market demands; increasing graduate employment; interaction with motivated youth; facilitating development of better prepared professionals; participation in improving educational programs considering market requirements.

The teaching-learning method may include the following activities:

- **Verbal** - (explaining the topic, questioning, reasoning, discussion-debates, presentation);
- **Written** - (preparing assignments for practical classes, preparing reports/presentations in working groups, excerpts from textbooks, etc.);
- **Use of information-communication technologies** - (searching and processing information, performing practical tasks related to the specialty, preparing illustrative materials for reports/presentations, etc.), combination of different methods (e.g., during lectures - listening and note-taking;
- **While working in groups** - verbal discussion of topics related to studied material and discussion/debates, presentation/report, preparation of written assignment/presentation, use of information technologies).

The following methods will be actively used in the learning process: Practical methods, Discussion/Debates - one of the most common methods of interactive learning. The discussion process significantly increases student engagement and activity. Discussion can develop into debate and this process is not limited to questions posed by the teacher only. It develops students' ability to reason and justify their own opinions.

Group (collaborative) work - this teaching method involves dividing students into groups and giving them learning assignments. Group members individually work on the issue while sharing their views with other group members. Depending on the task at hand, functions may be distributed among members during the group work process. This strategy ensures maximum involvement of all students in the learning process.

Cooperative learning - is a teaching strategy where each group member is obligated not only to learn themselves but also to help their teammates better understand the subject. Each group member works on the problem until all of them master the topic.

Problem-Based Learning (PBL) - it is important to follow the stages of problem identification and problem solving/resolution. These stages are:

Problem identification;
Analysis of the problem and its root causes;
Finding/mobilizing information related to the issue;
Organizing ways to solve the problem;
Selecting ways to solve the problem;
Demonstrating/presenting ways to solve the problem.

Case study - An active problem-situational analysis method based on learning through solving specific tasks/situations.

Clinical Case Analysis (CBL - case based learning) - Clinical thinking based on case discussion - CBL's active problem analysis aims to teach through specific clinical examples (case analysis). This group work is based on discussing complex, atypical cases that require finding additional information, differentiating and determining diagnosis. The "case" becomes the tool that enables applying theoretical knowledge in practice. Through combining theory and practice, CBL supports analytical and clinical thinking,

	development of analysis and synthesis skills, teamwork and decision-making abilities. Students develop skills in participating in medical discussions, communicating with colleagues in limited time, analytical ability, group work habits, alternative thinking, planning activities and foreseeing results. **Demonstration methods -** Visual presentation of information in a simple way to better understand the essence of the problem. **Induction -** Defines such form of knowledge transfer where during the learning process, thinking flows from facts to generalization, meaning material delivery proceeds from specific to general. **Deduction -** A scientific method of cognition that involves deriving specific characteristics from general traits. Thinking proceeds so that each component logically follows from the previous thought. Deductive method allows us to draw correct conclusions, identify common principles and laws that won't allow mistakes: they help establish the factual reality of specific events. **Analysis -** Helps break down learning material as a whole into constituent parts. This simplifies detailed illumination of individual issues within complex problems. **Synthesis -** Involves composing a whole by grouping individual issues. This method promotes developing the ability to see problems as a whole. **Explanatory method -** This method includes lectures, storytelling, conversation, etc. In this process, the teacher transmits and explains learning material through words, while students actively perceive and absorb it through listening, memorizing and comprehension. The learning process also uses: critical analysis and evaluation of student's own work; constructive criticism of others' work and considering others' criticism of own work; finding information in electronic format using computer technology and/or library book funds, reviewing relevant information and literature for the given task. Through the use and combination of different methods, the learning process becomes more diverse, while student participation becomes more active. The combination of methods ensures student engagement in the learning process, revealing and developing their capabilities - students become accustomed to independent individual and team work; setting goals and using adequate ways and methods to achieve them; step-by-step planning of work to be performed and time management; active use of information-communication technologies and library resources for obtaining necessary information and analysis of found information; formulating and justifying conclusions and opinions, verbal/written communication, preparing and arranging presentations, self-presentation of knowledge and competence, argumentative defense of conclusions and opinions. In the teaching process, it is possible to select and prioritize certain methods based on the characteristics of the study group and course, as the selection of teaching methods is aimed at activating learning, developing cognitive activities, and active student participation in the learning process. The syllabi of study courses specifically present the teaching/learning methods used in implementing the course.
Student Knowledge Assessment System	**The mastery of educational components and scientific research components** provided by the Integrated Master's Educational Program in Veterinary Medicine involves active student participation in the learning process and is based on the principle of continuous assessment of acquired knowledge. **When implementing the Integrated Master's Educational Program in Veterinary,** the level of student learning outcomes is assessed in accordance with current Georgian legislation. **The assessment of student learning outcomes in the educational component of the Integrated Master's Educational Program in Veterinary** includes assessment forms - midterm and final assessments, the sum of which represents the final assessment (100 points). **The research component submitted for academic degree -** master's thesis is evaluated as a whole, unified - with final assessment, which

includes evaluations by persons designated by the university and assessment received during defense.
The master's thesis will be evaluated in the same or following semester in which the student completes work on it.
The midterm and final assessment (assessment forms) of study courses includes assessment component(s) that determine the method(s) of assessing student's knowledge and/or skills and/or competencies (oral/written exam, oral/written questioning, homework, practical/theoretical work, etc.). The assessment component combines uniform assessment methods (test, essay, demonstration, presentation, discussion, completion of practical/theoretical tasks, group work, participation in discussions, abstract, written assignment, etc.). Assessment method(s) are measured by assessment criteria, i.e., the unit of measurement for the assessment method, which determines the level of achievement of learning outcomes.
Each form and component of assessment has a specific weight in the final assessment from the total score (100 points), which is reflected in the specific syllabus and is communicated to the student at the beginning of the academic semester.
Student knowledge is assessed through midterm and final assessments. It is not permitted to award credits using only one form (midterm or final assessment). Final assessment is mandatory. If a student does not receive a final assessment, the course will not be considered completed. The subject is considered passed and credits are awarded only if the student has crossed the minimum competency thresholds set for midterm and final assessments and received a positive assessment in each.
The minimum competency threshold for midterm and final assessment components is reflected in the syllabi and is communicated to students at the beginning of the academic semester.

The assessment system allows for:
Five types of positive assessments:
(A) Excellent - 91-100 points;
(B) Very Good - 81-90 points;
(C) Good - 71-80 points;
(D) Satisfactory - 61-70 points;
(E) Sufficient - 51-60 points.

Two types of negative assessments:
(FX) Failed - 41-50 points, which means that the student needs more work to pass and is given the right to take an additional exam once through independent work;
(F) Failed - 40 points and less, which means that the work done by the student is not sufficient and they must study the subject again.

The course is considered completed if the student's final assessment is equal to or greater than 51%.
In case of receiving FX in the educational program's study component or failing to receive a positive assessment defined by minimal competence in the final exam, an additional exam is scheduled no less than 5 days after the announcement of final exam results. The score received by the student in the additional exam is not added to the points received in the final assessment. The grade received in the additional exam is the final assessment and is reflected in the final grade of the educational program's study component.
For the scientific-research component, in case of receiving (FX) - failed - the graduate student is allowed to submit the revised

	scientific-research component during the following semester, while in case of receiving (F) - failed - the graduate student loses the right to submit the same scientific-research component.
Employment Fields	The veterinary profession is regulated by the state. Graduates are awarded a Master's degree in Veterinary and will have the right to work: • Veterinary clinics and laboratories; • Scientific research institutions; • Educational institutions; • Relevant state agencies; • Pharmaceutical enterprises; • Slaughterhouses; • Animal grooming salons; • Pet shops, zoos, vivariums, aquariums, terrariums, hippodromes, animal shelters; • Livestock and poultry farms and factories, beekeeping and fishery farms, cynological service; • Medical scientific research laboratories, centers and institutes; • Agricultural markets, food business operators, protected areas and others.
Opportunity to continue education	A graduate can continue studies at the third level of higher education in doctoral studies, in doctoral programs both in Georgia and abroad.
Program Material-Technical Base	**To achieve the learning outcomes envisaged by the Integrated Master's Educational Program in Veterinary,** the university's infrastructure and material-technical resources are used, which are accessible to students without restrictions, specifically: Properly equipped classrooms (computers connected to the internet, interactive whiteboards, laptops, projectors, copier, scanner, cameras, photo-audio materials) are absolutely accessible to stakeholders involved in the educational program. Conference halls, professors' room; Library equipped with computer equipment and information-communication technologies, renewable book collection. The library contains mandatory literature defined by syllabi and other educational materials, including those on electronic media. Reading room equipped with computers connected to the internet. Computer classes, computer equipment connected to the internet and internal network, and computer programs adequate for teaching/learning process; Laboratories equipped with modern technology for microbiology, anatomy, pathological anatomy and histology, clinical diagnostics, chemistry, and other types specified in contracts, clinical facilities, pharmacies, animal slaughterhouses, livestock production facilities-objects and others; university-owned cattle farm with animals for educational purposes; The educational program is provided with appropriate textbooks and methodological literature. The university library provides students with relevant printed and electronic textbooks specified in course syllabi, teaching-methodological and scientific literature, as well as the library book fund database and electronic catalog posted on the university website. The library is connected to international electronic databases (Scopus, Elsevier, etc.). **Practical training for specialty (field) practice defined by the Integrated Master's Educational Program in Veterinary Medicine, as well as**

	practical-laboratory skills provided in the course syllabi, will be carried out in university laboratories, the university's cattle teaching farm, and at the following facilities defined by contracts and memoranda: • LEPL - National Food Agency; • Association for Agricultural Development Veterinary Clinic "Association for Agricultural Development"; • Samegrelo-Upper Svaneti Veterinary Association Veterinary Clinic; • Chkhorotsku Veterinary Clinic Inovert; • Chkhorotsku "Livestock Development Center" • Small Entrepreneur Nato Gabisonia "Veterinary Pharmacy" • Individual Entrepreneur Roin Gvilava Poultry Slaughterhouse "Megruli Chicken" • Individual Entrepreneur Elguja Julakidze Animal Slaughterhouse; • Individual Entrepreneur Nodari Kharchilava Fish Hatchery; • NNLE Georgian Beekeepers Union; • Young Researchers Initiative Group.
Human Resources of the Program	The implementation of the Integrated Master's Educational Program in Veterinary Medicine is provided with appropriate human resources. The educational and scientific-research components envisaged by the educational program are led by 43 academic/invited personnel with relevant experience and competencies from the university. Specifically, 5 professors, 11 associate professors, 5 assistant professors, 2 assistant, and 20 invited specialists. From the total number of academic/invited personnel, those with basic veterinary education selected through competition are: 3 professors, 3 associate professors, 3 assistant professors, 1 assistant, and from invited personnel - 3 invited professors; 5 invited specialists. In the direction of animal husbandry, 1 associate professor and 3 invited specialists. Out of 21 academic personnel involved in the program implementation, 18 are affiliated (for complete information about the program head and involved persons, see attached documents).

Program Structure

The educational component of the Integrated Master's Program in Veterinary includes:

Free compulsory and basic education, free elective study component - 77 credits, or 25% of total credits, including:

- Required courses for free component - 40 Credit;
- Elective Study Courses of the Free Component- 7 Credit;
- Basic Education- 30 Credit;

30ტ9Mandatory/elective courses in the field of study and scientific research component - 231 credits, which is 75% of total credits, including:

- Preclinical Sciences - 45 Credit;
- Clinical Sciences- 98 Credit;

- **Animal Breeding-** **19 Credit;**
- **Animal Food Hygiene and Control -** **15 Credit;**
- **Specialty Elective Courses -** **14 Credit, including:**
  - From Veterinary Direction - 8 Credit;
  - From Animal Husbandry Direction - 6 Credit;
- **Specialty (Field) Practice -** **20 Credit;**
- **Master's Thesis -** **20 Credit;**

Integrated Master's Educational Program Curriculum in Veterinary Medicine

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
	Mandatory courses of the free component - 40 credits															
1.		Does not have	English 1	5/125										64	61	**5**
2.		English 1	English 2		5/125									64	61	**5**
3.		English 2	English 3			5/125								64	61	**5**
4.		English 3	English 4				5/125							64	61	**5**
5.		Does not have	History of Philosophy	5/125										49	76	**5**
6.		Does not have	Information Technology	5/125										49	76	**5**
7.		Does not have	Academic Writing	5/125										35	90	**5**
8.		Does not have	Democracy and Citizenship		5/125									49	76	**5**
Free Component Elective Courses - 7 credits												7/17				**7**

[1] A unit that expresses the academic workload required for a student and which can be obtained after achieving the learning outcomes.

[2] time required to achieve the learning outcomes defined by the educational program. The student's academic workload is based on independent and contact hours

[3] Time allocated for student learning activities with the involvement of personnel implementing the educational program component

[4] Student learning time without involvement of educational program component staff (preparation of homework and exams, etc.).

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
												5				
Required Courses in the Main Field of Study																
Basic Study Courses - 30 Credits																
9.		Does not have	Inorganic Chemistry	4/100										49	51	**4**
10.		Does not have	Animal Biology	3/75										49	26	**3**
11.		Animal Biology	General Microbiology		3/75									49	26	**3**
12.		Does not have	Biomathematics and Mathematical Statistics		3/75									49	26	**3**
13.		Does not have	Plant Biology			3/75								49	26	**3**
14.		Does not have	Physics with Biophysics			4/100								49	51	**4**
15.		General Microbiology	General Virology			3/75								49	26	**3**
16.		Inorganic Chemistry	Organic Chemistry		4/100									49	51	**4**
17.		Does not have	Environment and Sustainable Development							3/75				49	26	**3**
Preclinical study courses - 45																
18.		Does not have	Animal Anatomy 1	4/100										64	36	**4**
19.		Does not have	Veterinary Latin Terminology	2/50										34	16	**2**
20.		Animal Anatomy 1	Animal Anatomy 2		4/100									64	36	**4**
21.		Animal Biology	Histology, Cytology, Embryology		4/100									64	36	**4**
22.		Animal Biology	Animal Physiology 1 with Ethology		4/100									64	36	**4**
23.		Animal Anatomy 2	Animal Anatomy 3			4/100								64	36	**4**
24.		Animal Physiology 1 with Ethology	Animal Physiology 2			4/100								64	36	**4**
25.		Organic Chemistry	Veterinary Biochemistry			5/125								49	76	**5**

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
26.		Veterinary Microbiology, Histology, Cytology, Embryology	Veterinary Immunology				3/75							49	26	**3**
27.		Veterinary Microbiology Biomathematics and Mathematical Statistics	Veterinary Epidemiology and Public Health				3/75							49	26	**3**
28.		General microbiology;	Ecology				3/75							34	41	**3**
29.		Does not have	Professional ethics					2/50						34	16	**2**
30.		Professional ethics	Provision of veterinary services and veterinary legislation						3/75					49	26	**3**
Clinical Training Courses - 98 credits																
31.		General Microbiology	Veterinary Microbiology			4/100								64	36	**4**
32.		Animal Physiology 2	Pathological Physiology 1				3/75							49	26	**3**
33.		General Virology	Veterinary virology				4/100							64	36	**4**
34.		Histology, cytology, embryology; pathological physiology 1	Pathological Anatomy 1					4/100						64	36	**4**
35.		Animal Physiology 2, Animal Anatomy 3	Animal reproductive biotechnology					4/100						64	36	**4**

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
36.		Veterinary Latin terminology; Veterinary Biochemistry	Pharmacology with Pharmacy					4/100						64	36	**4**
37.		Veterinary Biochemistry Clinical pharmacology with prescription	Veterinary toxicology					4/100						64	36	**4**
38.		Pathophysiology 1	Pathological Physiology 2					4/100						49	51	**4**
39.		Animal Anatomy 3, Animal Physiology 2	Propaedeutics with radiology					3/75						49	26	**3**
40.		Propaedeutics with radiology; veterinary biochemistry	Clinical laboratory diagnostics						4/100					64	36	**4**
41.		Veterinary Latin terminology; Pharmacology with Pharmacy	Clinical pharmacology with prescription						4/100					64	36	**4**
42.		Animal biology; Animal Anatomy 3	Parasitology and parasitic diseases 1						4/100					64	36	**4**
43.		Pathological Anatomy 1	Pathological Anatomy 2						4/100					64	36	**4**
44.		Animal reproductive biotechnology Veterinary Microbiology	Obstetrics and reproductive diseases						4/100					64	36	**4**
45.		Animal Anatomy 3;	Surgery 1 with						5/125					79	46	**5**

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
		Histology, Cytology, Embryology	anesthesiology													
46.		Surgery 1 with anesthesiology	Surgery 2							4/100				64	36	**4**
47.		Parasitology and parasitic diseases 1	Parasitology and parasitic diseases 2							4/100				64	36	**4**
48.		Veterinary Microbiology; Veterinary biochemistry.	Veterinary laboratory research methods							4/100				64	36	**4**
49.		Veterinary Epidemiology and Public Health; Pathological Anatomy 2	Infectious diseases 1							4/100				64	36	**4**
50.		Propaedeutics with Radiology; Pathological Physiology 2	Therapy 1							4/100				64	36	**4**
51.		Therapy 1	Therapy 2								4/100			64	36	**4**
52.		Surgery 2	Surgery 3								4/100			64	36	**4**
53.		Infectious diseases 1	Infectious diseases 2								4/100			64	36	**4**
54.		Pathological Anatomy 2	Autopsy and forensic veterinary									4/100		64	36	**4**
55.		Infectious diseases 1	Zoonoses									3/75		49	26	**3**
Animal Food Hygiene and Control - 15 credits																
56.		Veterinary	Animal food safety								3/75			49	26	**3**

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
		Microbiology														
57.		Animal Anatomy 3; Animal food safety	Meat inspection									3/75		49	26	**3**
58.		Animal food safety Animal hygiene and welfare	Technology, quality and safety of milk and dairy products									4/100		64	36	**4**
59.		Animal food safety Animal hygiene and welfare	Technology, quality and safety of meat and meat products									5/125		64	61	**5**
Animal Husbandry - 19 credits																
60.		General Microbiology	Animal hygiene and welfare				3/75							49	26	**3**
61.		Animal Physiology 2, Plant Biology	Animal nutrition 1				3/75							49	26	**3**
62.		Does not have	Agricultural Economics				3/75							33	42	**3**
63.		Animal nutrition 1	Animal nutrition 2					3/75						49	26	**3**
64.		Animal Physiology 2; Animal nutrition 1	Animal breeding and genetics					4/100						64	36	**4**
65.		Animal nutrition 2; Animal hygiene and welfare	Biological foundations of animal husbandry						3/75					34	41	**3**
Specialty (specialized) practice - 20 credits																
66.		Animal nutrition 2; Biological Foundations of Animal Husbandry Animal hygiene and welfare;	Practical Training in Livestock Farm								3/75			58	17	**3**

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
		Animal breeding and genetics														
67.		Obstetrics and reproductive diseases	Practical Training in Breeding Biotechnology and Obstetrics Reproductive Diseases								4/100			82	18	**4**
68.		Clinical Training Courses	Practical Training in Small Animal Medicine										5/125	98	27	**5**
69.		Clinical Training Courses	Practical Training in Production Animal Medicine										5/125	98	27	**5**
70.		Technology, quality and safety of milk and dairy products; Technology, quality and safety of meat and meat products; Meat inspection	Practical Training in Food Safety and Veterinary Supervision										3/75	58	17	**3**
Research Component - 20 credits																
71.		Courses included in the program	**Master's Thesis**										20/500	31	469	**20**
Elective courses from veterinary and animal husbandry direction - 14 credits																
8 credits from Veterinary direction																**8**
72.		Does not have	Veterinary Allergology and Dermatology								3/75			34	41	
73.		Does not have	Ophthalmology								2/50			34	16	
74.		Does not have	Fish and Fry Diseases								3/75			34	41	

№	Subject Code	Prerequisite	Subject/Module	ECTS credit/hour[1]										Student Learning Load[2]		Number of credits
				I		II		III		IV		V		Contact Hours[3]	Independent Hours[4]	
				semester												
				I	II	III	IV	V	VI	VII	VIII	IX	X			
75.		Does not have	Bird Diseases								3/75			49	26	
76.		Does not have	Bee Diseases								2/50			34	16	
77.		Does not have	Dog and Cat Diseases								2/50			34	16	
78.		Does not have	Bacteriophage								3/75			49	26	
79.		Does not have	Entrepreneurship								3/75			34	41	
From the livestock sector - 6 credits																**6**
80.		Does not have	Cynology-Felinology							3/75				49	26	
81.		Does not have	Bird Biology and Care							3/75				49	26	
82.		Does not have	Cattle Biology Care and Maintenance							3/75				49	26	
83.		Does not have	Pig Biology and Husbandry							3/75				49	26	
84.		Does not have	Biology and Care of Sheep							3/75				49	26	
85.		Does not have	Bird Nutrition							3/75				49	26	
86.		Does not have	Fish and Fry Breeding Technology							3/75				49	26	
87.		Does not have	Breeding of Exotic Birds							3/75				49	26	
88.		Does not have	Animal Studies							3/75				49	26	
		semester		**33**	**32**	**32**	**30**	**32**	**31**	**29**	**30**	**26**	**33**			
		year		**65**		**62**		**63**		**59**		**59**				

Employment sector:

The veterinary profession is regulated by the state. Graduates are awarded a Master's Degree in Veterinary Medicine and will have the right to be employed:

- Veterinary clinics and laboratories;
- Scientific and research institutions;
- Educational institutions;
- Relevant state agencies;
- Pharmaceutical enterprises;

- Slaughterhouses
- Animal grooming cabinets;
- Pet shops, zoos, vivariums, aquariums, terrariums, racetracks, animal shelters;
- Livestock and poultry farms and factories, beekeeping and fishing farms, canine services;
- Medical scientific research laboratories, centers and institutes;
- Agricultural markets, food business operators, protected areas and others.

Information about the Program Director

First name, Last name	**Levan Makaradze**			
Position	Doctor of Veterinary Sciences, Professor			
Contact information	Telephone:	+995,577,11,20,10	Email:	mailto:lmakaradze@yahoo.com

Information about the program co-director

First name, Last name	**Nino Milashvili**			
Position	Veterinary Doctor, Professor			
Contact Information	Telephone:	+995,599511053	Email:	n.milashvili@gmail.com

Changes implemented:

LEPL - Shota Meskhia State Teaching University of Zugdidi
Resolution by the Academic Council of the University №50, 20.10.2023

Resolution of the Academic Council of
LEPL - Shota Meskhia Zugdidi State University№50, 20.10.2023

Resolution of the Academic Council of
LEPL - Shota Meskhia Zugdidi State University №17, 15.04.2025