Ministry of Agriculture of the Russian Federation
Federal State Budgetary Educational Institution
of Higher Education
"St. Petersburg State University of Veterinary Medicine"

APPROVED BY
Vice-Rector for Educational
Work and Youth Policy
_____ Sukhinin A.A.
June 27, 2025

Department of Pathological Anatomy and Forensic Veterinary Medicine

EDUCATIONAL WORK PROGRAM

for the discipline

"SECTIONAL COURSE AND FORENSIC VETERINARY MEDICINE"

The level of higher education
SPECIALIST COURSE

Specialty 36.05.01 Veterinary Medicine
Full-time education
Profile: «General clinical veterinary medicine»
Education starts in 2025

Reviewed and adopted
at the meeting of the department
on June 24, 2025.
Protocol No. 7

Head of the Department of Pathological Anatomy
and Forensic Veterinary Medicine,
Doctor of Veterinary Science, Professor
_____ Kudryashov A.A.

Saint Petersburg
2025

1. GOALS AND OBJECTIVES OF THE DISCIPLINE

The goal is to form the worldview of a veterinarian, his ability to think logically, to establish the sequence of occurrence and development of structural changes in a sick body

To achieve this goal, it is necessary **to solve the following tasks:**

a) General education task: to recognize the etiology and pathogenesis of pathological conditions and diseases.

b) The applied task is to compare pathoanatomical changes with clinical signs; to establish the causes and mechanisms of death.

c) A special task is to teach knowledge of environmentally safe technology for the disposal of corpses and the economic use of secondary raw materials.

2. THE LIST OF PLANNED LEARNING OUTCOMES ACCORDING TO THE DISCIPLINE, CORRELATED WITH THE PLANNED RESULTS OF THE DEVELOPMENT OF THE EDUCATIONAL PROGRAM

As a result of mastering the discipline, the student prepares for the following types of activities, in accordance with the educational standard of the Federal State Educational Standard on 05.36.01 "Veterinary Medicine".

The field of professional activity: 13 Agriculture

Types of tasks of professional activity:

Expert control

The student's competencies formed as a result of mastering the discipline

The study of the discipline should form the following competencies:

professional competencies (PC):

PC-4 Performing postmortem diagnostic examination of animals in order to establish pathological processes, diseases, causes of death

PC-4ID-1 Should be able to collect the anamnesis of the life and illness of the examined animals after death

PC-4ID-2 Should be able to perform a general examination of animal corpses before autopsy

PC-4ID-3 Should be able to perform autopsy of animal corpses using special tools and compliance with safety requirements

PC-4ID-4 Should be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies

PC-4ID-5 Should be able to establish the cause of death and a pathoanatomical diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases

PC-4ID-6 Should be able to formalize the results of a postmortem diagnostic examination of an animal in the autopsy protocol, including using digital technologies

PC-4ID-7 Know the veterinary and sanitary requirements for the autopsy process in accordance with the legislation of the Russian Federation in the field of veterinary medicine

PC-4ID-8 Know the rules of working with special tools when opening animal corpses

PC-4ID-9 To know the methods and techniques of autopsy of animal corpses of various species

PC-4ID-10 To know the methodology of sampling and fixation of samples of pathological material for laboratory research in accordance with the rules in this field

PC-4ID-11 To know the forms and procedure for drawing up an autopsy protocol for an animal, including using digital technologies

3. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF THE MPEP

Discipline B1.V.03 "Sectional course and forensic veterinary medicine" is a part formed by participants in educational relations of the federal state educational standard of higher education in the specialty 36.05.01 "Veterinary Medicine" (specialty level), formed by participants in educational relations. It is mastered in the 9th semester of full-time, in the 11th semester of full-time and part-time education, in the 6th year of part-time education.

Discipline B1.V.03 "Sectional course and forensic veterinary medicine" is a branch of Pathological anatomy that has a structural and logical connection with all natural science, biological, general professional clinical disciplines and veterinary practice. The study of the discipline B1.V.03 "Sectional course and forensic veterinary medicine" is based on knowledge of anatomy, biology, histology and embryology, biochemistry, physiology and many other disciplines, such as Clinical diagnosis, Internal non-infectious diseases, Veterinary and sanitary examination, Obstetrics and gynecology, Epizootology, Parasitology.

4. THE SCOPE OF THE DISCIPLINE AND TYPES OF EDUCATIONAL WORK "SECTIONAL COURSE AND FORENSIC VETERINARY MEDICINE"

Type of educational work	Total hours	9 semester
Classroom classes (total)	50	50
Lectures, including interactive forms	16	16
Practical lessons (PL), including interactive forms, among which are:	34	34
practical training (PP)	6	6
Self-study	**58**	**58**
Type of intermediate and final certification (test, exam)	test, exam	test, term paper
Total labor intensity hours/credits	**108/3**	**108/3**

5. THE CONTENT OF THE DISCIPLINE "SECTIONAL COURSE AND FORENSIC VETERINARY MEDICINE"

№	Name	ACHIEVED COMPETENCES	SEMESTER	TYPES OF ACADEMIC WORK, INCLUDING STUDENTS' INDEPENDENT WORK AND LABOR INTENSITY (IN HOURS)			
				Lectures	Practical lessons я	practical training	Self-study
1.	The meaning, purpose and objectives of pathoanatomic diagnostics. Safety precautions during autopsy. Environmental protection	PC-4ID-7	9	2			
2.	Making a pathoanatomical diagnosis based on the results of an autopsy. The wording of the conclusion. Recommendations for completing the course work	PC-4ID-1 PC-4ID-2 PC-4ID-5		2	4	3	

3.	Methods of dissection of animals of different species. Working out the technique of dissection of small animals. Sampling. Making a pathoanatomical diagnosis based on the results of an autopsy. Logging.	PC-4ID-3 PC-4ID-4 PC-4ID-6 PC-4ID-7 PC-4ID-8 PC-4ID-9 PC-4ID-10 PC-4ID-11			16	3	30
4.	Forensic veterinary medicine. Organizational and legal issues.	PC-4ID-7		2			10
5.	Preparation of documents. The responsibility of the expert	PC-4ID-5 PC-4ID-6 PC-4ID-11		2	4		10
6.	Examination of cases of asphyxia, electric current, high and low temperatures	PC-4ID-5 PC-4ID-6		2			2
7.	Examination of traumatic injuries, poisoning	PC-4ID-5 PC-4ID-6		2			2
8.	Examination in cases of claims for poor-quality treatment of an animal	PC-4ID-5 PC-4ID-6		2	4		2
9.	Examination in cases of claims in connection with the purchase of a sick animal	PC-4ID-5 PC-4ID-6		2			2
		TOTAL		**16**	**28**	**6**	**58**

6. THE LIST OF EDUCATIONAL AND METHODOLOGICAL SUPPORT FOR STUDENTS' SELF WORK ON THE DISCIPLINE

Correct organization and planned self – work stimulate research and creative activity of students. Self-work should be understood not only as the ability to make independent conclusions and to apply the knowledge, gained in practice, but also as the ability to organize their activities without outside help.

Self-work over the discipline "Veterinary and sanitary expertise" allow to develop skills on the principles of veterinary and sanitary control of the rational use of animal and plant products (controlled by gosvetnadzor), as well as raw materials (for industrial processing of farm and natural fishing resources); environmental protection technologies and equipments; fundamentals of technologies, technical regulation and standardization, professional responsibility; international cooperation in the field of veterinary and sanitary expertise, food safety and protection of the territory of the Russian Federation from the introduction of infectious zooanthroponous and animal diseases; environmental protection; human consciousness and society for the development of the agro-industrial complex of the Russian Federation.

Students self-work illustrates the development of the following qualification requirements:

- the ability to identify problems and interests in the field of quality control and food safety;
- the ability to set an adequate goal, determine the sequence of tasks;
- the ability to find optimal solutions, effective means and methods to achieve the goal;
- the ability to find the necessary information using modern technologies, classify and systematize it;

- the ability to conduct scientific research in the field of food expertise;
- the ability to present the results of their activities, both in written and oral form for the procedure of public presentation, as well as lectures;
- the ability to master the skills of effective business cooperation.

Students self-work over the discipline "Veterinary and sanitary expertise" is the main way of mastering educational material. It is carried out in order to:

- develop and assimilate the educational material of the discipline;
- consolidate and ameliorate knowledge, skills and abilities;
- prepare for upcoming classes and control tasks;
- form the culture of intellectual work, independency and initiative in research and education.

Students self-work includes the development of theoretical material and preparation for practical classes in the basics of technical regulation and standardization of livestock products, TR and GSS of the Russian Federation, the HACCP system, food safety requirements: meat and meat products, milk and dairy products, fish and fish products, raw materials and technological processes of children's and specialized nutrition and others. food security issues.

The forms of student's self-work over the discipline "Veterinary and sanitary expertise" are:

- acquaintance with the work program;
- making notes and processing lecture material;
- preparation for group classes, including:

a) selection of necessary sources of information (literature, online publications, regulatory framework);

b) taking notes of educational, methodological and scientific literature;

c) processing and analysis of laws and regulations;

d) self-control of the processed questions and topics of the curriculum;

In addition, students self-work in a free form is realized through the preparation of reports and articles for student scientific conferences on the problems of veterinary and sanitary expertise, food security, rational development of the agro-industrial complex of the Russian Federation and the use of natural resources, innovative technologies and technical regulation in the field of veterinary and sanitary expertise, processing of meat, poultry, dairy, etc. raw materials, eggs, honey and bee products, vegetable raw materials, raw materials for food ghee of animal origine, the use of biotechnology.

During the practical classes, the discussion of the topic is conducted in a free creative form. Students discuss with the teacher not only the questions formulated in the educational and methodological complex, but also ask questions that they have during preparation for the seminar, and state their own position on a particular problematic issue in a reasoned manner.

Preparing for the lesson involves the study of theoretical lecture material and regulatory documents. When solving problems, it is recommended to analyze the conditions, formulate a solution clearly and competently, giving references to the relevant legal norms. In order to assimilate the material and better prepare for future professional activity, it is necessary to strive to change the conditions of the task in order to choose the best solution to a specific life situation.

The type of tasks for students' self-work is determined by the teacher through the work program and assessment funds.

Educational and methodological materials for self-work of disabled students are provided in forms adapted to the limitations of their health and perception of information and can be specified depending on the contingent of students.

7. THE LIST OF BASIC AND ADDITIONAL LITERATURE NECESSARY FOR THE EDUCATION OF THE DISCIPLINE

7.1. Basic literature

Balabanova, V.I. Sectional course and forensic veterinary medicine: textbook / V.I. Balabanova, A.A. Kudryashov; Ministry of Agriculture of the Russian Federation, St. Petersburg State University of Medical Sciences. - St. Petersburg: St. Petersburg State University of Medical Sciences Publishing House, 2022. - 101 p. - URL: https://search.spbguvm.informsystema.ru/viewer.jsp?aWQ9OTkwJnBzPTEwNA== (date of access: 24.06.2025). - Access mode: for authorized users of the St. Petersburg State University of Medical Sciences Electronic Library.

7.2. Additional literature

Forensic Veterinary Expertise: A Textbook / compiled by: A. A. Kudryashov, V. I. Balabanova, D. E. Levterov; SPbGAVM. - Saint Petersburg: SPbGAVM, 2015. - 51 p. -— Access mode: Forensic Veterinary Expertise Kudryashov, Balabanova, Levterov (date of access 24.06.2025). - Access mode: for authorized users of the SPbGUVM Electronic Library

8. THE LIST OF RESOURCES OF THE INFORMATION AND TELECOMMUNICATION NETWORK "INTERNET" NECESSARY FOR THE DEVELOPMENT OF THE DISCIPLINE

To prepare for practical classes, tests and exams, and to perform independent work, students can use the following online resources:

1.http://www.kgau.ru/distance/vet_03/patanatomia/01_07_lab.html pathanatomy of animals.

2.http://www.kgau.ru/distance/vet_03/patanatomia/01_03_01.html pathanatomy of animals

3. www.mgavm.ru - information site of MGAVMiB.

4. Meduniver.com – medical information site.

Electronic library systems:

1. Electronic resources of SPbGUVM - http://ebs.spbguvm.ru/MarcWeb2/Default.asp

2.Doe (access mode: http://www.spbguvm.ru/ebs-izdatelstva-lan.html , free entry from any registered university computer).

3. www Scientific Electronic library. eLIBRARY.RU

Electronic library systems

1. ELS "SPBGUVM"
2. Legal reference system "ConsultantPlus"
3. University information system "RUSSIA"
4. Full-text database POLPRED.COM
5. Scientific electronic Library ELIBRARY.RU
6. Russian Scientific Network
7. Full-text interdisciplinary database on agricultural and environmental sciences ProQuest AGRICULTURAL AND ENVIRONMENTAL SCIENCE DATABASE
8. Electronic books of the publishing house "Prospekt Nauki" http://prospektnauki.ru/ebooks/
9. Collection "Agriculture. Veterinary medicine" publishing house "Quadro" ELS "Elibris" publishing house "Quadro" https://elibrica.com/

9. METHODOLOGICAL GUIDELINES FOR STUDENTS ON EDUCATION OF THE DISCIPLINE

Methodological recommendations for students are a set of recommendations and explanations that allow them organize the process of studying this discipline optimally.

The content of methodological recommendations, as a rule, may include:

• Tips on planning and organizing the time needed to study the discipline. Description of the sequence of actions of the student, or the "scenario of studying the discipline".

Morning time is the most effective for academic work (from 8-14 hours), followed by afternoon time (from 16-19 hours) and evening time (from 20-24 hours). The most difficult material is recommended to be studied at the beginning of each time interval after rest. After 1.5 hours of work, a break is required (10-15 minutes), after 4 hours of work, the break should be 1 hour. Part of the scientific organization of labor is the master of the technique of mental labor. Normally, a student should devote about 10 hours a day to studying (6 hours at university, 4 hours at home).

The methodology of work when taking notes of oral presentations differs significantly from the methodology of work when taking notes of written sources.

By taking notes of written sources, the student has the opportunity to read again the desired passage of the text, reflect on it, highlight the main thoughts of the author, briefly formulate them, and then write them down. If necessary, he can also note his attitude to this point of view. Listening to the lecture, the student should transist most of the complexity of the above–mentioned works for another time, trying to use every minute to record the lecture, and not to comprehend it - there is no time left for this. Therefore, when taking notes of a lecture, it is recommended, to leave separate fields on each page for subsequent entries in addition to the summary.

After recording a lecture or making a summary of it, you should not leave work on the lecture material before preparing for the test. It is necessary to do as early as possible the work that accompanies takimg notes of written sources, the last could not be done during the recording of the lecture - read your notes, deciphering individual abbreviations, analyze the text, establish logical connections between its elements, in some cases show them graphically, highlight the main thoughts, mark issues, requiring additional processing, in particular, the teacher's consultations.

When working on the text of the lecture, the student should pay special attention to the problematic issues, raised by the teacher, during the lecture, as well as to his assignments and recommendations.

For each lecture, practical lesson and laboratory work, classification cod, topic, list of issues under consideration, volume in hours and links to recommended literature are provided. For classes conducted in interactive forms, its organizational form should be indicated: computer simulation, business or role-playing game, analysis of a specific situation, etc.

• Recommendations for preparing for practical classes

Practical (seminar) classes are an important part of the professional training of students. The main purpose of conducting practical (seminar) classes is to form students' analytical, creative thinking through the acquisition of practical skills. Practical classes are also conducted in order to deepen and consolidate the knowledge gained in lectures and in the process of independent work on normative documents, educational and scientific literature. For student, it is necessary, to study or repeat theoretical material on a given topic when preparing for a practical lesson for students.

When preparing for a practical lesson, the student is recommended to follow the following algorithm;

1) get acquainted with the plan of the upcoming lesson;

2) study the literature sources that have been recommended and familiarize yourself with the introductory notes to the relevant sections.

Methodological guidelines for practical (seminar) classes in the discipline, along with the work program and schedule of the educational process, refer to methodological documents that determine the level of organization and quality of the educational process.

The content of practical (seminar) classes is recorded in the working curricula of the disciplines in the sections "List of topics of practical (seminar) classes".

The most important component of any form of practical training are tasks. The basis of the task is an example that is understood from the standpoint of the theory developed in the lecture. As a rule, the main attention is paid to the formation of specific skills, which determines the content of students' activities - problem solving, laboratory work, clarification of categories and concepts of science, which are a prerequisite for correct thinking and speech.

• Practical (seminar) classes perform the following tasks:

- stimulate regular study of recommended literature, as well as attentive attitude to the lecture course;
- consolidate the knowledge gained in the process of lecture training and independent work on literature;
- expand the scope of professionally significant knowledge, skills, and abilities;
- allow you to verify the correctness of previously acquired knowledge;
- initiate skills of independent self-thinking, oral presentation;
- contribute to the free use of terminology;
-provide the teacher with the opportunity to systematically monitor the level of independent work of students.

Methodological guidelines for practical (seminar) classes on the discipline should be focused on modern business conditions, current regulatory documents, advanced technologies, the latest achievements of science, technology and practice, modern ideas about certain phenomena, the studied reality.

• Recommendations for working with literature.

Working with literature is an important stage of the student's self-work on mastering the subject, contributing not only to the consolidation of knowledge, but also to the expansion of horizons, mental abilities, memory, the ability to think, express and confirm personal hypotheses and ideas. In addition, the skills of research work necessary for further professional activityare developed.

When starting to study the literature on the topic, it is necessary to make notes, extracts, notes. It is mandatory to take notes of the works of theorists, which allow us to comprehend the theoretical basis of the study. For the rest, you can limit yourself to summary from the studied sources. All summaries and quotations must have the exact "return address" (author, title of the work, year of publication, page, etc.). It is advisable to write an abbreviated title of the question to which the extract or quotation refers. In addition, it is necessary to learn how to immediately compile a file of special literature and publications of sources, both proposed by the teacher and identified independently, as well as refer to bibliographic reference books, chronicles of journal articles, book chronicles, abstract journals. At the same time, publications of sources (articles, book titles, etc.) should be written on separate cards, which must be filled in according to the rules of bibliographic description (surname, initials of the author, title of the work. Place of publication, publisher, year of publication, number of pages, and for journal articles – the name of the journal, year of publication, page numbers). On each card, it is advisable to record the thought of the author of the book or a fact from this book on only one specific issue. If the work, even in the same paragraph or phrase, contains more judgments or facts on another issue, then they should be written out on a separate card. The presentation should be concise, accurate, without subjective assessments. On the back of the card, you can make your own notes about this book or article, its content, structure, on which sources it is written, etc.

• Explanations about working with control and test materials for the course, recommendations for completing homework.

Testing is a conrol that allows you to determine whether the actual behavior of the program corresponds to the expected one by performing a specially selected set of tests. A test is the fulfillment of certain conditions and actions necessary to verify the operation of the function under test or part of it. Each question in the discipline must be answered correctly by choosing one option.

10. EDUCATIONAL WORK

As part of the implementation of the discipline, educational work is carried out to form a modern scientific worldview and a system of basic values, the formation and development of spiritual and moral, civil and patriotic values, a system of aesthetic and ethical knowledge and values, attitudes of tolerant consciousness in society, the formation of students' need for work as the first vital necessity, the highest value and the main way to achieve success in life, to realize the social significance of your future profession.

11. THE LIST OF INFORMATION TECHNOLOGIES USED IN THE IMPLEMENTATION OF THE EDUCATIONAL PROCESS

11.1 Information technologies

For the educational process of the discipline is previewed the use of information technologies:

- practical classes using multimedia;
- interactive technologies (dialogues, collective discussion on various topics for realization a particular educational and professional task);
- interaction with students via e - mail;
- community work in the electronic information and educational environment of St. Petersburg State University: https://spbguvm.ru/academy/eios/

11.2. Software. The list of licensed and free- distributed software, including national programs

№ п/п	Technical and computer programs recommended by sections and topics of the program	License
1	MS PowerPoint	67580828
2	LibreOffice	free software
3	OS Alt Education	AAO.0022.00
4	ABIS “ MARK-SQL”	02102014155
5	MS Windows 10	67580828
6	System Consult Plus	503/КЛ
7	Android OS	free software

12. THE MATERIAL AND TECHNICAL BASE NECESSARY FOR THE IMPLEMENTATION OF THE DISCIPLINE EDUCATIONAL PROCESS.

The title of the discipline (module), practice in accordance with the curriculum	The title of special rooms and rooms for self-work	Equipment of special rooms and rooms for self-work
Sectional course and forensic veterinary medi-	218 (196084, St. Petersburg, Chernihov street, 5) Classroom for conducting seminar-type classes, group and individual consultations, ongo-	Specialized furniture: tables, chairs, stools, blackboard. Visual aids and educational materials: posters on sections of pathologi-

cine	ing monitoring and intermediate certification	cal anatomy.
	219 (196084, St. Petersburg, Chernihov street, 5) Classroom for conducting seminar-type classes, group and individual consultations, ongoing monitoring and intermediate certification	Specialized furniture: chairs, stools, blackboard, multimedia projector, screen Visual aids and educational materials: posters on sections of pathological anatomy.
	220 (196084, St. Petersburg, Chernihov street, 5) Museum of the department, room for intermediate certification	Specialized furniture: tables, chairs. Visual aids and educational materials: museum preparations, drawings and posters on sections of pathological anatomy.
	196084, St. Petersburg, Chernihov street, 5 Practical laboratory for autopsy of animal corpses	Sectional table, tools, 2 refrigerators
	206 Large reading room (196084, St. Petersburg, Chernihov street, 5) Room for independent work	Specialized furniture: tables, chairs Technical means of education: computers connected to the Internet and access to an electronic information and educational environment.
	324 Department of Information Technology (196084, St. Petersburg, Chernihov street, 5) Room for storage and preventive maintenance of educational equipment	Specialized furniture: tables, chairs, special equipment, materials and spare parts for preventive maintenance of technical training facilities.

Developer:
Head of the Department of Pathological Anatomy
and Forensic Veterinary Medicine,
Doctor of Veterinary Science, Professor Kudryashov A.A.

Annex 1

Ministry of Agriculture of the Russian Federation
Federal State Budgetary Educational Institution
of higher education
"Saint Petersburg State University of Veterinary Medicine"

Department of Pathological Anatomy and Forensic Veterinary Medicine

FUND OF ASSESMENT TOOLS
for the discipline
"SECTIONAL COURSE AND FORENSIC VETERINARY MEDICINE"

Level of higher education
SPECIALIST COURSE

Specialty 36.05.01 Veterinary medicine
Profile: «General clinical veterinary medicine»
Full-time education.

Education starts in 2025

Saint Petersburg
2025

1. PASSPORT OF THE APPRAISAL FUND

The student's competencies formed as a result of mastering the discipline.

The study of the discipline should form the following **competencies:**

Professional Competencies (PC):

PC-4 Performing postmortem diagnostic examination of animals in order to establish pathological processes, diseases, causes of death

PC-4id-1 Should be able to collect the anamnesis of the life and illness of the examined animals after death

PC-4id-2 Should be able to perform a general examination of animal corpses before autopsy

PC-4id-3 Be able to perform autopsy of animal corpses using special tools and compliance with safety requirements

PC-4id-4 Should be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies

PC-4id-5 Should be able to establish the cause of death and a pathoanatomical diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases

PC-4id-6 Should be able to formalize the results of a postmortem diagnostic examination of an animal in the autopsy protocol, including using digital technologies

PC-4id-7 Know the veterinary and sanitary requirements for the process of opening animals in accordance with the legislation of the Russian Federation in the field of veterinary medicine

PC-4id-8 Know the rules of working with special tools when opening animal corpses

PC-4id-9 To know the methods and techniques of autopsy of animal corpses of various species

PC-4id-10 To know the methodology of sampling and fixation of samples of pathological material for laboratory research in accordance with the rules in this field

PC-4id-11 To know the forms and procedure for drawing up an autopsy protocol for an animal, including using digital technologies.

Table 1

№	Emerging competencies	Supervised sections (topics) of the discipline	Evaluation tool
1.	PC-4 ID-1 PC-4 ID-2 PC-4 ID-5 PC-4 ID-3 PC-4 ID-4 PC-4 ID-6 PC-4 ID-7 PC-4 ID-8 PC-4 ID-9 PC-4 ID-10 PC-4 ID-11	Topics: The meaning, purpose and objectives of pathoanatomic diagnostics. Safety precautions during autopsy. Environmental protection. Methods of dissection of animals of different species. Working out the technique of dissection of small animals. Making a pathoanatomical diagnosis based on the results of an autopsy. The wording of the conclusion. Recommendations for completing the course work.	course paper
2.	PC-4 ID-5 PC-4 ID-6 PC-4 ID-7 PC-4 ID-8 PC-4 ID-11	Topics: Forensic veterinary medicine. Organizational and legal issues. The responsibility of the expert. Preparation of documents. Features of various types of forensic examination.	credit

An approximate list of evaluation tools

Table2

№	**Name of the evaluation tool**	**Brief description of the evaluation tool**	**Presentation of an evaluation tool in the fund**
1.	Course paper	A means of controlling the assimilation of educational material of a topic, section or sections of a discipline, organized as an original written study	Methodological recommendations for the implementation of the course work on autopsy
2.	Credit	A system of standardized tasks that allows you to automate the procedure for measuring the level of knowledge and skills of a student	Questions for the test

2. INDICATORS AND CRITERIA FOR ASSESSING COMPETENCIES AT VARIOUS STAGES OF THEIR FORMATION, DESCRIPTION OF ASSESSMENT SCALES

Table 3

PC-4

Planned results of competence development	The level of development				Evaluation tool
	unsatisfactory	satisfactory	good	excellent	
PC-4 Performing postmortem diagnostic examination of animals in order to establish pathological processes, diseases, causes of death					
TO KNOW: PC-4 ID-7 To know the veterinary and sanitary requirements for the process of opening animals in accordance with the legislation of the Russian Federation in the field of veterinary medicine PC-4 ID-8 Know the rules of working with special tools when opening animal corpses PC-4 ID-9 Know the methods and techniques of autopsy of animal corpses of various species PC-4 ID-10 To know the methodology of sampling and fixation of samples of pathological material for laboratory research in accordance with the rules in this field PC-4 ID-11 To know the forms and procedure for drawing up an autopsy protocol for an animal, including using digital technologies	The level of knowledge is below the minimum requirements, gross errors have occurred	The minimum acceptable level of knowledge, many blunders have been made	The level of knowledge in the volume corresponding to the training program, several blunders were made	The level of knowledge in the volume corresponding to the training program, without errors	Course paper
BE ABLE TO: PC-4 ID-1 Be able to collect the	Basic skills were	Basic skills have been	All the basic skills	All basic skills have	Credit

anamnesis of the life and illness of the examined animals after death PC-4 ID-2 Be able to perform a general examination of animal corpses before autopsy PC-4 ID-3 Be able to perform autopsy of animal corpses using special tools and compliance with safety requirements PC-4 ID-4 Be able to carry out the selection and fixation of samples of pathological material for laboratory research using digital technologies PC-4 IAD-5 Should be able to establish the cause of death and a pathoanatomical diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases PC-4 ID-6 Should be able to register the results of a postmortem diagnostic examination of an animal in the autopsy protocol, including using digital technologies	not demonstrated when solving standard tasks, and gross errors occurred	demonstrated, typical tasks with minor errors have been solved, all tasks have been completed, but not in full	have been demonstrated, all the main tasks with minor errors have been solved, all tasks have been completed in full, but some with flaws	been demonstrated, all basic tasks have been solved with some minor flaws, and all tasks have been completed in full	

3. THE LIST OF CONTROL TASKS AND OTHER MATERIALS NECESSARY FOR THE ASSESSMENT OF KNOWLEDGE, SKILLS, SKILLS AND WORK EXPERIENCE

3.1. Typical tasks for the current monitoring of academic performance

3.1.1. On course work:

Professional Competencies (PC):

PC-4 Performing postmortem diagnostic examination of animals in order to establish pathological processes, diseases, causes of death

PC-4id-1 Should be able to collect the anamnesis of the life and illness of the examined animals after death

PC-4id-2 Should be able to perform a general examination of animal corpses before autopsy

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PC-4id-6 Should be able to formalize the results of a postmortem diagnostic examination of an animal in the autopsy protocol, including using digital technologies

PC-4id-7 Know the veterinary and sanitary requirements for the process of opening animals in accordance with the legislation of the Russian Federation in the field of veterinary medicine

PC-4id-8 Know the rules of working with special tools when opening animal corpses

PC-4id-9 To know the methods and techniques of autopsy of animal corpses of various species

PC-4id-10 To know the methodology of sampling and fixation of samples of pathological material for laboratory research in accordance with the rules in this field

PC-4id-11 To know the forms and procedure for drawing up an autopsy protocol for an animal, including using digital technologies.

METHODOLOGICAL RECOMMENDATIONS FOR THE IMPLEMENTATION OF THE COURSE WORK ON THE AUTOPSY OF ANIMALS

Introduction

In the practical work of a veterinary specialist in the diagnosis of various diseases, autopsy of corpses and post-slaughter examination of carcasses and internal organs of animals are of great importance. Pathoanatomical examination (autopsy and post-mortem examination), as an independent method or together with clinical, bacteriological and other studies, makes it possible to diagnose most diseases. A correct and timely pathoanatomical diagnosis in the first cases of death or forced slaughter of animals contributes to the rapid elimination of emerging diseases, as well as the successful treatment of animals and the prevention of infectious and non-infectious diseases. The success of pathoanatomic diagnosis depends on:

• the quality and completeness of the autopsy, ensured by compliance with appropriate methodological techniques;

• a competent and detailed description of organs and tissues, and then the correct classification of the detected pathoanatomical changes;

• the ability to determine the disease (diseases) according to the complex of detected pathoanatomical changes, taking into account the data of anamnesis and laboratory studies, i.e. to make an objective nosological diagnosis (nosos — disease).

The course work on autopsy performed by students should be the result of a complete pathoanatomical examination of a fallen or forcibly killed animal. The work consists of two parts.

1. Autopsy report.
2. Analysis of the disease diagnosed at autopsy.

THE FIRST PART OF THE WORK

The autopsy protocol, as well as the equivalent protocol of post-slaughter examination of the carcass and internal

organs of the killed animal, is drawn up according to the generally accepted scheme.
It should contain the following three sections:

1. Introduction.

The introduction indicates the type of animal, age, gender, nickname, inventory number, to whom it belongs. The circumstances of the autopsy: the time and place of the autopsy, who conducted the autopsy, who was present. Anamnestic data, where it is noted when the animal became ill, the clinical picture of the disease, the epizootic state of the farm (farm), the conditions of care, feeding and keeping of the animal, when and under what circumstances the animal fell. Clinical diagnosis.

2. The descriptive (special) part.

It describes in detail the identification features of the animal (type, breed, gender, age, suit (color), special signs, fatness, weight). Next, there are pathoanatomical changes detected during external and internal examination of the corpse. When describing the detected changes, it is necessary to avoid using special terms.

It is not recommended to use expressions such as "normal", "enlarged", "reduced". It is necessary to specify the size, consistency, color and other objective data about the organ and tissue so that the reader of the protocol has a complete idea of the described organ, about the changes found in it. When describing organs, one should not list what was not found: "without hemorrhages", "without overlays", etc.

3. The final part. It consists of several sections:

1) pathoanatomical diagnosis;

2) the results of additional laboratory tests (if any);

3) conclusion (clinical and anatomical epicrisis).

The pathoanatomical diagnosis *is a list of pathoanatomical changes detected during autopsy, defined by appropriate terms ("purulent mastitis", "fatty liver dystrophy", etc.).*

When making a diagnosis, it is recommended to first note the detected pathoanatomical changes related to the underlying disease, and then to its complications, concomitant and other diseases.

Based on the data of the pathological diagnosis, taking into account the anamnesis, additional laboratory studies, a conclusion is made about the cause of death of the animal.

In conclusion, first of all, the main disease that caused the death is indicated. This disease caused death directly by itself or through any complications (plague, salmonellosis, tuberculosis, leptospirosis, catarrhal purulent bronchopneumonia, etc.).

Often, along with the underlying disease, concomitant diseases and pathological conditions are diagnosed that aggravate the underlying disease and contribute to death; in such cases, their connection with the underlying disease is deciphered in conclusion.

It should be borne in mind that it is not always possible to give a final conclusion on the cause of death of an animal only according to autopsy data without conducting additional studies (histological, bacteriological, chemical and others). In such cases, a preliminary conclusion is made about the disease (diseases) suspected by the results of the autopsy and determine the need for additional research. After conducting additional research, a final conclusion is given.

When drawing up a conclusion, along with the pathoanatomical diagnosis and the results of additional laboratory studies, it is necessary to take into account the clinical signs of the disease and epizootological data.

When writing an autopsy training protocol, the use of printed letterheads is not recommended.

It is advisable to draw up the autopsy protocol (draft) directly during the autopsy at the dictation of the autopsy, since important details may be forgotten when drawing up the protocol from memory.

THE SECOND PART OF THE COURSE WORK

The analysis of the case diagnosed at the autopsy should include the following sections:

a) a brief definition of the underlying disease diagnosed at the autopsy;

b) the clinical and anatomical forms in which this disease manifests itself (along the course, predominant organ damage, etc.);

c) the main elements of pathogenesis;

d) the relationship of pathoanatomical changes detected at the autopsy;

e) the relationship of clinical signs, if any, in the anamnesis, with pathoanatomical changes detected at the autopsy;

(e) The results of additional laboratory tests;

g) diagnosis and differential pathoanatomical diagnosis, taking into account diseases with similar clinical signs and pathoanatomical changes.

At the end of the course work, it is necessary to provide a list of literature that served as a source of information when performing the work.

The quality of the course work is significantly improved by photographs of organs taken during autopsy, or schematic drawings.

AN APPROXIMATE SCHEME OF THE COURSE WORK

A. PROTOCOL OF THE PATHOANATOMICAL AUTOPSY (THE FIRST PART OF THE WORK)

THE INTRODUCTORY PART

1. The title of the document indicating the type of animal, nickname, inventory number, to whom the animal belonged.
2. The time and place of the autopsy, who opened it and who was present.
3. Anamnestic data:

a) brief information about the veterinary and sanitary condition of the farm, nursery, farm or livestock complex; about the conditions of care, maintenance and operation of the animal (animals);

c) the time and duration of the disease of the fallen (killed) animal, brief clinical data on the disease, date of death;

d) clinical diagnosis.

THE DESCRIPTIVE PART.

External inspection.

1. Identification signs: type of animal, gender, breed, age, color, special signs, physique, fatness, weight, body size, architecture of the corpse.

2. Cadaveric changes (cooling, rigor mortis, stage and location of cadaveric spots, putrefactive changes).

3. The condition of visible mucous membranes, natural openings.

Oral cavity: color, gloss, moisture of the mucous membrane, the presence of damage (hemorrhages, overlays, etc.); foreign objects and/or other contents in the cavity (if any). Tongue: color, moisture of the mucous membrane, the presence of damage (hemorrhages, overlays, etc.); consistency, color and pattern of the muscles of the tongue on the incision. Teeth: color, hardness, integrity, quantity, any changes (if any).

Nasal cavity: color, shine, moisture of the mucous membrane, the presence of damage (tumors, hemorrhages, overlays, etc.); color, shine, moisture of the skin on the nasal mirror, the presence of damage (hemorrhages, overlays, etc.); nasal discharge (if any) – quantity, consistency, color, transparency, odor etc.

Anal opening: color, gloss, moisture of the mucous membrane, the presence of damage (tumors, hemorrhages, overlays, etc.); discharge (if any) – quantity, consistency, color, odor, etc.; condition of the coat around.

Eyes: open – closed; color, shine, moisture of the conjunctiva, the presence of damage (hemorrhages, overlays, etc.); color, shine, moisture, transparency, visible changes (hemorrhages, overlays, etc.) of the cornea; discharge (if any) – quantity, consistency, color, transparency, etc.; condition of the wool the skin around the eyes.

Ears: integrity and configuration of the auricles; color, moisture, elasticity of the skin of the inner surface of the auricle, external auditory canal, the presence of damage (hemorrhages, overlays, etc.); discharge (if any) – quantity, consistency, color, smell, etc.

4. Skin, hair (feather, bristles), subcutaneous tissue, subcutaneous vessels, hooves (hooves, claws).

Skin: elasticity, color, damage (hemorrhages, overlays, neoplasms, wounds, erosions, etc.).

Hair (feather, bristles): uniformity of location on the skin, strength of retention in the skin, color, shine, if any – alopecia, pigmentation changes, characteristics of the hair (feather) cover (hair thickness, fragility, etc.).

Subcutaneous tissue: color, shine, moisture, consistency; fat – amount, body surface distribution, color, consistency.

Subcutaneous vessels are mainly blood filling.

Hooves (hooves, claws): consistency, color, gloss, integrity, configuration.

5. Superficial lymph nodes (list): dimensions (in linear units or by indirect signs), configuration, mobility in surrounding tissues, color, consistency, pattern on the incision, humidity, if any, the presence of changes (hemorrhages, nodules, etc.)

6. Mammary glands: symmetry, size of milk bags, development, consistency, color and humidity on the incision; if there is damage (hemorrhages, cysts, nodules, etc.).

7. External genitalia.

External genitalia: color, shine, moisture of the mucous membrane of the prepuce, vulva, the presence of damage (hemorrhages, overlays, etc.); the condition of the coat around; secretions (if any) – quantity, consistency, color, transparency, odor, etc.; testes and appendages in males – size, consistency, mobility in surrounding tissues, color and moisture on the incision, if any – the presence of abnormalities, lesions (hemorrhages, nodules, etc.).

8. Muscles, bones, joints, ligaments.

Muscles: development, color, consistency, pattern on the incision, elasticity, moisture; if there are injuries (hemorrhages, nodules, etc.).

Bones: integrity, hardness, symmetry, degree of development, color; if there are injuries (fractures, neoplasms, etc.).

Joints: mobility, shape; shine, humidity, smoothness, integrity, configuration of articular surfaces; contents of articular bags – quantity, color, consistency, transparency.

Ligaments: color, integrity, elasticity, shine.

Internal examination.

1. Abdominal cavity.

The position of the organs.

Content – quantity, consistency, color, transparency, inclusions.

The condition of the serous integuments is gloss, color, smoothness, transparency, thickness; if there is damage (hemorrhages, overlays, etc.).

The level of the diaphragm dome.

2. The chest cavity.

The position of the organs.

Content – quantity, consistency, color, transparency, inclusions.

The condition of the serous integuments is gloss, color, smoothness, transparency, thickness; if present, damage (hemorrhages, overlays, etc.).

The cavity of the cardiac sac: contents – quantity, consistency, color, transparency, inclusions; condition of the epicardium and pericardium – gloss, color, smoothness, transparency, thickness; if present – damage (hemorrhages, overlays, splices, etc.).

3. Organs of the oral cavity and neck.

Salivary glands: dimensions (linear), color, consistency, pattern on the incision.

Pharynx: color, gloss, moisture of the mucous membrane; if present – damage (hemorrhages, overlays, erosion, etc.); foreign objects, other contents (if present).

Tonsils: dimensions (linear); gloss, moisture, color of the mucous membrane; if present – damage (hemorrhages, overlays, nodules, etc.); consistency, color, pattern, moisture on the incision.

Esophagus: color, gloss, moisture of the mucous membrane; if present – damage (hemorrhages, overlays, etc.); foreign objects, other contents in the lumen (if present). For the content: quantity, consistency, color, transparency, inclusions.

Larynx: gloss, moisture, color of the mucous membrane; if there are changes (hemorrhages, overlays, etc.); foreign objects, other contents (if any). For the content: quantity, consistency, color, transparency, inclusions.

Trachea: integrity of the tracheal rings; gloss, moisture, color of the mucous membrane; if there are changes (hemorrhages, overlays, etc.); foreign objects, other contents in the lumen (if any). For the content: quantity, consistency, color, transparency, inclusions.

Thyroid gland: location, dimensions (linear), shape, symmetry of the lobes, color, consistency, juiciness, pattern on the incision; if there is damage (hemorrhages, nodules, etc.).

Parathyroid glands: location, color, size, shape; if there is damage (hemorrhages, nodules, etc.).

4. Organs of the thoracic cavity.

Thymus (thoracic and cervical lobes): dimensions (linear), location, color, consistency; if present, damage (hemorrhages, nodules, etc.).

Heart: shape; color, consistency, elasticity of the myocardium, pattern on the incision; if there are injuries (hemorrhages, nodules, etc.); thickness of the right and left ventricles (linear dimensions) and their ratio; contents of the chambers of the heart – quantity, color, consistency, gloss, humidity; condition of the endocardium – gloss, smoothness, color, transparency; condition of the valves – thickness, elasticity, gloss, shape; if present – damage (hemorrhages, nodules, etc.).

Blood vessels (aorta, large veins): elasticity of the wall, smoothness, color of intimacy; if present – damage (hemorrhages, nodules, overlays, etc.); contents (blood) – quantity, color, consistency, moisture, elasticity, attachment to the wall.

Lungs: what part of the volume of the chest cavity is occupied; color from the surface and on the incision, consistency, configuration; pattern on the incision, humidity, if any – flowing liquid (quantity, consistency, color, transparency)), buoyancy; if any – damage (hemorrhages, nodules, etc.).

Bronchial and mediastinal lymph nodes: size (in linear units or by indirect signs), configuration, mobility in surrounding tissues, color, consistency, pattern on the incision, humidity; if present, damage (hemorrhages, nodules, etc.).

5. Abdominal organs.

Spleen: edge sharpness (indirect evidence of size), dimensions (linear), color from the surface and on the incision, pulp consistency, scraping, pattern on the incision; if there is damage (hemorrhages, nodules, foci, etc.).

Omentum: fat content – quantity, color, consistency; presence of nodules adhesions , etc .

Liver: edge sharpness (indirect evidence of size), surface condition, color from the surface and on the incision, consistency, pattern on the incision; if present, damage (hemorrhages, nodules, cysts, etc.).

Gallbladder: quantity, color, consistency, transparency of the contents; gloss, color, moisture of the mucous membrane; if present – damage (hemorrhages, overlays, etc.); configuration, wall thickness; patency of the biliary tract.

Kidneys: symmetry of location, size, shape. The condition of the fat capsule is the amount, color, and consistency of fat deposits. Indirect evidence of the size (whether the edges of the incision are folded or not), how the fibrous capsule is removed; color, surface configuration, consistency, on the incision – the clarity of the cortical and medulla pattern, the color and thickness of the cortical and medulla (in linear dimensions or in relation to each other). If there is damage (hemorrhages, nodules, cysts, etc.). Renal pelvis: gloss, color, moisture of the mucous membrane; if present – damage (hemorrhages, nodules, overlays, etc.); contents (if present) – quantity, consistency, color, transparency, odor, etc.

Ureters: thickness, elasticity, color; contents (if any) – quantity, consistency, color, transparency, odor, etc.; gloss, moisture of the mucous membrane; if any – damage (hemorrhages, nodules, etc.).

Adrenal glands: shape, size (linear), consistency, color of cortical and medullary matter, thickness of cortical and medullary matter (in linear dimensions or in relation to each other); if present – damage (hemorrhages, nodules, cysts, etc.).
Pancreas: shape, location, size, lobulation, color from the surface and on the incision, consistency, pattern on the incision, humidity; if present, damage (hemorrhages, nodules, cysts, etc.).
Stomach: configuration; thickness, elasticity of the wall; serous membrane – color, moisture, smoothness; contents – quantity, consistency, color; mucous membrane – folding (folds are straightened or not), color, thickness, gloss, moisture, integrity; if present – damage (hemorrhages, nodules, erosion, etc.); overlays on the surface – whether there is or not, quantity, consistency, color, transparency.
Small and large intestines (by department): anatomical location of the loops; thickness, elasticity of the wall; serous membrane – color, moisture, smoothness; contents – quantity, consistency, color; mucous membrane – folding (folds are straightened or not), color, thickness, gloss, moisture, integrity; if present – damage (hemorrhages, nodules, erosion, etc.); overlays on the surface – whether there is or not, quantity, consistency, color.
Mesentery: how blood vessels are filled; the amount, color, consistency of fat deposits.
Mesentery lymph nodes – size (in linear units or by indirect signs), configuration, color, consistency, pattern on the incision, humidity; if present – damage (hemorrhages, nodules, etc.).
6. Pelvic organs.
Bladder: serous membrane – color, moisture, smoothness; wall – elasticity, thickness; contents – quantity, color, consistency, transparency; mucous membrane – folding (folds are straightened or not), color, thickness, gloss, moisture, integrity; if present – damage (hemorrhages, nodules, erosion, overlays, etc.).
Urethra: patency of urine; thickness, elasticity, color; contents in the lumen (if any) – quantity, consistency, color, transparency, odor, etc.; gloss, moisture of the mucous membrane; if any – damage (hemorrhages, nodules, erosion, etc.).
Lumbar, iliac and pelvic lymph nodes – dimensions (in linear units or by indirect signs), configuration, mobility in surrounding tissues, color, consistency, pattern on the incision, humidity; if present, damage (hemorrhages, nodules, etc.).
Abdominal aorta and its branches: elasticity of the wall, smoothness, humidity, color of intimacy; if present – damage (hemorrhages, nodules, overlays, etc.); contents (blood) – quantity, color, consistency, humidity, elasticity, attachment to the wall.
Uterus: physiological condition; serous membrane – color, moisture, smoothness; muscular membrane – consistency, thickness, pattern on the incision; mucous membrane – folding (folds are straightened or not), color, thickness, shine, moisture, elasticity, integrity; if there is damage (hemorrhages, nodules, erosion, etc.); overlays on the surface – whether there is or not, quantity, consistency, color; contents – quantity, consistency, color, transparency, odor, etc.; diameter of the lumen of the uterine horns. The condition of the cervix (open, closed).
Ovaries: size, configuration, consistency, color, symmetry; if any – damage (hemorrhages, nodules, cysts, etc.).
Fallopian tubes: thickness, elasticity, color; contents (if any) – quantity, consistency, color, transparency, odor, etc.; gloss, moisture of the mucous membrane; if if there are injuries (hemorrhages, nodules, etc.).
Prostate gland: size, configuration, consistency, color, pattern on the incision, humidity; if there are injuries (hemorrhages, nodules, etc.).
7. The skull. Hard and soft meninges. The brain. Frontal, maxillary sinuses, nasal cavity (together with shells).
Skull: symmetry and development of individual parts; hardness, bone color; configuration; if present – damage (hemorrhages, nodules, fractures, etc.).
Hard and soft meninges: blood vessels, color, humidity. For the soft meninges – transparency, thickness. If there is damage (hemorrhages, nodules, etc.). The contents between the membranes and the brain (if any) – quantity, consistency, color, transparency.
Brain: blood filling of vessels, humidity, severity of furrows, consistency, color, pattern on the incision; if present – damage (hemorrhages, nodules, etc.); ventricular contents – quantity, color, consistency, transparency.
Frontal, maxillary sinuses, nasal passages (together with shells) – symmetry, integrity and hardness of the bones that make up the cavity; if there are injuries (fractures, nodules, etc.); contents of the cavities (if any) – quantity, consistency, color, transparency; condition of the mucous membranes of the cavities: color, moisture, smoothness if there is damage.
8. The spine. The spinal cord.
Spine – the location of the vertebral column; integrity, symmetry, consistency of the vertebrae; thickness, elasticity, elasticity, color of the intervertebral discs; uniformity of the lumen of the spinal canal.
Spinal cord: color, consistency, humidity, pattern on the incision; if present – damage (hemorrhages, nodules, etc.).
9. Bone marrow: color, consistency, humidity, ratio of red and yellow bone marrow.

THE FINAL PART.

1. Pathoanatomical diagnosis (enumeration of pathoanatomical changes detected during autopsy, defined by special terms).
2. Additional studies (bacteriological, histological, chemical and others).
3. Conclusion on the death of the animal.

B. ANALYSIS OF THE DIAGNOSED CASE OF THE DISEASE. (THE SECOND PART OF THE WORK)

1. A brief definition of the disease.
2. Etiology.
3. Pathogenesis.

4. The main clinical and anatomical forms of the disease and their pathomorphological characteristics.
5. The relationship of pathoanatomic changes.
6. The relationship of clinical signs and pathoanatomic changes.
7. Diagnosis and differential pathoanatomical diagnosis.

C. THE LIST OF REFERENCES
The signature of the student who completed the course work. Date.

3.1.2. To credit

Emerging competencies:

PC-4id-5 Should be able to establish the cause of death and a pathoanatomical diagnosis in accordance with generally accepted criteria and classifications, lists of animal diseases
PC-4id-6 Should be able to formalize the results of a postmortem diagnostic examination of an animal in the autopsy protocol, including using digital technologies
PC-4id-7 Know the veterinary and sanitary requirements for the process of opening animals in accordance with the legislation of the Russian Federation in the field of veterinary medicine
PC-4id-8 Know the rules of working with special tools when opening animal corpses
PC-4id-11 To know the forms and procedure for drawing up an autopsy protocol for an animal, including using digital technologies.

Questions for the test in the discipline "Sectional course and forensic veterinary medicine"

1. The concept of forensic veterinary medicine and forensic veterinary examination.
2. How and by whom is the forensic veterinary examination appointed?
3. Types of forensic examination.
4. The choice of an expert, an expert institution. The rights and obligations of an expert.
5. The difference between a forensic autopsy and a diagnostic autopsy.
6. Preparation of documents for the judicial autopsy.
7. Determining the prescription of death by postmortem changes.
8. Examination of deaths caused by asphyxia.
9. Examination of the case of death by drowning.
10. Examination of deaths from high temperature (in a fire).
11. Examination of deaths from freezing (cooling).
12. Examination of deaths from the action of electric current.
13. Examination of mechanical damage.
14. Conducting an examination in case of poisoning.
15. Features of forensic examination in cases of death of animals from infectious diseases.
16. Forensic examination in cases of claims for the treatment of animals.
17. Forensic examination in cases of purchase and sale of animals.
18. The importance of medical ethics in conflict prevention.Понятие о судебной ветеринарной медицине и судебно-ветеринарной экспертизе.

4. METHODOLOGICAL MATERIALS DEFINING THE PROCEDURE FOR ASSESSING KNOWLEDGE, SKILLS AND WORK EXPERIENCE CHARACTERIZING THE STAGES OF COMPETENCE FORMATION

Criteria for evaluating students' knowledge during testing:

The test result is evaluated on a percentage rating scale. Each student is offered a set of test tasks consisting of 25 questions:

- Mark "excellent" – 25-22 correct answers.
- Mark "good" – 21-18 correct answers.
- The mark "satisfactory" is 17-13 correct answers.
- Mark "unsatisfactory" – less than 13 correct answers

Criteria of knowledge during the credite:

• The grade "credited" must correspond to the parameters of any of the positive grades ("excellent", "good", "satisfactory").

• The grade "not credited" must correspond to the parameters of the grade "unsatisfactory".

• Mark "excellent" – all types of educational work provided for in the curriculum have been completed. The student demonstrates the compliance of knowledge, skills, and abilities with the indicators given in the tables, operates with acquired knowledge, skills, and applies them in situations of increased complexity. At the same time, inaccuracies, difficulties in analytical operations, transfer of knowledge and skills to new, non-standard situations may be allowed.

• Mark "good" – all types of educational work provided for in the curriculum have been completed. The student demonstrates the compliance of knowledge, skills, and abilities with the indicators given in the tables, operates with acquired knowledge, skills, and applies them in standard situations. At the same time, minor errors, inaccuracies, difficulties in analytical operations, transfer of knowledge and skills to new, non-standard situations may be made.

• Mark "satisfactory" – one or more types of educational work provided for in the curriculum have not been completed. The student demonstrates incomplete compliance of knowledge, skills, and abilities with the indicators given in the tables, significant errors are made, a partial lack of knowledge, skills, and skills is manifested in a number of indicators, the student experiences significant difficulties in operating with knowledge and skills when transferring them to new situations. –

• Mark "unsatisfactory" – the types of educational work provided for in the curriculum have not been completed. demonstrates incomplete compliance of knowledge, skills, and abilities given in the tables of indicators, significant errors are made, a lack of knowledge, skills, and skills is manifested for a large number of indicators, the student experiences significant difficulties in operating with knowledge and skills when transferring them to new situations

Accessibility and quality of education for persons with disabilities

If necessary, persons with disabilities and persons with disabilities are given additional time to prepare an answer for the test.

When conducting the procedure for evaluating the learning outcomes of persons with disabilities and persons with disabilities, their own technical means can be used.

The procedure for evaluating the learning outcomes of persons with disabilities and persons with disabilities in the discipline provides for the provision of information in forms adapted to the limitations of their health and perception of information:

For persons with visual impairments: – in printed form in enlarged font,

– in the form of an electronic document.

For persons with hearing impairments: – in printed form,

– in the form of an electronic document.

For persons with disorders of the musculoskeletal system – in printed form, the device:

– in the form of an electronic document.

When conducting the procedure for evaluating the learning outcomes of persons with disabilities and persons with disabilities in the discipline, it ensures that the following additional requirements are met, depending on the individual characteristics of the students:

a) instructions on the procedure for conducting the assessment procedure are provided in an accessible form (orally, in writing);

b) an accessible form of assignment of assessment tools (in printed form, in printed form in enlarged font, in the form of an electronic document, assignments are read out by the teacher);

c) an accessible form of providing answers to tasks (written on paper, a set of answers on a computer, orally).

If necessary, for students with disabilities and the disabled, the procedure for evaluating the results of training in the discipline can be carried out in several stages.

The procedure for evaluating the learning outcomes of people with disabilities and persons with disabilities is allowed using distance learning technologies.