

## MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

#### STATE BIOTECHNOLOGICAL UNIVERSITY

# EDUCATIONAL AND PROFESSIONAL PROGRAM «VETERINARY MEDICINE»

LEVEL OF HIGHER EDUCATION – Second

DEGREE OF HIGHER EDUCATION – Master

SPECIALTY – 211 Veterinary medicine

FIELD OF STUDY – 21 Veterinary

EDUCATIONAL QUALIFICATION – Master of veterinary medicine

APPROVED BY THE ACADEMIC COUNCIL of State Biotechnological University (protocole # 11 from «26» of April 2024 y.) it is put into action from 01 of September 2024 y.

Acting rector\_\_\_\_\_/Andrii Kudriashov/

#### **UPDATE APPROVAL LETTER**

## of educational program «Veterinary medicine» from specialty 211 Veterinary medicine for second (master's) level of higher education

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Head of centr	re of management of educa	tional quality
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#### **PREFACE**

Educational and professional program (EPP) for the training of applicants of higher education on the second (master's) level in the specialty 211 Veterinary medicine contains the amount of ECTS credits required for obtaining an appropriate degree of higher education; a list of competences of the graduate; the normative content of training of applicants of higher education, formulated in terms of study; forms of certification of applicants of higher education; requirements for the availability of a system of internal quality assurance of higher education.

Project Group (SBU Order) on the basis of higher education Standard 211 Veterinary medicine for the second (master's) level of higher education and recommendations of the leading experts of the industry on the preparation of masters in the composition:

- 1. Naumenko SV, doctor of veterinary sciences, professor, Guarantor;
- 2. Yatsenko IV, doctor of veterinary sciences, professor;
- 3. Kushch MM, doctor of veterinary sciences, professor;
- 4. Fedorenko SY, doctor of veterinary sciences, professor;
- 5. Kibkalo DV, doctor of veterinary sciences, professor;
- 6. Vikulina GV, candidate of veterinary sciences, associate professor;
- 7. Nikiforova OV, candidate of veterinary sciences, associate professor;
- 8. Denisova OM, candidate of biological sciences, associate professor.

#### **External Stakeholders Reviews:**

- 1. Moraru IG, co-founder, project manager of LLC «American Dairy Technology», Kyiv;
- 2. *Vorotnikov VP*, chairman of the Board of Organizations "Veterinarians without Borders", Kharkiv region, Krasnograd (Kharkiv region);
- 3. *Borodachyk AV*, head of the State Consumer Service Department in Zolochiv district of Kharkiv region;
- 4. *Radzikhovsky M.*, professor of the department of veterinary epidemiology and health of animals, doctor of veterinary sciences, professor, National University of bioresources and environmental management of Ukraine, Kyiv;
- 5. *Melnyk A. and Vovkotrub N.* candidates of veterinary sciences, associate professors of the department of propedeutics and medicine of internal animal diseases and poultry named after VI Levchenko, Bila Tserkva National Agrarian University;
- 6. *Stefanik V.*, head of the department of obstetrics, gynecology and biotechnology of animal reproduction named after GV Zvereva, doctor of veterinary sciences, professor, Lviv National University of Veterinary Medicine and Biotechnology named after SZ Gzhitsky.

#### Stakeholder reviews are added.

The amendments to the educational program by the decision of the Academic Council of the State Biotechnology University (minutes # 14 of 28.06.2024) on the basis of the order of the Ministry of Education and Science of Ukraine No. 842 of 13.06.2024.

# Profile of educational and professional program «Veterinary medicine» from the specialty 211 Veterinary medicine

1 – General information				
The full name of the higher education institution and the structural unit	State biotechnological university Faculty of veterinary medicine			
Higher education degree and qualification name	Master from veterinary medicine			
The official name of the educational program	Veterinary medicine			
Diploma Type and Educational Program Volume	Master's degree, single 360 ECTS credits, a period of study 5 years and 10 months 300 ECTS credits, a period of study 4 years and 10 months			
Accreditation	Accredited. Accreditation Certificate: Series UI #21019026  Order of the Ministry of Education and Science of Ukraine of December 19, 2016 #1565, The certificate it valid until July 1, 2025.			
Cycle / Level	7 level of the National framework of qualifications of Ukraine (NFQ). 7 Level of the European Qualifications Frame for Life Learning ( <i>EQF LLL</i> ). The second cycle of European Higher Education Space ( <i>HPFQ EHEA</i> )			
Prerequisites	The conditions of admission are determined by the "Rules of admission to the State Biotechnological University" approved by the Academic Council.  Availability of complete general secondary education; EL «junior bachelor/junior specialist»;  Bachelor/Specialist/Master. Training of veterinary medicine specialists is carried out exclusively on full-time training.  Results of external independent assessment/national multigrade testing.			
Language (s) teaching	Ukrainian, English			
The expiry of the	till 01.07.2028 year			

educational program		
Internet address of		
permanent	https://biotechuniv.edu.ua/pro-universitet/osvitnya-	
placement of an	diyalnist/osvitni-programi/	
educational program	dryamist/osvium-programi/	
description		
2 Aim of advantional program		

#### 2 – Aim of educational program

Training of the master of veterinary medicine of European level, a specialist of a new formation who is capable to work in a fast-variable, multifunctional environment and to use modern scientific achievements, intellectual resources to solve urgent problems in veterinary medicine and agro-industrial complex on the state and international levels.

3 – (	3 – Characteristics of educational program				
Subject area					
(field of knowledge,	Field of knowledge 21 Veterinary				
specialty,	Specialty 211 Veterinary medicine				
specialization)					
Orientation of the	Educational and professional				
educational program	•				
The main focus of	Special, in the field 21 Veterinary, specialty 211				
the educational	Veterinary medicine.				
program and	Keywords: veterinary medicine, animals, disease,				
specialization	pathology, diagnosis, prevention, treatment.				
Features of the program	The program provides a prerequisite for the passage of educational and industrial practice at livestock enterprises, veterinary clinics of various forms of ownership, laboratory institutions, institutions for processing and sale of animal products.  For foreign students the educational program is taught in English and Ukrainian.				
4 – Graduates	suitability for employment and further training				
Suitability for employment	Occupations, professional work names (according to the current version of the National Classifier of Ukraine: Classifier of Professions (DK 003:2010) and <i>International Standard Classification of Occupations</i> 2008 (ISCO-08)), professional training can be directed by educational and professional and educational programs in the specialty: veterinary doctor (2223.2), junior researcher (veterinary medicine) (2223.1), researcher (veterinary medicine) (2223.1), assistant (2310.2), higher education teacher (2310.2), doctoral student (2310.1) or occupy the following positions: pharmacy head (pharmacy institution)				

	(1210.1), the head of the pharmacy base (1210.1), director			
	of the department (1210.1), director of the laboratory			
	(1210.1), director (chief, other manager) of the enterprise			
	(1210.1).			
	Learning throughout life to improve professional,			
Further training	scientific and other activities 8 NFQ, 8 EQF LLL.			
ruither training	Continuation of training to obtain the third (educational			
	and scientific) level FQ-EHEA			
	5 – Teaching and evaluation			
	Student centred learning, problem-oriented learning,			
	technology of intensification and individualization of			
	learning, technology of developmental training, credit-			
Teaching and	transfer system of organization of learning, e-learning in			
training and	the Moodle system, self-study, study based on research.			
training	Teaching is conducted in the form of lectures, seminars,			
	laboratory work, practical classes, consultations with			
	teachers, independent learning on the basis of textbooks			
	and notes, performance of coursework.			

#### **Evaluation**

Types of control: current, final. Exams, tests (differentiated and undifferentiated), defence from coursework are carried out in accordance with the requirements «Regulations on the organization of educational process at the State Biotechnological University» (2025 y.).

The results of the exam are determined on a 100-point scale, an ECTS scale and a national assessment scale («excellent», «good», «satisfactorily», «unsatisfactorily»), and the standings-on a groove scale, ECTS scale and national. These results are a compulsory component of the overall final assessment of the discipline. Their weight in the overall assessment is determined by the working curriculum.

State certification: the uniform state qualification exam (USQE); clinical qualification exam or defence of qualification work.

<u>-</u> -				
Оцінка (за національною шкалою) / National grade	Мін. бал / Min. marks	Макс. бал / <i>Max. marks</i>		
Національна диф	еренційована шкал	a / National differentiated grade		
Відмінно / Excellent	90	100		
Добре / <i>Good</i>	74	89		
Задовільно / Satisfactory	60	73		
Незадовільно / Fail	0	59		
Національна недиф	еренційована шкал	a / National undifferentiated grade		
Зараховано / Passed	60	100		
He зараховано / Fail	0	59		
Шкала ECTS / ECTS grade				
A	90	100		
B	82	89		

C	74	81	
D	64	73	
E	60	63	
Fx	35	59	
F	1	34	
-	6 - Software	competences	
		ve complex problems and problems in	
Integral competence	the field of veterinary medicine, which involved conducting research and/or innovation and characterized by uncertainty of conditions and characterized by the characte		
General competences (GC)  1. The ability to abstract thinking, analysis and synth 2. The ability to apply knowledge in practical situation 3. Knowledge and understanding of the subject indicated and profession.  4. The ability to communicate in the state language or or ally and in writing.  5. The ability to communicate in a foreign language.  6. Skills in using information and communicate technologies.  7. The ability to conduct research at an appropriate legal 8. The ability to learn and master modern knowledge 9. The ability to make reasonable decisions.  10. The ability to communicate with representative other professional groups of different levels (with expected of other fields of knowledge/types of economic activation of the subject in the state language or all years and in writing.  5. The ability to communicate in a foreign language.  6. Skills in using information and communicate communicate with representative other professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expected of the professional groups of different levels (with expec		pply knowledge in practical situations. d understanding of the subject industry communicate in the state language both ng.  communicate in a foreign language.  cing information and communication onduct research at an appropriate level.  carn and master modern knowledge.  cake reasonable decisions.  communicate with representatives of groups of different levels (with experts knowledge/types of economic activity).	
	performed.  12. The desire to preserve the environment.  13. The ability to make decisions and act in account with the principle of inadmissibility of corruption a other manifestations of dishonesty.		
Special (professional, subject) competences (SC)	<ol> <li>The ability to e and functioning or apparatus of the basecies - mamma vertebrates.</li> <li>The ability to equipment and of necessary maniputs.</li> <li>The ability to easeptic and antiseprent and on the apparatus of the ability to easeptic and antiseprent.</li> </ol>	establish the peculiarities of the structure of cells, tissues, organs, their systems and body of animals of different classes and hals, birds, insects (bees), fish and other to use tools, special devices, laboratory other technical means for carrying out the bulation during professional activity. To observe the rules of occupational safety, septic during professional activity.	

conclusions about animals or diagnose.

- 5. The ability to use methods and techniques of pathological-anatomical diagnosis of animal diseases to establish a final diagnosis and causes of their death.
- 6. The ability to select, pack, fix and forward biological material for laboratory tests.
- 7. The ability to organize and conduct laboratory and special diagnostic studies and analyse their results.
- 8. The ability to plan, organize and implement measures for the treatment of animals of different classes and species with non-communicable, infectious and invasive diseases.
- 9. The ability to carry out obstetric-gynaecological and surgical measures and surgery.
- 10. The ability to develop strategies for safe, sanitary-conditioned keeping of animals.
- 11. The ability to use knowledge of biosecurity, bioethics and welfare of animals in professional activity.
- 12. The ability to develop and implement measures aimed at protecting the population from diseases common to animals and humans.
- 13. The ability to develop strategies for the prevention of diseases of different etiology.
- 14. The ability to conduct forensic examination.
- 15. The ability to organize supervision and control of production, storage, transportation and sale of products of animal and vegetable origin.
- 16. The ability to protect the environment from pollution of livestock waste, as well as materials and means of veterinary.
- 17. The ability to carry out marketing and management of veterinary products and services in veterinary medicine.
- 18. The ability to use specialized software to perform professional tasks.
- 19. The ability to carry out educational activities among industry and population workers.
- 20. The ability to organize, carry out and control workflow during professional activity.

#### 7 - Programme learning outcomes

- 1. To know and correctly use the terminology of veterinary medicine.
- 2. To use information from national and foreign sources to develop diagnostic, treatment and business strategies.
- 3. To determine the essence of physics-chemical and biological processes that

occurs in the body of animals in normal and pathological conditions.

- 4. To collect anamnestic data during registration and examination of animals, make decisions regarding the choice of effective methods of diagnosis, treatment and prevention of animal diseases.
- 5. To establish a connection between the clinical manifestations of the disease and the results of laboratory studies.
- 6. To develop quarantine and health measures, methods of therapy, prevention, diagnosis and treatment of diseases of various etiologies.
- 7. To formulate conclusions regarding the effectiveness of selected methods and means of keeping, feeding and treating animals, prevention of contagious and non-contagious diseases, as well as production and technological processes at enterprises for keeping, breeding or exploiting animals of various classes and species.
- 8. To monitor the causes of the spread of diseases of various etiologies and biological pollution of the environment with livestock waste, as well as materials and means of veterinary use.
- 9. To develop measures aimed at protecting the population from diseases common to animals and humans.
- 10. To propose and use expedient innovative methods and approaches to solving problematic situations of professional origin.
- 11. To summarize and analyse information on the effectiveness of the work of veterinary specialists of various subordinates.
- 12. To know the rules and legislative regulations regarding supervision and control of production, storage, transportation and sale of products of animal and plant origin.
- 13. To understand the logical sequence of actions and be able to draw up the relevant documentation during a forensic veterinary examination.
- 14. To understand the essence of the processes of production, storage and recycling of biological raw materials.
- 15. To know the rules of storage of various pharmaceuticals and biological drugs, ways of their enteral or parenteral use, understand the mechanism of their action, interaction and complex action on the animal body.
- 16. To know the principles and methods of marketing and management of veterinary products and services in veterinary medicine.
- 17. To know the rules and requirements of biosafety, bioethics and animal welfare.
- 18. To carry out accounting reports during professional activity.
- 19. To carry out educational activities among industry workers and the population.
- 20. To have specialized software tools for performing professional tasks.

8 - Resource provision of program implementation			
Personnel support	Project group: 5 doctors of sciences, professors, 3		
	candidates of sciences, associate professors.		
	Guarantor of the educational program (head of the project		
	group): professor of the department of veterinary surgery		

and reproductology of SBU, doctor of veterinary sciences, professor Naumenko Svitlana Valeryivna. The total length of work is 22 years, of which 14 years are scientific and pedagogical, in particular at the Kharkiv State Zooveterinary Academy (now SBU).

Scientific and pedagogical staff involved in the educational and professional program are full-time employees of the SBU and meets the requirements of the current legislation of Ukraine.

Scientific and pedagogical workers involved in the implementation of the educational program are staff of the university, responsible for the courses have a scientific degree and academic title and confirmed level of scientific and professional training.

According to the Law of Ukraine «On Higher Education», advanced training and internships of scientific and pedagogical staff (not less than once every five years) are ensured.

Common practice is to conduct guest lectures by leading national and foreign specialists in the field of veterinary medicine.

Material and technical support of the educational process

Logistical support of the educational process (training premises, specialized offices, computer classes, training laboratories, multimedia equipment, etc.) meets the requirements for conducting lectures and practical classes, including in distance mode. The training audiences are equipped with the necessary devices and tools. The latter include modern, including semi-automatic analyser for studies of blood, portable ultrasound biochemical diagnostic system, thermograph. Departments have the necessary equipment for conducting lessons: centrifuges, photoelectrocolorimeters, microscopes, рН meters, refractometers. ionmeter. nitrameter. portable electrocardiograph, mobile spermoscope, cervicoscope, ultraviolet meter, sterilizers, spectrophotometer, drying oven. At the faculty of veterinary medicine there is a modern educational and scientific laboratory of geneticmolecular methods of research named after PI Verbitsky. The university has local computer networks with Internet access. All the necessary social and household infrastructure (dormitories, dining rooms, sports halls and open sports grounds, gyms, medical complex), the number of seats in hostels meets the requirements.

Official website <a href="https://biotechuniv.edu.ua">https://biotechuniv.edu.ua</a> contains information about educational programs, educational, scientific and educational activities, structural units, admission rules, contacts.

EPP training materials are set out on the university's educational portal in the section «University-Educational Activity-Educational Programs» <a href="https://biotechuniv.edu.ua/pro-universitet/osvitnya-divalnist/osvitni-programi/">https://biotechuniv.edu.ua/pro-universitet/osvitnya-divalnist/osvitni-programi/</a> and page of faculty of

<u>diyalnist/osvitni-programi/</u> and page of faculty of veterinary medicine <a href="https://biotechuniv.edu.ua/fakulteti-instituti/fakultet-veterinarnoyi-meditsini/">https://biotechuniv.edu.ua/fakulteti-instituti/fakultet-veterinarnoyi-meditsini/</a>.

The library fund is multi-sectoral, proper provision of the library with textbooks and manuals, national and foreign professional periodicals of the relevant profile, access to the Internet, copyright developments of the teaching staff, etc. There is a repository of scientific works <a href="https://library.btu.kharkov.ua/">https://library.btu.kharkov.ua/</a>

The library fund consists of only 229697 copies, of which 210303 - books, 152100 copies of foreign periodicals, 10525 are foreign electronic publications. University has full-text access to the following databases of electronic resources: *Web of Science, Science Direct / Scopus*. The subscription was made for 24 periodicals.

Requirements for conducting lecture and practical classes by scientific and pedagogical staff are determined by the internal provisions on the organization of the educational process.

Educational and methodological support of training of higher education applicants meets the licensing and accreditation requirements and includes:

- an educational program, which is approved in a certain order and is subject to review and improvement, contains a description of general and special (professional) competencies and programmable learning outcomes;
- means of diagnostics of quality of higher education;
- the curriculum approved in the above manner;
  - educational and methodological support for each educational discipline of the curriculum: working educational programs of the disciplines, lecture complex, plans of seminar and laboratory-practical classes, methodological instructions and topics of coursework;

# Information and educational methodological support

	<ul> <li>packages of control tasks to test knowledge in the disciplines of general, sectoral and professional training;</li> <li>programs of all types of practices, methodological instructions for the performance of methodological works;</li> <li>didactic support for students' independent work.</li> <li>Contracts with «Unicheck» and «Antiplagiarism.net» have</li> </ul>	
	been concluded to check student work for anti-plagiarism.	
	9 - Academic mobility	
National credit mobility	It provides for the possibility of national credit mobility according to certain training modules, which ensure the acquisition of general and special competences.	
International credit mobility	Students' mobility is possible on the basis of a partner agreement on cooperation with foreign universities: University of Cordoba (Spain), Warsaw University of Life Sciences (Poland), Wroclaw Natural University (faculty of veterinary medicine) (Poland), Lithuanian University of Health Sciences (Lithua). Participation in international educational programs gives the opportunity:  • gain additional knowledge in related fields of science; • improve the level of foreign language proficiency; • get acquainted with foreign culture, history.	
Learning Foreign Higher Education Applicants	Training of foreign higher education applicants is conducted on general conditions with additional language training. The faculty of veterinary medicine of SBU is the first faculty in Ukraine, which in 2016 began training of applicants in the specialty 211 Veterinary medicine in English.  Students' mobility is possible on the basis of a partner agreement on cooperation with foreign universities, provided that foreign students are spoken in Ukrainian, English.	

## 2. List of components of educational and professional/scientific program and their logical sequence

2.1. List of components of the EPP

	2.1. List of components of the Li i				
Code	Components of the educational program (disciplines,	Number of	Form of final		
Code	course projects (works), practice, qualification work	credits	control		
	Mandatory components of EP	P			
MC1	Ukrainian language by professional direction	4	exam		
MC2	Foreign language in professional activity	7	credit, exam		
MC3	Latin (veterinary terminology)	3	credit		
MC4	Philosophy	4	exam		
MC5	History of Ukrainian Statehood and Civil Society	4	exam		

MC6	Anatomy of domestic animals (with educational	13	credit, credit,
	practice)		exam, credit
MC7	Animal biochemistry	7	exam
MC8	Cytology, histology, embryology (with educational practice)	8	credit, exam, credit
MC9	Bioorganic chemistry	6	exam
MC10	Animal physiology	9	credit, exam
MC11	Life safety and labour protection in veterinary medicine	3	credit
MC12	Veterinary jurisprudence of Ukraine and international veterinary legislation	3	credit
MC13	Veterinary hygiene, sanitation and animal welfare	6	credit, exam
MC14	Veterinary microbiology (with educational practice)	6	exam, credit
MC15	Veterinary immunology	3	credit
MC16	Veterinary virology (with learning practice)	6	exam, credit
MC17	Pathological physiology	8	credit, exam
MC18	Obstetrics, gynaecology and biotechnology of animal reproduction (with educational practice)	14	credit, credit, credit, exam, course work, credit
MC19	Hygiene and food examination (with educational practice)	14	credit, credit, exam, course work, credit
MC20	Epizootology and infectious diseases of animals (with educational practice)	14	credit, credit, credit, exam, course work, credit
MC21	General and Special Surgery (with educational Practice)	12	credit, credit, exam, course work, credit
MC22	Operational surgery with the basics of topographic anatomy and anaesthesiology (with educational practice)	8	credit, exam, credit
MC23	Veterinary parasitology (with educational practice)	14	credit, credit, exam, course work, credit
MC24	Pathological anatomy and opening (with educational practice)	11	credit, credit, exam, course work, credit
MC25	Internal Animal Diseases (with educational practice)	14	credit, credit, credit, exam, course work, credit
MC26	Veterinary pharmacology	5	credit
MC27	Veterinary clinical biochemistry	5	credit
MC28	Clinical diagnosis of animal diseases (with educational practice)	10	credit, exam, course work,
MC29	Forensic veterinary medicine	4	credit credit

MC30	Organization of biological research	3	credit
MC31	Organization of veterinary business	4	credit
MC32	Bioethics and professional ethics in veterinary medicine	3	credit
MC33	Veterinary toxicology	4	credit
	Other types of training		
MC34	Educational practice (Introduction to Specialty)	1	credit
MC35	Internship	23	defence
14026	Final Attestation (Option 1)	2	
MC36	Preparation and assembly of USQE	5	exam
MC37	Training and Protection of Qualification Work  Final Attestation (Option 2)	3	defence
MC36	Preparation and assembly of USQE	2	exam
MC37	Preparing and drawing up a clinical qualification	5	
IVICST	exam		exam
	Total volume of mandatory components -	270 (75 %)	
	Selective components of EPP		
SC1	Selective component	3	credit
SC2	Selective component	3	credit
SC3	Selective component	3	credit
SC4	Selective component	3	credit
SC5	Selective component	3	credit
SC6	Selective component	3	credit
SC7	Selective component	3	credit
SC8	Selective component	3	credit
SC9	Selective component	3	credit
SC10	Selective component	3	credit
SC11	Selective component	3	credit
SC12	Selective component	3	credit
SC13	Selective component	3	credit
SC14	Selective component	3	credit
SC15	Selective component	3	credit
SC16	Selective component	3	credit
SC17	Selective component	3	credit
SC18	Selective component	3	credit
SC19	Selective component	3	credit
SC20	Selective component	3	credit
SC21	Selective component	6	credit
SC22	Selective component	6	credit
SC23	Selective component	6	credit
SC24	Selective component	6	credit
SC25	Selective component	6	credit
Selective components of EPP are selected from a university catalogue in number of 90			

credits (25,0 %)	
THE TOTAL VOLUME OF EDUCATIONAL PROGRAM	360 credits

### 3. Forms of certification of applicants of higher education

	Attestation of graduates of the educational and professional program at the specialty 211 Veterinary medicine is carried out
Forms of	in the form of a uniform state qualification exam and protection
certification of	of qualification work or passing the clinical qualification exam
applicants of	(at the choice of education).
higher education	The issuance of a document of the established sample on the award of the degree of higher education «Master» with the assignment of professional qualification "veterinary medicine".
	The uniform state qualification exam provides for evaluation of
Requirements for a	the achievements of the learning outcomes set by the Higher
uniform state	Education Standard in the specialty 211 Veterinary medicine
qualification exam	for the second (master's) higher education and this educational
-	program.
Requirements for the qualification work (at the choice of education applicant)	Qualification work in the specialty 211 Veterinary medicine involves solving a complex task or problem in the field of veterinary medicine, which requires an appropriate study or innovation and is characterized by uncertainty of conditions and requirements.  Qualification work is mandatory for anti-plagiarism (it should not contain both plagiarism and incorrect textual borrowings).  Qualification work is published on the SBU official website <a href="https://library.btu.kharkov.ua/">https://library.btu.kharkov.ua/</a> Defence of qualification work is carried out in accordance with the established procedure openly and publicly, with the obligatory presence of a response of the scientific supervisor, internal review and the act of checking the work for anti-plagiarism.
Requirements for the clinical qualification exam (at the choice of the applicant of education)	The clinical qualification exam checks the students' adaptation of theoretical knowledge and mastering their professional skills of the necessary for masters of veterinary medicine for the professional activity in accordance with the requirements of the standard.  The clinical qualification examination is conducted by the Examination Commission of the faculty of veterinary medicine in conditions close to the professional activity (on animals, laboratory equipment, tools, etc.)

## 4. The matrix of compliance of general competences (GC) with mandatory components (MC) of the educational and professional program «Veterinary Medicine»

	GC1	GC2	GC3	GC4	GC5	GC6	GC7	GC8	GC9	GC10	GC11	GC12	GC13
MC1		+		+						+			
MC2					+					+			
MC3		+			+								
MC4	+	+						+					
MC5	+	+						+					+
MC6	+	+	+										
MC7	+	+	+				+	+					
MC8	+		+				+						
MC9		+											
MC10	+	+	+				+						
MC11		+	+						+	+	+	+	
MC12	+	+	+					+		+			+
MC13		+	+				+		+			+	
MC14	+	+	+										
MC15	+	+	+										
MC16	+	+	+										
MC17	+	+											
MC18		+	+			+		+	+				
MC19		+						+	+				
MC20	+	+	+						+	+			
MC21		+					+		+		+		
MC22		+					+		+		+		
MC23	+	+	+						+		+		
MC24	+	+					+	+	+	+	+		

MC25	+	+				+		+				
MC26	+	+	+				+		+			
MC27	+	+				+	+	+		+		
MC28	+	+				+	+	+				
MC29	+	+				+		+	+			
MC30	+				+	+	+					+
MC31	+	+					+	+	+			+
MC32	+	+						+	+			
MC33	+	+				+		+		+		
MC34			+						+			
MC35		+	+	+	+	+	+	+	+	+	+	
MC36-37	+			+		+		+		+		+

5. The matrix of compliance of special (professional) competences (SC) with mandatory components (MC) of the educational and professional program «Veterinary Medicine»

	SC1	SC2	SC3	SC4	SC5	9DS	SC7	SC8	SC9	SC10	SC11	SC12	SC13	SC14	SC15	SC16	SC17	SC18	SC19	SC20
MC1																				
MC2																				
MC3																				
MC4																			+	
MC5																			+	
MC6	+																			
MC7	+	+				+	+													
MC8	+	+				+														
MC9		+	+																	

MC10	+																			
MC11			+									+				+			+	+
MC12												+			+	+			+	+
MC13		+	+							+	+	+	+			+				
MC14		+	+			+	+				+					+				
MC15						+	+													
MC16		+	+			+	+				+					+				
MC17	+	+			+															
MC18		+	+	+		+	+	+	+											
MC19												+			+				+	+
MC20		+	+	+		+	+	+		+		+	+						+	
MC21		+	+	+			+	+	+											
MC22		+	+	+					+							+				
MC23		+	+	+		+	+	+			+	+	+			+				
MC24	+	+	+		+	+	+													
MC25		+	+	+		+	+	+					+			+				
MC26								+												
MC27	+	+				+	+													
MC28	+	+	+	+		+	+													
MC29					+	+								+						
MC30						+												+		
MC31								+							+		+		+	+
MC32											+	+				+			+	
MC33											+									
MC34			+								+									
MC35		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
MC36-37		+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

## 6. The matrix of compliance with program learning outcomes (PLO) with mandatory components (MC) of the educational and professional program «Veterinary Medicine»

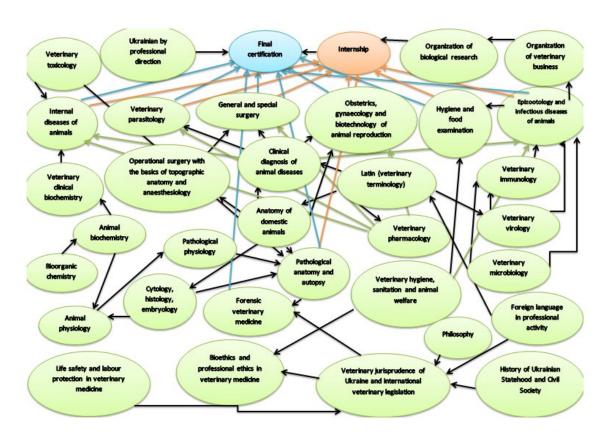
	PL01	PL02	PL03	PLO4	PLO5	PL06	PLO7	PLO8	PL09	PL010	PL011	PL012	PL013	PL014	PL015	PL016	PL017	PL018	PL019	PLO20
MC1	+																			
MC2	+	+																		
MC3	+	+																		
MC4																			+	
MC5																			+	
MC6	+																			
MC7			+																	
MC8	+		+																	
MC9														+						
MC10	+		+																	
MC11																		+	+	
MC12										+		+					+		+	
MC13							+										+			
MC14	+	+																		
MC15	+	+																		
MC16	+	+															+		+	
MC17	+	+	+																	
MC18	+			+		+	+	+						+	+			+		
MC19												+		+						
MC20	+	+		+	+	+	+	+	+						+		+	+	+	
MC21	+	+		+	+	+	+			+										

MC22	+																			
MC23				+	+	+	+	+	+	+										
MC24	+	+	+				+													
MC25	+	+	+	+	+	+	+								+					
MC26		+	+												+					
MC27	+	+	+		+															
MC28	+			+	+															
MC29	+		+				+						+							
MC30																				+
MC31	+	+				+		+		+	+		+		+	+		+	+	
MC32									+	+	+						+		+	
MC33					+	+	+													
MC34																	+			
MC35	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
MC36-37	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+

#### 7. Structural and logical scheme of educational program

1 1	year	2 ye	ear	3 y	ear	4 y	ear	5 ye	ar	6 ye	ar
I semester	II semester	III semester	IV semester	V semester	VI semester	VII semester	VIII	IX semester	X	XI semester	XII
							semester		semester		semester
MC1	MC2	MC4	MC10	MC16	MC17	MC18	MC18	MC18	MC35	MC20	MC36-37
Ukrainian	Foreign	Philosophy	Animal	Veterinary	Pathological	Obstetrics,	Obstetrics,	Obstetrics,	Internship	Epizootology	Final
language by	language in		physiology	virology	physiology	gynaecology	gynaecology	gynaecology		and infectious	certification
professional	professional					and	and	and		diseases of	
direction	activity					biotechnology	biotechnology	biotechnology		animals	
						of animal	of animal	of animal			
2.504		2.00	25012		75010	reproduction	reproduction	reproduction			
MC2	MC5	MC6	MC12	MC17	MC18	MC19	MC19	MC19		MC25	
Foreign	History of	Anatomy of	Veterinary	Pathological	Obstetrics,	Hygiene and	Hygiene and	Hygiene and		Internal animal	
language in	Ukrainian	domestic animals	jurisprudence of	physiology	gynaecology	food	food	food		diseases	
professional activity	Statehood and Civil Society		Ukraine and international		and	examination	examination	examination			
activity	Civil Society		veterinary		biotechnology of animal						
			legislation		reproduction						
MC3	MC6	MC8	MC13	MC22	MC28	MC20	MC20	MC20		MC30	
Latin	Anatomy of	Cytology,	Veterinary	Operational	Clinical	Epizootology	Epizootology	Epizootology		Organization of	
(veterinary	domestic	histology,	hygiene,	surgery with the	diagnosis of	and infectious	and infectious	and infectious		biological	
terminology)	animals	embryology	sanitation and	basics of	animal diseases	diseases of	diseases of	diseases of		research	
(3)		, ,	animal welfare	topographic		animals	animals	animals			
				anatomy and							
				anaesthesiology							
MC6	MC7	MC10	MC14	MC26	MC33	MC21	MC21	MC21			
Anatomy of	Animal	Animal	Veterinary	Veterinary	Veterinary	General and	General and	General and			
domestic	biochemistry	physiology	microbiology	pharmacology	toxicology	special surgery	special surgery	special surgery			
animals											
MCO	MCO	MC	MC17	MCCCC		MCCCC	MCCC	MCCCC			
MC9	MC8	MC11	MC15	MC28		MC23	MC23	MC23			
Bioorganic	Cytology, histology,	Life safety and	Veterinary	Clinical		Veterinary	Veterinary	Veterinary			
chemistry	embryology	labour protection in veterinary	immunology	diagnosis of animal diseases		parasitology	parasitology	parasitology			
	emoryology	medicine		aiiiiiai uiseases							
		medicine									
	MC34	MC13	MC22	MC31		MC24	MC24	MC24			
	EP	Veterinary	Operational	Organization of		Pathological	Pathological	Pathological			
	"Introduction to	hygiene,	surgery with the	veterinary		anatomy and	anatomy and	anatomy and			
	the specialty"	sanitation and	basics of	business		autopsy	autopsy	autopsy			
		animal welfare	topographic								
			anatomy and								
			anaesthesiology								

			MC25 Internal animal diseases	MC25 Internal animal diseases	MC25 Internal animal diseases		
			MC29 Forensic veterinary medicine	MC27 Veterinary clinical biochemistry	MC32 Bioethics and professional ethics in veterinary medicine		
+5SC	+5SC	+5SC	-	-	-	+108	SC



#### The internal quality assurance system of higher education

The internal quality assurance of education under the educational and professional program «Veterinary medicine» is based on the "Regulations on the system of internal quality assurance of higher education at the State Biotechnological University" (2021) to create and maintain the conditions of quality training related fields of activity capable of effective professional activity at the level of world standards, ready for constant professional growth, social and professional mobility.

The system of internal quality assurance of higher education involves the monitoring and periodic review of the educational program, the annual evaluation of higher education applicants, scientific and pedagogical workers, with subsequent publication on the official website of the university, improvement of qualification academic integrity by teachers and higher education applicants.

The system of internal quality assurance of higher education includes surveys of applicants on the quality of the educational program and its discussion, academic integrity, assessing the quality of organization of the educational process, teaching of educational components, provision of educational and methodological resources, practices, monitoring of the current and final success of higher education applicants, involvement into the educational process of external stakeholders for conducting theoretical and practical classes, obtaining the information about employment.

#### List of regulatory documents on which the educational program is based:

- 1. Закон України «Про вищу освіту» (документ 1556-VII, чинний) // BBP, 2014. № 37-38, ст. 2004 (редакція від 31.03.2023, підстава 2849-IX) / Law of Ukraine «On Higher Education» (document 1556-VII, valid) // BBR, 2014-№ 37-38, Art. 2004 (editorial from 31.03.2023, base 2849-IX).
- 2. Закон України «Про ветеринарну медицину» (документ 2498-XII, чинний) // ВВР, 1992. № 36, ст. 531 (редакція від 31.03.2023, підстава 2849-IX) / Law of Ukraine «On Veterinary Medicine» (document 2498-XII, valid) // VVR, 1992-№ 36, Art. 531 (edition dated 31.03.2023, base 2849-IX).
- 3. Закон України «Про ліцензування видів господарської діяльності» (документ 222-VIII, чинний) // ВВР, 2015. № 23, ст. 158 (редакція від 31.03.2023, підстава 2849-IX) / Law of Ukraine «On Licensing of Business Activities» (document 222-VIII, valid) // VVR, 2015-№ 23, Art. 158 (edition dated 31.03.2023, base 2849-IX).
- 4. Постанова Кабінету Міністрів «Про затвердження переліку галузей знань і спеціальностей, за якими здійснюється підготовка здобувачів вищої освіти» № 266 від 29.04.2015 (чинна, редакція від 21.12.2022) / Resolution of the Cabinet of Ministers «On approval of the list of fields of knowledge and specialties for which the preparation of higher education applicants» No. 266 dated 29.04.2015 (current, version of 21.12.2022).
- 5. Постанова Кабінету Міністрів «Про затвердження Ліцензійних умов провадження освітньої діяльності закладів освіти» № 1187 від 30.12.2015 (чинна, редакція від 20.06.2021) / Resolution of the Cabinet of Ministers «On Approval of Licensing Conditions for Conducting Educational Activities of Educational Institutions» No. 1187 of December 30, 2015 (current, version of 20.06.2021).
- 6. Наказ МОН України «Деякі питання оприлюднення інформації про діяльність вищих навчальних закладів» № 166 від 19.02.2015 (редакція 23.03.2015) / Order of the Ministry of Education and Science of Ukraine «Some issues of publication of information on the activity of higher educational establishments» № 166 dated 19.02.2015 (edition 23.03.2015).
- 7. Наказ МОН України «Про затвердження та введення в дію Методичних рекомендацій щодо розроблення стандартів вищої освіти» № 600 від 01.06.2016 / Order of the Ministry of Education and Science of Ukraine «On Approval and Introduction of Methodological

- Recommendations for Development of Higher Education Standards» No. 600 of 01.06.2016.
- 8. Наказ МОН України «Про затвердження стандарту вищої освіти за спеціальністю 211 «Ветеринарна медицина» для другого (магістерського) рівня вищої освіти» № 558 від 24.04.2019 / Order of the Ministry of Education and Science of Ukraine «On Approval of the Standard of Higher Education in Specialty 211 Veterinary Medicine» for the second (master's degree) level of higher education" No. 558 dated 24.04.2019.
- 9. Наказ МОН «Про внесення змін до деяких стандартів вищої освіти» № 26 від 13.01.2022 / Order of the Ministry of Education and Science «On Amendments to Certain Higher Education Standards» No. 26 of 13.01.2022.
- 10.Національний класифікатор України: «Класифікатор професій» ДК 003:2010. Київ : Вид-во «Соцінформ», 2010 (чинний, редакція від 29.12.2022) / National Classifier of Ukraine: «Classifier of Professions» DK 003: 2010. Kyiv: SOCINFORM, 2010 (current, editorial board dated 29.12.2022).