FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
"AMUR STATE MEDICAL ACADEMY"
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

AGREED
Vice-Rector for Academic Affairs,

_____N.V. Loskutova

April17, 2025

Decision of the CCMC
April17, 2025

ProtocolNo. 7

APPROVED
by decision of the Academic Council of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation
April 22, 2025

Protocol No. 15

Acting Rector of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation

_____I.V. Zhukovets

April 22, 2025

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 50AB2242604E64520B52614FA420034A
Владелец: Жуковец Ирина Валентиновна
Действителен: с 15.04.2025 до 09.07.2026

EDUCATIONAL PROGRAM

disciplines "Forensic Medicine"

Specialty: 31.05.01 General Medicine
Course: 6
Semester: 12
Total hours: 72 hrs.
Total credits: 2 credit units
Control form: test, 12 semester

Blagoveshchensk, 2025

The educational program of the discipline is designed in accordance with the requirements of the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine, approved by order of the Ministry of Education and Science of Russia dated 08/12/2020 No. 988 (registered with the Ministry of Justice of Russia on 08/26/2020 No. 59493), BPEP HE (2021).

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APPROVED at the meeting of the Department of Pathological Anatomy with a course in Forensic Medicine,
Protocol No. 8 dated April 08, 2025

Head of Department, Holder of the Advanced Doctorate in Medical Sciences,
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Conclusion of the Expert Commission on the review of the Educational Programs:
Protocol No. 3 dated April 09, 2025

Expert of the expert commission,
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APPROVED at the meeting of the CMC No. 2:
Protocol No. 7 dated April10, 2025.

Chairman of the CMC No. 2
Holder of the Advanced Doctorate in Medical Sciences,
Associate Professor _____ I.Y. Sayapina

AGREED: Dean of the Faculty of Medicine,
Ph.D. of Medical Sciences

April 17, 2025_____ N.G. Brush

CONTENT

I. EXPLANATORY NOTE

1.1.Characteristics of the discipline

Forensic medicine as an independent science occupies one of the central places among medical and biological disciplines and, according to the Federal State Educational Standard of Higher Education, is included in the basic part of disciplines for graduates of the medical faculty of medical universities.

In Russian medical universities , starting from the first third of the 19th century, forensic medicine was and remains one of the compulsory medical disciplines that make up the training course for a doctor of any specialty. Over the course of a century, training students in forensic medicine in medical universities was, in essence, the only form of training future doctors to perform the complex and responsible duties of a forensic expert. Forensic examination is performed in medical institutions of the state or municipal health care system by an expert of the Bureau of Forensic Medical Examination , and in his absence, by a doctor involved in the examination on the basis of a resolution of the person conducting the inquiry, investigator, prosecutor, or a court ruling .

It is these provisions of the Law that formally make the teaching of forensic medicine mandatory in medical universities, since any doctor must have the necessary minimum knowledge in the field of forensic medicine, since he can be considered a potential expert.

In fact, the role of teaching forensic medicine in the system of training and education of a doctor goes beyond these formal provisions . The course in forensic medicine examines the problems of professional medical ethics and deontology, the responsibility of doctors for professional and professional-official offenses and causing harm to human health; legal provisions on liability for crimes against human life and health , issues of criminal law and procedure related to this area. In the sections of forensic traumatology and examination of sudden death due to diseases , forensic toxicology, issues of diagnostics, morphology, mechano- and thanatogenesis are considered , which are not studied in courses in surgery, traumatology, internal and infectious diseases.

Consequently, the study of forensic medicine by students not only provides the doctor with the knowledge he needs, but also shapes his worldview. In the forensic medicine program for students of medical institutes , which has been in effect since 1995 , it was determined that "... the main goal of training in the subject "Forensic Medicine" is to prepare a general practitioner to perform the duties of a forensic expert on assignment from judicial and investigative bodies and to implement the tasks of Russian healthcare to further improve the quality of medical and diagnostic care for the population."

Long-term practice has shown that these tasks cannot be solved by departments and courses of forensic medicine within the framework of the current curriculum, according to which 80 to 115 academic hours were allocated for the study of forensic medicine in different universities .

These tasks were also in legal conflict (contradiction) with the current regulation , according to which a doctor who has completed a 6-year period of study is not allowed to practice medicine independently until the end of a one-year internship.

Primary postgraduate specialization in forensic medicine after completion of a six-year period of study, as well as advanced training in forensic medicine, will be conducted according to special programs. In connection with the above, the main goal of teaching forensic medicine should be to teach students theoretical and practical issues of forensic medicine to the extent necessary for the successful performance of a specialist's duties in the production of initial investigative actions, familiarizing them with the morphological features of the course of pathological processes in mechanical trauma and some extreme conditions (terminal conditions, death and cadaveric changes, poisoning, mechanical asphyxia), legal regulation and organization of forensic medical examination, issues of physician liability for causing harm to health, professional and professional-official offenses.

If we keep in mind the ultimate goals that domestic forensic medicine serves, then we can with full justification state its important social significance in the fight against crimes against life and health, in the prevention of injuries, intoxications, sudden death, as well as in improving the quality of health care and educating physician ethics.

The general objective of teaching and studying forensic medicine is to teach students - future doctors - to independently perform the most common types of forensic medical examination: examination of a corpse and examination of victims, which is assigned to any doctor by the criminal legislation of the Russian Federation.

The current legislation on healthcare in the Russian Federation provides for the functioning of forensic medical examination in the healthcare system. The implementation of this function is the practical implementation of forensic science, which, based on the constitutional rights of citizens of the Russian Federation to health protection and judicial protection from attacks on life and health, fulfilling the norms of criminal and civil legislation, is based on the content and progressive development of theoretical and practical medical disciplines, purposefully serves higher medical education and the ethical and deontological education of students in the aspect of their future activities as doctors.

Forensic medicine is an independent medical science that studies a certain range of issues arising in the practice of justice and health care agencies.

Based on these provisions, forensic medicine in the Russian Federation is a science that represents a combination of knowledge and research in the field of natural science, medicine, physics, chemistry and medical forensics, purposefully aimed in its development, improvement and practical application at implementing the tasks of justice and health care. Particular tasks of studying forensic medicine are included in the "List of Practical Skills" for each section of the program.

Due to the fact that forensic medicine is based on the basic data of anatomy, histology, physiology, pathological anatomy, microbiology, radiology, surgery, traumatology, therapy and is supplemented by the achievements of all other medical disciplines: medical and biological sciences, physics and chemistry. Its teaching is provided for in the 6th year of higher medical educational institutions. Moreover, the basics and achievements of other sciences included in the scope of forensic medicine are transferred to its field not mechanically, but are theoretically studied, developed and specifically improved for effective implementation in the system of law enforcement agencies and health care. Specific types of connections of forensic medicine with sections and chapters of other disciplines are given below, in the last section of this work program.

The work program of the discipline consists of one module: **module –** Forensic Medicine.

Forensic medicine classes are held in the 12th semester: 52 hours of practical classes and 20 hours of lectures.

1.2. GOALS AND OBJECTIVES OF THE DISCIPLINE

The purpose of the discipline : Providing the student with the necessary information to acquire knowledge in the field of forensic medicine, taking into account his further education and professional activity in the specialty "Forensic Medicine":

- training, acquisition and improvement of the level of theoretical and practical knowledge on issues of forensic medicine to the extent necessary for independent work in the position of a general forensic expert in the performance of the duties assigned to him;
- ensuring a modern level and high quality of forensic medical examinations ordered by law enforcement agencies;
- familiarization with the morphological features of the course of pathological processes under various types of external influences and extreme conditions;
- acquisition of knowledge concerning the legal regulation of the work of a forensic expert (specialist) and the organization of forensic medical examination.

Objectives of the discipline:

- to study the main sections of forensic science and, above all, the mechanical and morphogenesis of injuries and processes - objects of forensic examination, legal and medical aspects of establishing a person's death, establishing the time limitation - the onset of death, the time limitation and sequence of the formation of injuries, their intravital or posthumous origin;
- know the principles of organization and legal regulation of the production of forensic medical examinations in the Russian Federation, the structure of state forensic medical institutions;
- know the rights, duties and responsibilities of a doctor involved as a specialist in investigative actions and legal proceedings;
- to master the basic methods of research of objects of forensic medical examination, the diagnostic capabilities of the structural divisions of the forensic medical examination bureau, where these studies can be carried out;
- study the requirements for the documentary preparation of forensic medical examinations;
- understand the tasks of a doctor in the event of his involvement in the examination of a corpse or a crime scene , the methods and techniques for identifying material evidence of biological origin, the rules for their removal, packaging and sending for examination to the appropriate forensic laboratory;
- to teach how to apply information and communication technologies in forensic activities.

1.3. PLACE OF DISCIPLINE IN THE STRUCTURE OF THE BASIC PROFESSIONAL EDUCATIONAL PROGRAM OF HIGHER EDUCATION

In accordance with the Federal State Educational Standard of Higher Education, the specialty 31.05.01 General Medicine (2020) the discipline "Forensic Medicine" refers to the basic part of block 1 and is taught in the 6th year of the 12th semester. The total workload is 72 hours (2 ZE).

1. 4. Requirements for students

To study the discipline, knowledge, skills and abilities formed by previous disciplines/practices are required (entrance control of the level of students' preparedness):
Latin
Knowledge **:** basic medical and pharmaceutical terminology in Latin.
Skills: be able to apply knowledge for communication and obtaining information from medical literature, medical documentation. (II - III level) ***Skills:*** Proficiency in Latin to obtain and interpret medical data.
Professional foreign language
Knowledge: basic medical and pharmaceutical terminology in a foreign language. (II - III level)
Skills **:** be able to apply knowledge for communication and obtaining information from foreign sources. ***Skills:*** Proficiency in a professional foreign language to obtain and interpret medical data.
History of Medicine
Knowledge: outstanding figures in medicine and health care, Nobel laureates, outstanding medical discoveries in the field of morphology and pathological anatomy, the influence of humanistic ideas on medicine (II - III level)
Skills: be able to competently and independently present and analyze the contribution of domestic

scientists to the development of forensic medicine. ***Skills:*** Analysis and interpretation of received information on the contribution of scientists to the development of forensic medicine
Bioethics
Knowledge: moral and ethical standards, rules and principles of professional medical conduct, rights of the patient and the doctor, basic ethical documents regulating the activities of the doctor. (II - III level), deontological aspects of pathological anatomy
Skills: be able to build and maintain working relationships with relatives of the deceased, patients, colleagues, and other team members. ***Skills:*** maintaining professional relationships within the work team and with relatives
Histology
Knowledge: embryogenesis of tissues and organ systems, histological structure and function of all cells and tissues of the body. Compensatory and adaptive processes (regeneration) of organs and tissues. (II - III level)
Skills: be able to determine age-related patterns of development of organs and tissues of the body, know the normal structure of cells, tissues, organs, analyze the results of histophysiological research, sketch the normal structure of cells and tissues of the body, work with a light and electron microscope, taking into account safety regulations. ***Skills:*** interpretation of cytological and morphological findings.
Microbiology with virology
Knowledge: classification, morphology and physiology of microorganisms. Microbiological diagnostics of infectious diseases. (II level)
Skills: be able to analyze the results of microbiological diagnostics of infectious diseases; work with a light and electron microscope, taking into account safety regulations. ***Skills:*** interpretation of microorganisms and determination of their influence on the pathological state of the organism.
Modern problems of regeneration
Knowledge: biological essence, main forms and phases of the main types of regeneration - physiological, reparative and pathological; general ideas about the possibility of stimulating regenerative processes occurring in the body; main types of stem cells, sources of their production, application in medicine. (II - III level).
Skills: be able to analyze the patterns of physiological, reparative and pathological regeneration. ***Skills:*** determining the regeneration of the body depending on age and its pathology.
Physics, Mathematics. Medical informatics. Medical biophysics
Knowledge: mathematical methods for solving intellectual problems and their application in medicine; theoretical foundations of computer science, collection, storage, search, processing, transformation, distribution of information in medical and biological systems, use of information computer systems in medicine and healthcare; principles of operation and design of equipment used in medicine, fundamentals of physical and mathematical laws reflected in medicine. (II - III levels).
Skills: be able to use educational, scientific, popular science literature, the Internet for professional activities, work with equipment taking into account safety regulations **.** ***Skills:*** knowledge of modern technical support equipment.
Chemistry. Bioorganic chemistry in medicine
Knowledge : chemical and biological essence of processes occurring in a living organism at the molecular and cellular levels (II - III level).
Skills : be able to analyze the contribution of chemical processes to the functioning of organs and systems of the body. ***Skills:*** interpretation of chemical and chemical-biological processes in the body and their pathology.

Biochemistry
Knowledge: structure and biochemical properties of the main classes of biologically important compounds, the main metabolic pathways of their transformation; the role of cell membranes and their transport systems in metabolism. (II - III levels).
Skills: be able to analyze the contribution of biochemical processes to the functioning of organs and systems of the body, interpret the results of the most common laboratory diagnostic methods. ***Skills:*** interpretation of biochemical research results.
Biology
Knowledge: Anatomical and physiological features of organs and systems of the body. Features of blood supply and innervation of organs and systems (II - III level). Age and constitutional features of the body. Embryogenesis.
Skills: be able to analyze age- and gender-related features of the structure of organs and systems. ***Skills*** : know how to determine a person's age.
Normal Physiology
Knowledge **:** Neuroendocrine regulation of biological processes in the human body. Physiology of organs and systems of the body. (II - III level)
Skills : be able to analyze the importance of regulation of biological processes in the human body on the functioning of all organs and systems. ***Skills:*** identifying normal and pathological functioning of organs and systems.

1.5. Requirements for the results of mastering the discipline

List of competencies formed as a result of mastering the discipline

The study of the discipline "Forensic Medicine" is aimed at the formation of the following competencies: universal (UK), general professional (GPK).

No. p/p	Code and name of competence	Code and the name of the indicator of achievement of competence	As a result of studying the academic discipline, the student must:		
			Know	Be able to	To own
Universal competencies					
1	**UK-1.** Capable of carrying out a critical analysis of problematic situations based on a systems approach and developing an action strategy	**ID UK-1.1.** Analyzes a problem situation based on a systems approach. **ID UK-1.2.** Develops and argues a strategy for solving problematic situations based on a systemic and interdisciplinary approach. **ID UK-1.3** . Identifies problems in the information needed to solve problem situations and designs processes to resolve them. **ID UK-1.4** . Applies systems analysis to resolve problematic situations in the professional sphere. **ID UK-1.5.** Uses logical and methodological tools for critical evaluation of modern concepts of a philosophical	- theoretical foundations of forensic medicine - Basic statistical methods for solving intellectual problems and their application in medicine and health care.	- use forensic medicine methods; - analyze the information received and draw the main conclusions and inferences from it;	- terminology related to forensic medicine; - skills in solving situational problems in all sections of the discipline; - the main scientific methods of cognition: observation, description, measurement, experiment;

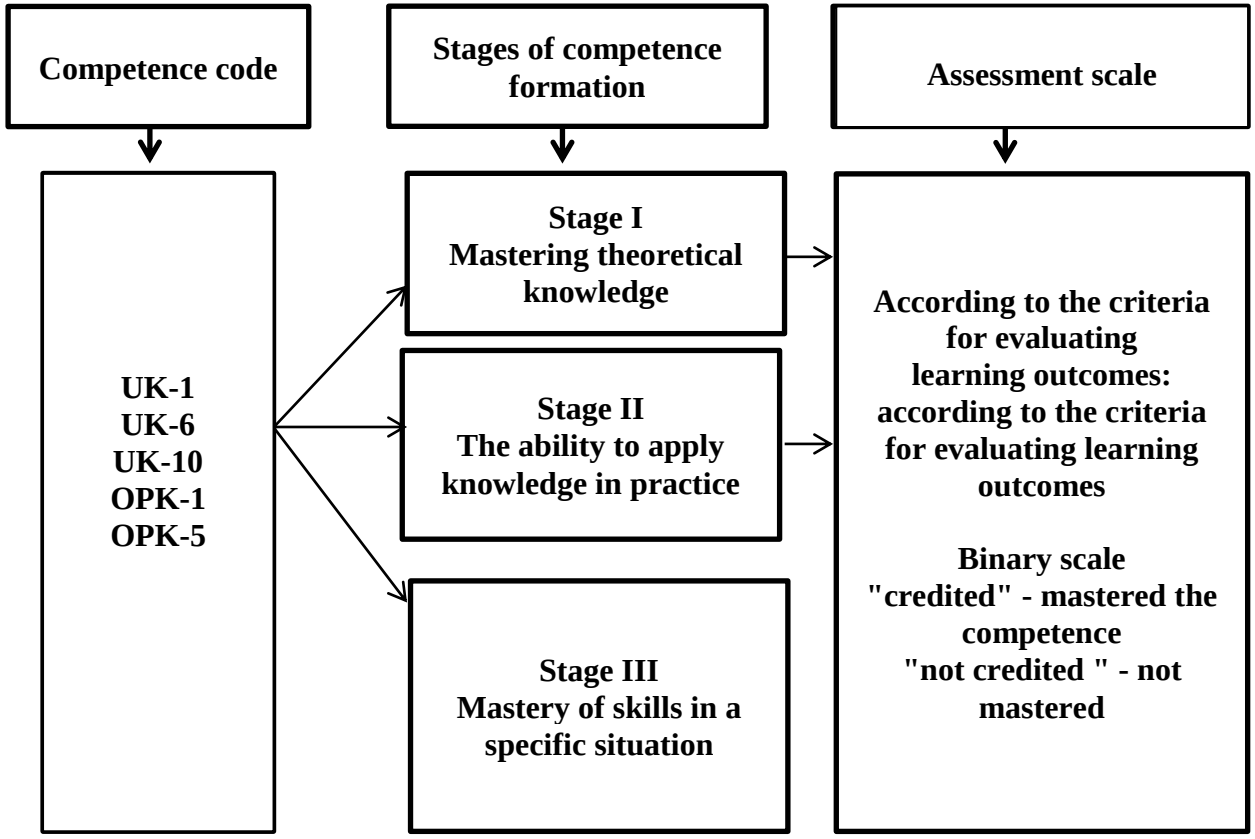
		and social nature in his subject area. **ID UK-1.6.** Critically evaluates the reliability of information sources.			
2	**UK-6** Capable to define and implement priorities for one's own activities and ways to improve them based on self-assessment and lifelong learning	**ID UK-6.1.** Assesses his personal, situational, time resources and uses them optimally to complete the assigned task. **ID UK-6.3.** Carries out critical self-analysis of the results of one's own activities.	- the main approaches to the formalization and structuring of various types of medical data used to form decisions during the treatment and diagnostic process.	- analyze the information received and draw the main conclusions and inferences from it;	- terminology related to forensic medicine.
3	**UK-10.** Able to make informed economic decisions in various areas of life	**ID UK-10.1.** Understands the basic principles of how the economy functions. **ID UK - 10.2.** Applies economic knowledge when performing practical tasks . **ID UK-10. 4 .** Analyzes socio-economic problems, is an active subject of social activity ready to perform	- main socio-economic problems .	- analyze the impact of socio-economic factors on mortality rates	- basic concepts in the field of forensic medicine;

		work functions, in accordance with the requirements of the professional standard .			
General professional competencies					
4	**OPK-1.** Able to implement moral and legal norms, ethical and deontological principles in professional activities	**ID OPK-1.1.** Carries out professional activities in accordance with ethical standards and moral principles. **ID OPK-1.2.** Organizes professional activities, guided by legislation in the field of health care, knowledge of medical ethics and deontology. **ID OPK-1.3.** Has the skills of presenting an independent point of view, analysis and logical thinking, public speaking, moral and ethical argumentation, conducting discussions and round tables, principles of medical deontology and medical ethics.	- moral and ethical standards and principles in the work of a forensic expert; - regulatory documents on issues of medical ethics and deontology.	- carry out professional activities in accordance with the norms of medical ethics and moral principles; - conduct discussions with colleagues in compliance with the principles of medical deontology and medical ethics	- concepts of medical ethics and deontology;

5	**OPK-5.** Capable of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	**ID OPK-5.1** . Knows the functional systems of the human body, their regulation and self-regulation when interacting with the external environment in normal conditions and during pathological processes. **ID OPK-5.2** . Knows the etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, and the basic concepts of nozoology . **ID OPK-5.3** . Knows the indicators of the morphofunctional and physiological state of a healthy person and can measure/determine them. **ID OPK-5.5.** Analyzes macroscopic and microscopic changes in normal and pathologically altered tissues and organs. **ID OPK-5.6** . Interprets the results of biopsy and surgical material studies to solve professional problems and formulate a	- Functional systems of the body in normal and pathological conditions - etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, basic concepts of nozoology . - indicators of the morphofunctional, physiological state of a healthy person	- analyze changes in normal and pathological tissues and organs .	- Draw conclusions based on the results of macroscopic and microscopic studies

		diagnosis in accordance with the ICD			

1.6. Stages of competencies formation and description of assessment scales



1.7. Forms of training organization and types of control:

Forms of organization of students' education	Types of control
• Lectures • Practical classes • Interactive forms: (interactive survey, solving situational problems, discussions, small group method, peer review of expert opinions, abstracts, etc.). • Participation in the research work of the department, scientific societies and conferences	*Current control:* - frontal survey (oral or written); - testing; - checking homework; - solving situational problems; - checking the student's independent work of choice; - checking the acquisition of practical skills (interview on situational tasks, interpretation of micro- and macropreparations) *Interim assessment:* -Credit (interview on theoretical issues, description of a macroscopic specimen, drawing up conclusions and findings) – 12th semester

Explanation:

Students receive theoretical knowledge of the discipline at lectures, practical classes, and by participating in the department's research work. During practical classes, the material learned is consolidated and monitored. In order to implement the competency-based approach, along with traditional teaching methods, active and interactive forms of classes are provided in the form of discussions, solving situational problems, trainings to develop practical skills, and role-playing games. In particular, when solving situational problems, an element of competition is introduced, encouraging students to be more active. The student or group of students who are the first to suggest the correct solution to the problem are encouraged to receive a higher grade for the class.

Types of control over the process of developing competencies:

- current: oral survey, interview, checking protocols of practical classes, control over the implementation of practical work on sketching micropreparations, test control, solving situational problems, describing macropreparations. Traditional forms of control allow checking the assimilation of educational material by students.

- midterm assessment: oral survey, test control, practical skills.

The level of a student's mastery of practical skills is assessed during the course of practical work, in final classes, including the final class on practical skills .

2. STRUCTURE AND CONTENT OF THE DISCIPLINE

2.1 SCOPE OF THE DISCIPLINE AND TYPES OF STUDY WORK

TYPES OF STUDY WORK	Total hours	Semester
Lectures	**14**	**12**
Practical classes	**34**	**12**
Independent work of students	**24**	**12**
Total labor intensity in hours	**72**	
Total workload in credit units	**2**	

2 .2 Thematic plan of lectures and their content

No. p\p	Lecture topics	Codes of formed competencies	Labor intensity (hour.)
1	Lecture No. 1 "A Brief History of the Development of Forensic Medicine. Procedural and Organizational Foundations of the Forensic Medical Service in the Russian Federation." Lecture content: The concept of forensic medicine and forensic medical examination. Brief history of the development of forensic medicine. Objects of forensic medical research. Procedural and organizational foundations of the forensic medical service in the Russian Federation. Forensic medical documentation.	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
2	Lecture No. 2 "Forensic thanatology". Lecture content: Definition of the concept of death. Dying and death, terminal conditions. Certification of the onset of death. Forensic classification of death. Early and late cadaveric changes and their forensic significance. Principles of making a forensic diagnosis.	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
3	Lecture No. 3 "General issues of forensic traumatology" Lecture content: Forensic and legal definition of bodily injuries. Basic classifications of bodily injuries. Injuries caused by blunt hard objects. Types of blunt hard objects, their mechanisms of action and the nature of the bodily injuries they cause. Injuries caused by sharp objects, classification of sharp objects, their mechanisms of action and the characteristics of the injuries they cause. Determination of the instrument of injury based on the characteristics of the injuries.	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**

4	Lecture No. 4 "Forensic medical examination in complex trauma" Lecture content: Forensic medical examination of injuries in cases of falls on a plane and from various heights. Automobile injury, its classification, mechanisms of occurrence and forensic medical diagnostics. Railway injury, its classification, mechanisms of formation and forensic medical diagnostics. Features of conducting a forensic medical examination in case of an aviation injury. Features of conducting a forensic medical examination in case of an injury on water transport.	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
5	Lecture No. 5 "Forensic examination of gunshot wounds" Lecture content: Definition of gunshot injuries. Classification of firearms and ammunition. Damaging factors of a shot and mechanisms of formation of gunshot injuries. Establishing the direction of the wound channel, the distance of the shot, the type of firearm and the sequence of shots. Features of gunshot injuries when shots are fired from smoothbore weapons and special-purpose bullets. Features of gunshot injuries when shots are fired from atypical weapons.	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
6	Lecture No. 6 "Forensic medical examination in cases of death from mechanical asphyxia" Lecture content: Definition of mechanical asphyxia. Classification of mechanical asphyxia. Pathophysiology of mechanical asphyxia. General asphyxial signs. Strangulation mechanical asphyxia. Obstructive mechanical asphyxia. Compression mechanical asphyxia. Mechanical asphyxia from lack of oxygen in the inhaled air (when entering a confined space). Drowning, its types. Forensic diagnostics of drowning. Signs of a corpse's stay in water. Determining the duration of a corpse's stay in water.	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
7	Lecture No. 7 "Forensic medical examination in cases of exposure to physical factors on the body"	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**

	Lecture content: Damage and death from exposure to high or low temperatures. Forensic medical examination in cases of death from exposure to atmospheric or technical electricity. Forensic medical examination in cases of death from exposure to high or low atmospheric or barometric pressure. Forensic medical examination in cases of exposure to ionizing radiation.		
8	Lecture No. 8 "Forensic Toxicology" Lecture content: The concept of poisons and intoxications. Classification of poisons. Conditions of action of poisons on the body. Toxicodynamics . Forensic diagnostics of poisoning. Ethyl alcohol poisoning. Effect of ethyl alcohol on the body. Forensic diagnostics of death from alcohol poisoning. Forensic diagnostics of alcohol intoxication on a corpse.	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
9	Lecture No. 9 "Fundamentals of forensic examination of material evidence" Lecture content: Fundamentals of forensic examination of material evidence. Identification and seizure of material evidence at the scene of the crime and during examination of a corpse. Issues resolved during examination of blood and its traces. Issues resolved during examination of other objects (sperm, hair, saliva stains, sweat, etc.).	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
10	Lecture No. 10. Forensic outpatient examination. Lecture content: Rules for conducting forensic outpatient examination, reasons for conducting examination. Rules for determining the severity of harm to health. Controversial sexual conditions and sexual crimes. Examination based on medical documents	UK-1, UK-6, UK-10, OPK-1, OPK-5	**1.4**
Total hours			**14**

2.3. Thematic plan of practical classes

No. p/p	Name of practical topics Occupations	Contents of practical classes	Codes being formed competencies and indicators their achievements	Types control	Labor intensity (hours)
1.	Forensic thanatology.	**Theoretical part:** The doctrine of death. Dialectical unity and opposition of the processes of life and death. Terminal states and their forensic significance. Clinical and biological death, its initial signs and their definition. The period of vegetative life. Reliable signs of death. The rate of dying. Morphology of acute (rapid) death and agonal . Use of cadaveric organs and tissues for transplantation. Legal, moral, ethical and medical aspects of resuscitation and transplantation. Forensic assessment of possible injuries during resuscitation. The concept of the cause of death. The cause and genesis of death in light of the doctrine of dialectical materialism on causality. Forensic classification of death. Violent and non-violent death. Type of violent death: murder, suicide, accident. Death suspicious of violence. Sudden and sudden death. Cadaveric changes. Changes occurring in organs and tissues after death and their forensic significance. Reaction of skeletal muscles to	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey testing in the Moodle system Checking the notes	3.4

		mechanical and electrical stimulation. Reaction of the pupil to chemical stimulation. Other supravital reactions and their significance in determining the time of death. Examination of the body at the place of its discovery **Practical part:** completing exercises and assignments based on a model, working with scientific, medical and reference literature, drawing up protocols.			
2.	Forensic examination (examination of a corpse)	**Theoretical part:** Reasons for forensic examination (research) of a corpse. Tasks of forensic examination (research) of a corpse and its difference from pathological autopsy. "Rules of forensic examination (research) of a corpse". Research technique. Documentation of forensic examination (research) of a corpse. Features of examination (research) of corpses of unknown persons and dismembered corpses. Features of examination of skeletonized corpses and bone remains. Methods of establishing the identity of a corpse. Features of autopsy of a corpse in case of suspected damage by radioactive substances and combat toxic substances. Repeated examination of a corpse. Exhumation. Examination of an exhumed corpse. Restoration of corpses. Questions for examination and their resolution in the main types of violent death. Establishing the causes and	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10 : ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		genesis of death. Establishing the external factor and the conditions of its impact. Distinguishing between intravital and postmortem injuries. Ability to act in case of fatal wounds. Forensic medical examination of corpses of persons who died in medical institutions. Principles of construction and formulation of forensic medical diagnosis and expert conclusions. Clinical and anatomical conferences. Sudden and sudden death and its causes. Conditions that contribute to sudden and sudden death. The most common diseases that lead to sudden and sudden death at different ages. Forensic diagnostics of sudden and untimely death. Laboratory methods of research. The importance of forensic medical examination materials of sudden and untimely death for improving the quality of medical and preventive care for the population. **Forensic examination (research) of corpses of newborns** Main issues resolved during examination of newborn corpses. Establishing neonatal status, full-term status , maturity, live birth , viability and life expectancy after birth. Peculiarities of neonatal autopsy technique. Causes of non-violent death of fetuses and newborns before birth, during birth, after birth. Violent death, its causes. Infanticide. Social conditions for eliminating infanticide. Methodological and ideological issues.			

		Study of patterns of intra-nosological and inter-nosological cause-and-effect relationships in the process of establishing the underlying disease (damage), complications of the underlying disease (damage), immediate cause of death, background disease, and other associated nosological units. **Practical part:** completing exercises and assignments based on a model, working with macropreparations, scientific, medical and reference literature, drawing up protocols.			
3.	Forensic traumatology	**Theoretical part:** Definition of the concept of bodily injury. Basic classifications of injuries (by damaging factor, nature and severity). Traumatism and its types. Causes of traumatism. The importance of forensic medical examination materials in the prevention of various types of traumatism. Mechanical injuries and their morphological characteristics: abrasions, bruises, wounds, dislocations, fractures, ruptures and detachments of organs, crushing , separation and crushing of body parts. Complications of injuries. Syndromes of prolonged crushing and positional compression. Exacerbation of existing diseases due to trauma. Tasks and methods of research in forensic medicine of injuries. Main questions resolved during examination of mechanical injuries. Blunt hard object injuries	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		Types of blunt hard objects. Mechanisms of action of blunt hard objects on the human body and the nature of damage caused by them. Damage caused by parts of the human body (hand, foot, teeth). Damage caused by objects in the hands of a person. Possibilities of determining the type of blunt object and its mechanism of action based on the characteristics of the damage. Injuries caused by falling. Injuries caused by falling on flat surfaces and from different heights. Their differences from injuries caused by blunt objects. **Transport injury** General characteristics of modern traffic injuries. The importance of forensic medical examination in investigating traffic accidents. Automobile trauma and its types. Mechanisms of formation and features of injuries in the main types of automobile trauma. Features of inspection of the scene of a traffic accident and forensic medical examination of automobile trauma. Motorcycle injury. Tractor injury. Railway injury, its types, nature of damage. Injuries on water transport. Aviation trauma and its types. Features of forensic medical examination and its importance for determining the causes of aviation accidents. **Injuries from sharp objects** Definition and classification of sharp objects. Mechanisms of damaging action of cutting, piercing, piercing-cutting, chopping and			

		sawing objects. Morphological features of cut, pierced, pierced-cut, chopped and other injuries. Possibilities of establishing sharp objects and their mechanisms of action based on the characteristics of injuries. **Practical part:** performing exercises and tasks according to the model, working with macro preparations, scientific, medical and reference literature, drawing up protocols.			
4.	Gunshot injuries	**Theoretical part:** Firearms and their types. Ammunition. Shot mechanism. Damaging factors of a shot. Mechanism of action of a firearm projectile on clothing, tissues and organs. Signs of injuries from a shot at various distances. Signs of a point-blank shot. Traces of a "close" shot on clothing and the body, their meaning and methods of recognition. Bullet wounds from a "non-close" distance. Through and through bullet wounds. Recognizing entry and exit bullet wounds, determining the direction of the wound channel in the body. Blind and tangential wounds. Detecting a bullet and its meaning. Establishing the shooting distance. Features of gunshot injuries when shooting through an obstacle, with deformed and exploded bullets. Shotgun (buckshot) projectile damage. Blank cartridge firing damage. Damage from	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		atypical, homemade and pneumatic weapons. Determining the number and sequence of gunshot damage. Possibilities of determining the type of weapon by the properties of damage.			
5.	Forensic examination in cases of death from mechanical asphyxia	**Theoretical part:** The concept of hypoxia and mechanical asphyxia. Types of mechanical asphyxia. General characteristics of the course of mechanical asphyxia, its signs revealed during the examination of a corpse. Strangulation asphyxia: hanging, strangulation with a noose, strangulation with hands, compression of the neck with hard objects. Nooses and their types, variants of location on the neck. Genesis of death with compression of the neck with a noose. Strangulation groove in hanging and strangulation with a noose. Determination of the vitality of the strangulation groove. Forensic diagnostics of strangulation with hands. Compression asphyxia: compression of the chest and abdomen. Genesis of death with compression of the chest and abdomen. Morphological features of this type of asphyxia. Obstructive asphyxia: closure of the mouth and nose, the lumen of the respiratory tract by foreign objects, loose bodies, gastric contents, blood. Drowning, its types. Recognizing drowning. Death in water not related to drowning. Damage	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		on corpses taken from water. Determining the duration of a corpse's stay in water. Death in a confined space with a lack of oxygen. **Practical part:** completing exercises and assignments based on a model, working with scientific, medical and reference literature, drawing up protocols.			
6.	Forensic toxicology	**Theoretical part:** The concept of poisons. Forensic classification of poisons. Poisonings and their origin. The dependence of the course of poisoning on the properties of the poison, the conditions of its introduction into action, as well as the individual characteristics of the body. Routes of introduction of poisons into the body. Toxicodynamics of the effect of poison on the body, changes and excretion of poisons. Addiction to poisons. The course of poisoning. Drug addiction, toxicomania, alcoholism. Features of the crime scene inspection in case of suspected death from poisoning. Forensic medical recognition of poisoning. Issues arising during poisoning examination. The main stages of forensic medical examination of poisoning: analysis of case materials and medical documents, examination of the corpse, laboratory tests. Taking material for forensic chemical, biochemical, histological, botanical and other studies and evaluation of their results.	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6 , UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		Characteristics of fatal poisoning: acids and alkalis; salts of heavy metals and arsenic; carbon monoxide and other poisons that change hemoglobin; ethylene glycol, dichloroethane and other technical liquids; organophosphorus and other pesticides; medicinal products. Poisoning with ethyl alcohol and alcohol-containing liquids. Effect of ethyl alcohol on the body. Drunkenness and alcoholism. Measures to combat alcoholism. Toxicokinetics of ethyl alcohol. Forensic diagnostics of death from alcohol intoxication. The importance of quantitative determination of alcohol in blood, urine and other fluids, organs and tissues for diagnostics of poisoning. Poisoning with methyl alcohol. Food poisoning. Forensic examination in connection with food poisoning. **Practical part:** completing exercises and assignments based on a model, working with scientific, medical and reference literature, drawing up protocols.			
7.	Forensic medical examination in cases of exposure to physical factors on the body	**Theoretical part:** Damage from exposure to high and low temperatures Local and general effects of high temperature. Burns. Burn disease. Outcomes of burns. Issues to be resolved during burn examination. Determination of the damaging	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the	3.4

		factor, area and extent of burns. Examination of corpses found in the fire. Determination of the vitality of flame action. Cremation of corpses. General effects of high temperature on the body. Heat stroke and sunstroke. General and local effects of low temperature. Death from hypothermia and its signs on the corpse. Conditions that contribute to death from hypothermia. Freezing of the corpse. **Damage from other physical factors** Electrical injury. The mechanism of action of electric current on the body. Conditions affecting the outcome of electrical injury. Morphology of electrical injury: electrical marks , electrical burns, mechanical damage. Genesis of death in electrical injury. Features of inspection of the scene of the incident and forensic medical examination in cases of electrical injury. Lightning strike. Effect of increased and decreased pressure of the gas environment on the body. Decompression sickness. Barotrauma. Body compression. Health disorders and death due to changes in partial pressure of gases. Effect of ionizing radiation on the body. Radiation sickness. Features of corpse examination. **Practical part:** completing exercises and assignments according to the model, working with scientific, medical and reference literature, drawing up protocols.		notes	

8.	Forensic examination of victims, defendants and other persons	**Theoretical part:** Reasons for forensic medical examination of victims, accused and other persons, its organization and implementation. Expertise to determine the severity of bodily injuries. Legal classification of bodily injuries by their severity. Criteria for serious, less serious and minor bodily injuries. "Rules for forensic determination of the severity of bodily injuries" (1978). Methodology for conducting an examination. Main issues resolved by the examination. Expertise of the state of health, simulation, aggravation, dissimulation, disaggravation , artificial diseases, self-harm and self-mutilation. The importance of this type of examination of medical documents, investigative materials, examination of material evidence and reproduction of the conditions under which the injury was caused. Expertise regarding infection with venereal diseases. Age examination, reasons for examination. Signs for determining age, examination methods. Examination to establish pregnancy, previous births and abortions. Criminal abortion. Main methods of performing a criminal abortion. Features and importance of examining the scene of an incident in connection with an extra-hospital abortion. Methodology for examining women with suspected criminal abortion. Forensic diagnostics	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		of death during a criminal abortion. Crimes against sexual integrity. Examination in cases of rape and indecent acts against minors. Examination in cases of suspected sodomy.			
9.	Forensic examination of biological evidence.	**Theoretical part:** The concept of material evidence. Material evidence subject to forensic medical and forensic chemical examination. Identification, seizure of material evidence, its packaging and sending for examination. Blood and blood traces examination. Classification of blood traces by form and mechanism of their formation. Principles of determining the presence of blood, its gender, species and group specificity. Other issues resolved during blood examination. Forensic blood examination in cases of disputed paternity, maternity and child substitution. "Genetic fingerprinting". Principles and possibilities of examination of sperm and seminal stains, saliva, hair and other biological objects. Issues resolved during examination. Forensic cytological studies. Physical and technical studies. Study of "overlays". Reasons for appointing examinations based on case materials. Objects of examinations: medical documents, forensic experts' reports, protocols of inspections of crime scenes,	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		interrogations, etc. Organization and methods of conducting examinations based on case materials. **Practical part:** completing exercises and assignments based on a model, working with macropreparations, scientific, medical and reference literature, drawing up protocols.			
10.	Medical deontology and responsibility of medical workers for professional and official violations	**Theoretical part:** Legal and moral-ethical norms regulating the relationship between a doctor and a patient. Professional duties and rights of medical and pharmaceutical workers. Medical ethics and deontology. The role of medical ethics in educating the humanistic morality of a doctor. The Hippocratic Oath. Consequences of violations of deontological principles by medical workers . Iatrogenic diseases. Professional and professional-official offenses of medical and pharmaceutical workers and responsibility for them under the criminal legislation of the Russian Federation (crimes, careless actions). Medical errors and accidents in medical practice. Organization and conduct of examinations in cases of criminal liability of medical personnel. Limits of competence of the expert commission on these cases. Use of materials from these examinations in improving the quality of medical and preventive care for the population.	UK-1 : ID – 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, UK-6: ID – 6.1, 6.3, UK-10: ID – 10.1, 10.2, 10.4, OPK-1: ID – 1.1, 1.2, 1.3, OPK-5: ID – 5.1, 5.2, 5.3, 5.5, 5.6	Frontal survey Solving situational problems testing in the Moodle system Checking the notes	3.4

		Practical part: completing exercises and assignments based on a model, working with scientific, medical and reference literature, drawing up protocols.			
					Total hours 34

2.4 .Interactive forms of learning

In order to activate students' cognitive activity, **interactive** teaching methods are widely used in practical classes (analysis of situational problems, independent and demonstration research, preparation of forensic diagnosis and expert conclusions)

No. p\p	Topics of practical classes, lectures	Labor intensity in hours	Interactive form of learning	Labor intensity in hours
	Topic 1. Forensic thanatology	5.2	Situational tasks, autopsy protocols discussions	70 minutes (1.66 hours) 31.9%
	Topic 2. Forensic examination (research) of a corpse **Forensic examination (research) of corpses of newborns** **Topic 3. Forensic traumatology** **Transport injury** **Injuries from sharp objects**	5.2	Peer review of notes Situational tasks discussions	70 minutes (1.66 hours) 31.9%
	Topic #4. Gunshot injuries	5.2	Discussion Interactive survey	70 minutes (1.66 hours) 31.9%
	Topic 5. Mechanical asphyxia	5.2	Discussion Interactive survey	70 minutes (1.66 hours) 31.9%
	Topic 6. Forensic medical examination in cases of exposure to physical factors on the body **Damage from other physical factors**	5.2	Discussion Interactive survey Situational tasks	70 minutes (1.66 hours) 31.9%
	Topic 7. Forensic toxicology	5.2	Discussion Interactive survey Situational tasks	70 minutes (1.66 hours) 31.9%
	Topic 8. Forensic examination of victims, defendants and other persons	5.2	Discussion Interactive survey	70 minutes (1.66 hours) 31.9%

	Topic 9. Forensic examination of material evidence of biological origin.	5.2	Discussion Interactive survey Situational tasks	70 minutes (1.66 hours) 31.9%
	Topic 10. Medical deontology and responsibility of medical workers for professional and official violations. Expertise based on materials of investigative and judicial cases.	5.2	Discussion Interactive survey Situational tasks	70 minutes (1.66 hours) 31.9%

2.5. Criteria for assessing students' learning outcomes

The assessment of learning outcomes is carried out in accordance with the "Regulations on the assessment system for the learning outcomes of students of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy of the Ministry of Health of Russia".

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria - completeness and correctness:

- correct, precise answer;
- correct but incomplete or imprecise answer
- incorrect answer; no answer.

When assigning marks, the classification of errors and their quality are taken into account:

- gross errors;
- similar errors;
- minor errors; shortcomings.

The success of students in mastering the topics of the discipline "Forensic Medicine" is determined by the quality of mastering knowledge, skills and practical abilities; the assessment is given on a five-point scale: "5" - excellent, "4" - good, "3" - satisfactory, "2" - unsatisfactory.

Criteria for assessing the oral response

- **"5" (excellent)** – the student demonstrates deep and complete knowledge of the educational material, does not allow inaccuracies or distortions of facts when presenting, presents the material in a logical sequence, is well oriented in the presented material, and can provide justification for the judgments expressed.
- **"4" (good)** - the student has mastered the educational material in full, is well oriented in the educational material, presents the material in a logical sequence, but makes inaccuracies when answering.
- **"3" (satisfactory)** – the student has mastered the basic principles of the topic of the practical lesson, but when presenting the educational material, he/she makes inaccuracies, presents it incompletely and inconsistently, requires leading questions from the teacher to present it, and has difficulty substantiating the judgments expressed.
- **"2" (unsatisfactory)** – the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining basic concepts, distorts their meaning, and cannot independently present the material.

Assessment criteria for the practical part

- **“5” (excellent)** – the student has fully mastered the practical skills and abilities provided for by the course work program.
- **“4” (good)** – the student has fully mastered the practical skills and abilities provided for in the course program, but makes some inaccuracies.
- **“3” (satisfactory)** – the student has only some practical skills and abilities.
- **“2” (unsatisfactory)** – the student demonstrates the performance of practical skills and abilities with gross errors.

Criteria for assessing independent extracurricular work:

- the level of student mastery of the educational material;
- the completeness and depth of general educational concepts, knowledge and skills on the topic being studied, to which this independent work relates;
- development of universal and general professional competencies (ability to apply theoretical knowledge in practice).
- the problems were solved correctly, the exercises were completed, and the test assignments were answered accurately – “passed”.
- Problems were not solved correctly, exercises were not completed correctly, test questions were not answered accurately – “failed”.

Essay evaluation criteria:

- **“5” (excellent) –** awarded to a student if he has prepared a complete, detailed, and formatted according to requirements, abstract on the chosen topic, presented his work in the form of a report with a computer presentation, and answered questions on the topic of the report;
- **“4” (good) –** awarded to a student for a complete, detailed essay that is formatted according to requirements, but poorly presented;
- **“3” (satisfactory) –** the abstract does not contain information on the issue being studied in full, is formatted with errors, and is poorly presented;
- **“2” (unsatisfactory)** – given to a student if the abstract is not written, or is written with gross errors, the report and computer presentation are not prepared, or their content does not correspond to the topic of the abstract.

Working off disciplinary debts.

1. If a student misses a class for a valid reason, he/she has the right to make it up and receive the maximum grade provided for by the course work program for that class. A valid reason must be documented.
2. If a student misses a class for an unjustified reason or receives a "2" mark for all activities in the class, he/she is required to make it up. In this case, the mark received for all activities is multiplied by 0.8.
3. If a student is excused from a class at the request of the dean's office (participation in sports, cultural and other events), then he is given a grade of "5" for this class, provided that he submits a report on the completion of mandatory extracurricular independent work on the topic of the missed class.

Criteria for assessing midterm assessment.

Midterm assessment is designed to assess the degree of achievement of planned learning outcomes upon completion of the study of a discipline and allows for an assessment of the level and quality of its mastery by students.

The students' success in mastering the discipline is assessed on a 5-point scale: "5" – excellent, "4" – good, "3" – satisfactory, "2" – unsatisfactory.
"Excellent" - for the depth and completeness of mastery of the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones, express and justify their judgments, correctly and logically present the answer; when testing, allows up to 10% of erroneous answers. Practical skills and abilities provided for by the working program of the discipline are fully mastered.
"Good" - the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing allows up to 20% of erroneous answers. Completely practical skills and abilities provided by the working program of the discipline, but allows some inaccuracies
"Satisfactory" - the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; during testing, allows up to 30% of erroneous answers. Has only some practical skills and abilities.
"Unsatisfactory" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers during testing. Performs practical skills and abilities with gross errors.

Interim assessment is carried out through a system of passing a test in 3 stages:
1. Testing in the Moodle system .
Access mode: https://educ-amursma.ru/mod/quiz/view.php?id=11020

2. Completion of the practical part of the discipline.
3. Oral interview.

Forms of control of knowledge, skills, abilities
Current monitoring of academic performance

Current monitoring of academic performance is carried out by the teacher throughout the entire period of studying the discipline and checks knowledge, skills, and abilities in accordance with the work program of the discipline.
Types of current performance monitoring:
entrance control https://educ-amursma.ru/mod/quiz/view.php?id=11069 - is conducted by the teacher at the beginning of the lesson in order to check individual knowledge, skills, and abilities of students necessary for successful mastery of the lesson topic;
final control https://educ-amursma.ru/course/view.php?id=574 - used to check individual knowledge, skills and abilities of students acquired during the course of study;
final assessment https://educ-amursma.ru/mod/quiz/view.php?id=11020 - testing of knowledge, skills, and abilities acquired in class;

2.6. Independent work of students.
Forms of independent work:

1. Preparation for practical and seminar classes.

2. Working with primary and secondary literature.
3. Registration of the Act of forensic medical examination of the corpse.
4. Registration of the Certificate of examination of a living person.
5. Drawing up a report on the inspection of the scene of the incident.
6. Watching a video.
7. Description of wet preparation.
8. Description of the bone preparation.
9. Solving a situational problem.
10. Preparing an abstract.
11. Working with terms.

The organization of independent classroom work of students is carried out with the help of methodological instructions for students, which contain educational goals, a list of basic theoretical questions for study, basic new terminology on the topic of the lesson, a list of macropreparations for study.

From 1/4 to 1/2 of the practical lesson time is allocated for independent work of students: drawing micropreparations, discussing them, completing individual assignments. The preparatory stage, or the formation of an approximate basis for actions, begins with students outside of class time when preparing for a practical or seminar lesson, and is completed during the lesson. All subsequent stages are carried out during the lesson. The stage of materialized actions (solving situational problems) is carried out independently. The teacher, if necessary, provides consultation, provides assistance and simultaneously monitors the quality of students' knowledge and their ability to apply existing knowledge to solve assigned problems.

Item No.	**Topic of clinical practical lesson**	**Time for student preparation for the lesson**	**Forms of extracurricular independent work of a student**	
			Mandatory and the same for all students	**At the student's choice**
1	Forensic thanatology.	1.5	Drawing up a protocol for forensic medical examination of a corpse	Examination of the skull, chest, abdominal cavity, extraction of bones, conducting tests. - Abstract: History of the development of forensic medicine in Russia. - History of the sectional course. Features of the dissection method at various historical stages of society development.
2	Forensic examination (body examination)	1.5	Work with legislative documents, special educational literature	Computer Presentation on the topic "Forensic examination of a corpse", - Abstract: Modern

				methods for determining the time of death. - Dynamics and features of the structure of sudden death. - Auxiliary methods in forensic medical examination of the corpse of a newborn.
3	Forensic traumatology.	1.5	Description of bone fractures and determination of the mechanism of injury.	Production of bone macropreparations of the skull and tubular bones. Computer presentation on the topic "Transport damage" Abstract: - Morphological features of external and internal injuries when falling from a great height - Features of injury from a collision between a passenger car and a pedestrian, taking into account the design features of a modern car. - Features of stab wounds inflicted by special and standard army bladed weapons. - Historical aspects of injuries caused by bladed weapons of atypical shape (wavy, round, “mercy daggers”, etc.).
4	Gunshot injuries.	1.5	Description of bone fractures and establishment of the mechanism of formation. Description of skin macropreparations.	Production of skin macropreparations. Computer presentation on the topic "Damage from self-defense weapons"

				Abstract: - Features of entrance gunshot wounds when fired from special weapons (special ammunition, weapons with silencers). - Features of the destructive effect of ammunition of combat weapons in service with the armies of the USA, the Russian Federation and European countries. - Features of gunshot wounds caused by shots from self-defense gas weapons. - Differential diagnostic criteria for wounds caused by stabbing weapons, pneumatic weapons and firearms.
5	Forensic medical examination in cases of death from mechanical asphyxia.	1.5	Determination of the vitality of the strangulation groove.	Study of the cervical organ complex . Computer presentation on the topic "Forensic medical examination of injuries to the neck organs." - Abstract: Historical aspects of death by hanging. - The mechanism of dying in various types of mechanical asphyxia.

6	Forensic medical examination in cases of exposure of the body to physical environmental factors.	1.5	Definition of an electrical mark . Study of macropreparations.	Making macro-preparations of the skull, in case of damage from high and low temperatures. Abstract: - Mechanisms of death in electrical trauma. Additional methods of forensic medical examination in this type of death. - Caisson disease – history, clinical picture, pathomorphology .
7	Forensic toxicology.	1.5	Solving problems to determine the degree of alcohol intoxication	Solving problems on determining alcohol in the blood. Abstract: - Poisoning by wild plants endemic to central Russia. - Clinical and morphological features and cause of death in cannabinoid intoxication . - Clinical and morphological features and cause of death in ephedrone intoxication .
8	Forensic examination of victims, defendants and other persons	1.5	Determining the severity of harm caused to health . Drawing up expert opinions.	Expertise of medical documents. Determining the severity of harm to health. Abstract: - Rights and responsibilities of an expert during examination of living persons, procedural features of this type of examination. - Expertise of sexual perversions. The

				importance of expert opinion in the context of a court hearing.
9	Forensic examination of biological evidence	1.5	Determination of the mechanism of formation of blood traces. Detection and examination of material evidence.	Restoration of shape and size of skin wounds. Abstract: Methods and features of inspection of the scene of an incident in cases of mass casualties
10	Medical deontology and responsibility of medical workers for professional and official violations	1.5	Study of medical documents and solution of problems on professional violations of medical workers.	Drawing up a protocol on professional violations of medical workers
Labor intensity in hours		24 hours	15	9
Total labor intensity (in hours)			24 hours	
Total workload (in credit units)			**1z.e.**	

2.7. Research work of students

Student research work (SRW) is a mandatory section of the discipline and is aimed at the comprehensive formation of general cultural and professional competencies of students and involves the study of specialized literature and other scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge, participation in scientific research, etc. The topics of R&D can be chosen by students independently in consultation with the teacher or from the list below (taking into account the scientific direction of the department).

Scientific directions and sample topics of students' research work.

1. Differential diagnosis of coronary heart disease, cardiomyopathy and alcohol intoxication.

2. Acute general traumatic anemia of the body.

3. Forensic science.

3. Educational, methodological, material, technical and informational support of the discipline

3.1. Primary literature

Pigolkin Yu.I., Dubrovin I.A., Beleshnikov I.L.	-Forensic Medicine. National Guide. - 2018. Number of copies 25 https://www.sechenov.ru/upload/iblock/4a1/sudebnaya-meditsina-pigolkin-2012.docx

Pigolkin Yu.I., Nagornov M.N., Leonova E.N.	- Forensic medicine. Tasks and test assignments. - 2016. Number of copies 25 https://bookmos.ru/components/com_jshopping/files/img_products/sudebnaya-medicina-uchebnoe-posobie-2011-978-5-9704-1840-6.pdf
Yu.I. Pigolkin V.L. Popov I.A.Dubrovin	Forensic medicine: Textbook. - M.: OOO "Publishing house Medical information agency, 2011. - 424 p. 30 copies. http://bilgreek.narod.ru/med/sud/pigolkin-sudebnaja_medicina-2012.pdf

3.2. Further reading

Romodanovsky P.O., Barinov E.Kh., Dobrovolskaya N.E.-	Improper provision of medical care. Forensic medical examination.-2018 https://www.labirint.ru/books/624395/
Pigolkin Yu.I., Dubrovin I.A., Dubrovina I.A.-	*Forensic Medicine. Lecture. Study Guide.-2014.* http://bilgreek.narod.ru/med/sud/pigolkin-sudebnaja_medicina-2012.pdf
Yu.I. Piglovin	Tasks and test assignments in forensic medicine [Text] / edited by Yu. I. Pigolkin . - M.: GEOTAR-MED. - 2004. 624 pages 54 copies. https://bookmos.ru/components/com_jshopping/files/img_products/sudebnaya-medicina-uchebnoe-posobie-2011-978-5-9704-1840-6.pdf
V.I. Viter , A.A. Khalikov . -	Forensic medicine in lectures. - Izhevsk-Ufa. - 2007. www . igma . ru > article > lecture
Pigolkin Yu.I., Dubrovin I.A., Gornostaev D.V. -	Atlas of forensic medicine.-2010. https://www.labirint.ru/books/393392/
Starchikov M.Yu.-	Legally significant medical documents. Normative provisions, standard forms and judicial practice.-2018. http://www.consultant.ru/cons/cgi/online.cgi?req=doc&base=CMB&n=18695
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Yu.I. Piglovin	Forensic medicine: Textbook / Under. ed. Yu.I. Pigolkina . – M.: GEOTAR-Media, 2002. – 360 p. 62 copies http://bilgreek.narod.ru/med/sud/pigolkin-sudebnaja_medicina-2012.pdf
Pashinyan , G.A. P.O. Romodanovsky	Forensic medicine in diagrams and drawings [Text]: Textbook / G.A. Pashinyan , P.O. Romodanovsky. - M.: GEOTAR-MED, 2006. - 336 p. 54 copies. https://www.booksmed.com/sudebnaya-medicina/259-sudebnaya-medicina-v-sxemax-i-risunkax-pashinyan.html

V.N. Kryukov	Forensic Medicine [Text] / edited by V.N. Kryukov. - M: Medicine. - 1990. - 448 p. 4 copies. https://tashpmi.uz/wp-content/uploads/2020/08/kryukov_v_n__red__sudebnaya_meditsina.pdf

Electronic literature on forensic medicine on the library website

1. Forensic medical identification of a person by dental status: textbook. allowance / P. O. Romodanovsky, E. Kh. Barinov. - M.: GEOTAR-Media, 2017. - 208 p. : ill. - ISBN 978-5-9704-3875-6.
2. Forensic psychiatric examination / A. A. Tkachenko, D. N. Korzun. - M.: GEOTAR-Media, 2016. - 672 p.: ill. - ISBN 978-5-9704-3725-4.
3. Forensic and medical-legal assessment of adverse outcomes in dental practice / edited by O. O. Yanushevich . - M.: GEOTAR-Media, 2016. - 384 p.: ill. - ISBN 978-5-9704-3845-9.
4. Forensic medicine and forensic medical examination: national guidelines / edited by Yu. I. Pigolkin . - M.: GEOTAR-Media, 2014. - 728 p.: ill. - ISBN 978-5-9704-2820-7.
5. Objects of research of biological origin in the system of investigative actions / E. A. Bazikyan , V. V. Kuchin, P. O. Romodanovsky, E. Kh. Barinov. - M.: GEOTAR-Media, 2014. - 104 p. - ISBN 978-5-9704-2882-5.
6. Determination of the severity of harm to health. Application of rules and medical criteria. Answers to questions - M.: GEOTAR-Media, 2013. - 136 p. - ISBN 978-5-9704-2545-9.
7. Forensic medical examination: theoretical, procedural, organizational and methodological foundations. - M.: GEOTAR-Media, 2012. - 368 p. (Library of a medical specialist). - ISBN 978-5-9704-2455-1.
8. Forensic medical and social examination. Legal and organizational foundations. Puzin S.N., Klevno V.A., Lavrova D.I., Dymochka M.A. 2010. - 128 p. (Series "Library of a medical specialist") - ISBN 978-5-9704-1664-8.
9. Atlas of forensic medicine. Pigolkin Yu.I., Dubrovin I.A., Gornostaev D.V. and others / Ed. Yu.I. Pigolkin . 2010. - 376 p.: ill. - ISBN 978-5-9704-1542-9.

3.3 List of educational and methodological support for independent work of students prepared by the department: no

3.4 Material and technical base of the educational process. List of equipment used in teaching students:

Item No.	Name	Use in the educational process	Quantity
1	**Associate Professor's Office** Personal computer Three-eye microscope "Nikon"	**No**	**1** **1**

2	**Histology laboratory** Light microscopes Slide microtome MSE Thermostat TSO 1/80 SPU Pipettes, laboratory glassware, reagents microtome	**Yes**	**14** **1** **1**
3	**Assistant No. 1** Personal computer	**Yes**	**1** **1**
4	Museum Multimedia projector Museum macropreparations	Yes	1 230
5	Study room #1 Educational macropreparations	Yes	24
6	Study room #1 Educational macropreparations 26	Yes	26

3.5. Professional databases, information and reference systems, electronic educational resources.

Name Resource	**Resource Description**	**Access**	**Resource address**
Electronic library systems			
"Student Consultant" Electronic Library medical school.	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	library, individual access	http: // www .studmedlib.ru/
"Doctor's Consultant" Electronic medical library.	The materials posted in the library have been developed by leading Russian specialists based on modern scientific knowledge (evidence-based medicine). The information has been prepared taking into account the position of the scientific and practical medical society (world, European and Russian) in the relevant specialty. All materials have undergone mandatory independent review.	library, individual access	http://www.rosmedlib.ru /cgi-bin/mb4x

PubMed	Free search engine in the largest medical bibliographic database MedLine . Documents medical and biological articles from the specialized literature, and also provides links to full-text articles.	library, free access	http :// www . ncbi . nlm . nih . gov / pubmed /
OxfordMedicine Online .	A collection of Oxford Press medical publications, bringing together over 350 titles into a single, cross-searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , with electronic versions continually updated.	library, free access	http://www.oxfordmedicine.com
Biology Knowledge Base Human	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	library, free access	http://humbio.ru/
Medical online Library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	library, free access	http://med-lib.ru/
Information systems			
Russian medical association	Professional Internet resource. Objective: to facilitate the implementation of effective professional activities of medical personnel. Contains the charter, personalities, structure, rules of entry, information about the Russian Medical Union.	library, free access	http://www.rmass.ru/
Web-medicine	The site presents a catalog of professional medical resources, including links to the most authoritative subject sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	library, free access	http: //webmed.irkutsk.ru/
Databases			
Worldwide health care organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	library, free access	http://www.who.int/ru/
Ministries of Science and higher	The website of the Ministry of Science and Higher Education of the Russian Federation contains news,	library, free access	http://www.minobrnauki.gov.ru

of the Russian Federation	newsletters, reports, publications and more.		
Ministry of Education of the Russian Federation.	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more.	library, free access	https://edu.gov.ru/
Federal portal "Russian education"	A single window for access to educational resources. This portal provides access to textbooks on all branches of medicine and health care.	library, free access	http: // www . edu.ru/ http://window.edu.ru/catalog/?p rubr =2.2.81.1
Bibliographic databases			
BD "Russian Medicine"	It is created in the Central Scientific and Methodological Library and covers the entire collection, starting from 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology, biophysics, biochemistry, psychology, etc.	library, free access	http://www.scsml.rssi.ru/
eLIBRARY.RU	Russian information portal in the field of science, technology, medicine and education, containing abstracts and full texts of more than 13 million scientific articles and publications. The eLIBRARY.RU platform provides electronic versions of more than 2,000 Russian scientific and technical journals, including more than 1,000 open access journals.	library, free access	http://elibrary.ru/defaultx.asp
Portal Electronic library of dissertations	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	library, free access	http://diss.rsl.ru/?menu=disscatalog/
Medline.ru	Medical and biological portal for specialists. Biomedical journal. Last updated February 7, 2021.	library, free access	http://www.medline.ru

3.6 . Licensed and freely distributed software used in the educational process.

I. Commercial software products		
1.	Operating system MS Windows 7 Pro	License number 48381779

2.	Operating system MS Windows 10 Pro , MS Office	AGREEMENT No. 142 A dated December 25, 2019
3.	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	KasperskyEndpointSecurity for Business Advanced	Agreement No. 977/20 dated 12/24/2020
5.	1 C: PROF University	LICENSE AGREEMENT No. 2191 dated 15.10.2020
6.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
II. Freely distributed software		
1.	Google Chrome	Freely distributed Distribution conditions: https://play.google.com/about/play-terms/index.html
2.	Browser « Yandex »	Freely distributed License agreement for the use of the Yandex Browser software https://yandex.ru/legal/browser_agreement/
3.	Dr.WebCureIt !	Freely distributed License Agreement: https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/

3.7. Resources of the information and telecommunications network "Internet"

- Library of Amur State Medical Academy. Access mode: https://amursma.ru/obuchenie/biblioteki/biblioteka-amurskoy-gma/
- Electronic library system "Student consultant". Access mode: http://www.studmedlib.ru/cgi-bin/mb4x
- Electronic library of medical literature. Access mode: https://www.books-up.ru/ru/entrance/97977feab00ecfbf9e15ca660ec129c0/
- Scientific and practical journal "Doctor and information technologies". Access mode: http://www.studmedlib.ru/book/1811-0193-2010-01.html

4. ASSESSMENT TOOLS FUND

4.1.Current test control (input, output), final control

4.1.1 Examples of test tasks for incoming control

tissue wounds are usually accompanied by the most profuse external bleeding ?

1. Stab wounds .
2. Puncture wounds .
3. Incised wounds .
4. Chopped wounds.
The correct answer is 3

2. What is the shape of the trace of blood when it falls from an insignificant height (up to 1 м)?

1. A trace in the form of exclamation marks with smooth edges.
2. A trace in the form of stars.
3. A trace of a rounded shape with smooth edges.
4. A trace in the form of a drip.
5. A trace in the form of a puddle.
The correct answer is 3

3. What is a reliable sign of death?

1. Lack of breathing.
2. No breathing or heartbeat.
3. No heartbeat.
4. The appearance of early cadaveric changes.
The correct answer is 4

4.1.2 Examples of test tasks for final control
(with sample answers) https://educ-amursma.ru/course/view.php?id=574

1. Who developed the method of one-stage evisceration of internal organs during the examination of a corpse?
1. Apricot.
2. Buyalsky .
3. Shorom .
4. Virchow .

2. By how many degrees on average does the temperature of a corpse decrease in 1 hour under normal conditions?
1. At 5o.
2. On 1o.
3. At 3º.

3. What color are the cadaveric spots in carbon monoxide poisoning?
1. Brown in color.
2. Gray color.
3. Bluish-violet color.
4. Bright red color.

Answers to test tasks

№1-3 №2-2№3-4

4.1.3 Examples of test tasks for the final assessment (with sample answers) https://educ-amursma.ru/mod/quiz/view.php?id=11020

Final testing is carried out in the Moodle system
Total number of questions -200

1. Where, with the same action of a blunt hard object, will the bruise be most pronounced?

1. On the anterior surface of the shin.
2. In the shoulder area.
3. On the scalp.
4. On the neck.

The correct answer is 2

2. Under which article of the Criminal Code of the Russian Federation is a doctor liable for illegally performing an abortion?

1. Article 111 of the Criminal Code of the Russian Federation.
2. Article 112 of the Criminal Code of the Russian Federation.
3. Art. 121 of the Criminal Code of the Russian Federation.
4. Art. 123 of the Criminal Code of the Russian Federation.
5. Article 141 of the Criminal Code of the Russian Federation.

The correct answer is 4

3. Which weapons are considered piercing?

1. Tools with a sharp blade.
2. Elongated tools with a sharp end.
3. Tools with a sharp blade and a sharp end .
4. Tools with a large mass and a sharp edge.

The correct answer is 2

4.2 Examples of situational tasks of current control
(with sample answers)

TASK

At the plant, in the tool shop, due to failure to observe safety precautions, citizen V. injured his hand while working on a machine. The foreman suspected that citizen V. was intoxicated. Citizen V. stated that 7 hours ago he drank 150 grams of vodka. During a forensic chemical analysis, 0.9% alcohol was found in citizen V.'s blood.

How much vodka did Mr. V. drink?

Body weight g. V. = 60 kg.

ANSWER: 433 grams of vodka.

TASK

While working on the construction of a house, worker Khudeev fell from the scaffolding and broke his leg. The foreman claimed that Khudeev showed up for work drunk. Worker Khudeev stated that he drank a mug of beer 3 hours before the incident. When Mr. Khudeev's blood was tested, 1.9% alcohol was found.

Determine how much beer Mr. Khudeev drank ?

Khudeev's body weight = 70 kg.

ANSWER: 4.1 liters of beer.

TASK

The investigation data showed that Mr. B. and his female friend were riding a boat rented from a boat station. When they were changing places, the boat capsized. Mr. B. drowned, and his female friend was rescued. Mr. B.'s body was fished out the next day. When blood was taken from the body, 2.5% alcohol was found. Mr. B.'s female friend reported that they had been in a restaurant drinking red wine 3 hours before the incident.

How much wine did Mr. B. drink?

Body weight of Mr. B. = 80 kg.

ANSWER - 940 ml of wine

TASK
Motorcyclist N. drove through a green light and hit a pedestrian. Mr. B. was suspected of being intoxicated. Mr. N. stated that he had drunk a mug of beer 3 hours earlier. A forensic chemical analysis revealed 1.9% alcohol in Mr. N.'s blood.
How much beer did Mr. V. drink?
Body weight of gr. N. = 75 kg.
ANSWER - 267 grams of vodka.

4.3 List of practical skills required to pass the test.
Topic #1
1. Inspection of the scene of an injury caused by hard, blunt or sharp objects.
2. Inspection of the scene of a road accident.
3. Inspection of the scene of a crime in case of gunshot injury.
4. Rules for the examination and expert assessment of damage to the clothing of a corpse.
5. Rules for the examination of corpses with injuries from the action of hard blunt or sharp objects.
6. Rules for examining corpses with car injuries.
7. Rules for the examination of corpses with gunshot wounds.
8. Technique for performing an air embolism test.
9. Technique for performing a pneumothorax test.
10. Special research methods used in forensic traumatology.
11. Rules for drawing up a pathological diagnosis and expert conclusions in different personal types of mechanical injury.
Topic #2
1. Inspection of the scene of the incident in cases of mechanical asphyxia.
2. Rules for the examination of corpses of persons who died from mechanical asphyxia.
3. Special research methods used to diagnose mechanical asphyxia.
4. Rules for drawing up a pathological diagnosis and expert conclusions for various types of mechanical asphyxia.
Topic #3
Inspection of the scene of an incident in cases of exposure to high temperatures.
1. Inspection of the scene of an incident in cases of exposure of the body to technical and atmospheric electricity.
2. Inspection of the scene of the incident in cases of exposure of the body to low temperatures.
3. Inspection of the scene of an incident in cases of exposure of the body to altered atmospheric and barometric pressure.
4. Rules for examining the corpses of persons who died from exposure to high temperatures.
5. Rules for examining the corpses of persons who died from exposure to low temperatures.
6. Rules for the examination of corpses of persons who died from exposure to technical and atmospheric electricity.
7. Rules for the examination of corpses of persons who died from the effects of altered atmospheric and
barometric pressure.
8. Rules for drawing up a pathological diagnosis and expert conclusions in cases of death due to physical factors.
Topic #4
1. Inspection of the scene of an incident if poisoning is suspected.
2. Rules for examining the corpses of persons who died from poisoning.
3. Rules for collecting material for general chemical analysis.
4. Methods for detecting carboxyhemoglobin in the blood (spectroscopic, Hoppe-Seyler test).

5. Rules for drawing up a pathological diagnosis and expert conclusions in cases of death from poisoning.

Topic #5

1. Methodology for detection and study of cadaveric cooling.
2. Methodology for detection and study of cadaveric desiccation.
3. Methodology for identifying and studying rigor mortis.
4. Methodology for identifying and examining cadaveric spots.
5. Methodology for studying decay.
6. Methodology for studying mummification.
7. Methodology for studying adipose wax.
8. Methodology for studying peat tanning.

Topic #6

1. Rules for inspection of the scene of the incident.
2. Rules for examining a corpse's clothing.
3. Rules for external examination of a corpse.
4. Technique of brain extraction.
5. Techniques for studying the brain.
6. Technique for extracting organocomplex .
7. Technique for examining the neck organs.
8. Technique of lung examination.
9. Technique of cardiac examination.
10. Technique for examining the liver and gallbladder.
11. Technique for examining the kidneys and adrenal glands.
12. Technique for examining the spleen and pancreas.
13. Technique for examination of the stomach and intestines.
14. Technique for extraction and examination of the spinal cord.
15. Technique for examination of pelvic organs.
16. Technique for examining the skull of a newborn.
17. Technique for performing a pulmonary hydrostatic test.
18. Technique for producing a gastrointestinal swim sample.
19. Technique for studying ossification nuclei in newborns.
20. Features of the study of corpses of newborns.
21. Features of the study of corpses with especially dangerous infections.
22. Rules for the acceptance, registration, examination and issuance of corpses subject to forensic medical examination.

Topic #7

1. Rules for the admission and examination of people.
2. Rules for drawing up an expert opinion or a report on forensic medical examination of people.

Topic #8

1. Inspection of the scene of a crime if there is a suspicion of a criminal abortion.
2. Rules for examining corpses in cases of suspected criminal abortion.
3. Rules for drawing up a pathological diagnosis and expert conclusions in cases of death from criminal abortion.
4. Rules for conducting outpatient obstetric and gynecological examinations.
5. Methodology for taking vaginal contents for referral for forensic biological examination.

Topic #9

1. Technique for identifying, removing, packaging and sending for examination stains suspicious for blood.
2. Technique for identifying, removing, packaging and sending for examination spots suspicious for sperm.
3. Technique of hair removal, packaging and sending for examination.

Topic No. 10

1. Rules and procedures for conducting examinations of professional and official violations of medical workers.

4.4 List of questions for the test

Provide a classification of injuries and a brief description of each type.

1. What signs of damage indicate that it was inflicted by one's own hand?
    a. Gunshot and blast trauma
2. Explain the mechanisms of formation of entrance and exit gunshot wounds and the wound channel?
3. What are the signs of a point-blank shot?
4. How to determine the direction and sequence of a shot when damaging flat bones?
5. What methods can be used to detect soot in the area of a gunshot wound? What forensic significance does this have?
6. How are bullet and shot cartridges constructed, and what is the firing mechanism?
7. Give the signs of three close range shooting zones?
8. Where and how does the hydrodynamic action of a bullet manifest itself, what is its mechanism?
9. How to determine the direction and sequence of a shot when damaging flat bones?
10. What is the effect of different barrier materials on the nature of a gunshot wound?
11. How to determine the position of the victim at the moment of the shot?
12. Name the close-range shooting zones and describe them?
13. What are the damaging factors of an explosion?
14. What are the signs of a gunshot wound caused by shot from different distances?
15. What research methods can detect and prove the presence of gunpowder in the area of a gunshot wound?
16. What is a grazing bullet wound and how is the direction of the bullet's flight determined?
17. What is the damaging factor in a blank shot injury?
18. What influences the features of the formation of the stamp mark?
19. What is the forensic and criminalistic significance of a wad found in a wound channel?
20. The mechanism of formation and significance of the Vinogradov phenomenon?
21. Blunt force trauma, transport trauma
22. What are the typical injuries to a driver when a car collides with an obstacle?
23. What skull fractures can occur when struck by a confined or unconfined object?
24. List the mechanisms of action of a blunt object and the possibility of establishing them based on damage?
25. Provide conditions that facilitate and hinder the display of the shape of a blunt object when causing damage?
26. How can one determine the position of a victim on a railway track based on the characteristics of the damage?
27. What are the injuries typical of falling from a great height onto the head? What is the mechanism of their formation?
28. What are the differences between a direct rib fracture and a constructive one?
29. Provide a classification of falls from great heights? How does the nature of the fall affect the resulting injuries?
30. How to determine the age of a bruise on a corpse and on a living person?
31. List the forensic significance of abrasions, scratches, bruises?
32. What are the different mechanisms of railway trauma, and how can this be proven during a forensic examination of a corpse?
33. What are the characteristics of injuries that occur in motorcycle accidents?
34. How to differentiate rib fractures caused by impacts and compression?

35. What are the main types of mechanical damage and define them?
36. How to determine the age of a bruise or abrasion?
37. How to determine the age of a wound and fracture?
38. What is the evidence of falling out of the vehicle?
39. Provide the characteristics of damage caused by a crawler tractor depending on the mechanism of action?
40. What kind of damage can be caused by an unarmed person and with what?
41. How does body dragging manifest itself on the skin, and how can its direction be determined?
42. Injuries from sharp objects
43. How to determine the shape of the part of the blade of a piercing and piercing-cutting weapon that has penetrated the liver?
44. How is a cut wound similar to a chopped wound and what is the difference?
45. Provide a differential diagnosis of wounds caused by the edge of a blunt or chopping object?
46. Extreme temperatures, electric shock
47. How does the local effect of low temperature manifest itself and establish itself?
48. How to prove skin damage from electric current?
49. How can one establish at the scene of an incident that the general effect of low temperature was life-threatening?
50. Provide the basics of diagnosing heat stroke and the possibilities of examination in establishing the cause of death?
51. What is the immediate cause and manner of death in electrical injury?
52. How to prove death from exposure to technical electricity?
53. What, at the site of the discovery of a body where lightning is suspected, can confirm this assumption?
54. What signs and research methods can prove that thermal burns were received on a corpse during its lifetime ?
55. List the signs of death from hypothermia, starting with the most common?
56. How to prove death from exposure to technical electricity?
57. How to distinguish burns from flame, hot liquid, steam or contact exposure?
58. What causes death from thermal burns?
59. Examination of material evidence
60. How is blood collected from different carrier objects to be sent for forensic biological examination?
61. Provide detection methods and preliminary blood tests?
62. What is the basis for establishing the origin of a child from specific parents?
63. How is the type of blood determined and its group assigned?
64. How is the sex of blood determined and pregnancy proven?
65. What is material evidence, what are the conditions and terms of its storage?
66. Cadaveric phenomena, thanatology, cadaver examination
67. What are the possibilities of establishing the presence of an injury during a cadaveric examination?
68. Provide morphological evidence of acute and profuse bleeding?
69. What is the forensic significance of late postmortem changes, after what time do they appear and how do they manifest themselves on the corpse?
70. In what causes of death and in what organs are Minakov, Rasskazov -Lukomsky , Vishnevsky spots found and what are their characteristics?
71. What is Beloglazov's symptom, in what complex of other signs is it used?
72. Which corpses are subject to mandatory forensic examination?
73. the Shore method , what is its advantage over others?
74. What are the main causes of sudden death by nosological units in different age groups?

75. What and to which laboratory is sent from the morgue to the appropriate laboratories: in case of sudden death, mechanical asphyxia and gunshot injury?
76. List the morphological signs of acute death upon examination of the body at the place of its discovery.
77. What is the difference between a pathological examination of a corpse and a forensic examination?
78. What is the competition of causes and categories of death, what is the significance of forensic medical examination? Give examples?
79. List the meaning of livor mortis and rigor mortis?
80. List the immediate causes of death due to mechanical injury?
81. What are the main complications associated with death from mechanical trauma?
82. What is competition of causes of death, what is the meaning of forensic medical examination, examples?
83. How much time has passed since death if rigor mortis is moderately expressed only in the leg muscles? What other cadaveric phenomena are observed in this case?
84. How to distinguish a parchment livor stain from blunt force injuries during life?
85. Where does cadaveric desiccation manifest itself and what is its forensic significance?
86. Provide the types of rigor mortis, the mechanism of its formation and its significance for forensic medicine?
87. Give a definition and meaning of thanatology?
88. What are the clinical signs of different periods of terminal conditions?
89. On what basis and how is the moment of death determined for the purpose of refusing resuscitation?
90. Provide the types of rigor mortis, the mechanism of its formation and its significance for forensic medicine?
91. Inspection of the crime scene
92. The concept, organization, methodology and significance of examining a corpse at the place of its discovery?
93. What are the main tasks of a medical specialist when examining a corpse at the place where it was found?
94. What is used to establish the time of death at the scene of the incident in the first 2 hours after its occurrence?
95. How should the fact of death be determined at the place where the body is found?
96. Forensic medical examination
97. What traces are distinguished when examining injuries and name the branch of forensic science and forensic medicine that studies them?
98. What are the possibilities of identification and personal identification from skeletal remains?
99. What are the features and objectives of forensic examination of a dismembered corpse?
100. Name the reasons for exhumation, the tasks of forensic examination of the exhumed corpse
101. What are the main questions that an expert decides when examining a skeletonized corpse and what laboratory methods are used in this case?
102. In what cases and what methods are used for personal identification, their capabilities?
103. Newborn examination
104. How to prove that a newborn is born alive ?
105. What is full-term maturity of a baby, what signs indicate this?
106. Give a definition of infanticide, its types and methods?
107. What is the technique for performing a lung test and evaluating its results during an autopsy of a newborn?
108. Rules for determining the severity of harm caused to health; examination of living persons
109. What is battery and what is the competence of the forensic medical examination in its examination?

110. What is special and professional work capacity, and for what purpose are they determined?
111. In which medical institutions, for what purpose and in what order is permanent loss of working capacity established?
112. Give a definition of the concepts of torture and torment? What is the task of the forensic expert in this case?
113. Provide qualifying features of minor bodily harm and examples of each of them?
114. What questions must an expert answer during an examination or examination to determine harm to health?
115. For what reasons and with what methods is age assessment carried out and its possibilities?
116. In which department of the forensic medical examination bureau and where outside of it are examinations of living persons carried out?
117. For what purpose is a forensic medical examination of a suspect in a sexual crime carried out?
118. List the qualifying signs of serious bodily harm?
119. When should one refuse to determine harm to health and what should the expert indicate in the conclusion?
120. What is the procedure and specifics of establishing harm to health during an examination conducted in a hospital?
121. How is the severity of harm to health determined in the presence of several qualifying features?
122. Give a definition of the concept of rape? What are the possibilities of forensic examination in connection with the suspicion of this crime?
123. How to assess serious harm to health during a corpse examination?
124. How to assess the severity of minor and moderate harm to health in cases of death?
125. What are the reasons, procedure and features of establishing the state of health?
126. What is the basis for establishing permanent loss of general working capacity? When is this examination carried out in the Bureau of Forensic Medical Examination?
127. What is the sequence of the methodology for conducting forensic medical examination of living individuals?
128. What questions should be answered in a health assessment report when the outcome of a non-life-threatening condition is unclear?
129. Provide the concepts and limits of competence of a forensic medical expert in establishing permanent disfigurement of the face?
130. Name 2 groups of life-threatening injuries and give examples of each?
131. Provide classification features of moderate harm to health and examples of each of them?
132. What should be determined when detecting abrasions, bruises and small superficial wounds during the relevant examination?
133. What is the procedure for establishing the severity of harm to health caused by the defects of medical workers? What should the expert note in the conclusions?
134. For what specific reasons is an obstetric-gynecological forensic medical examination prescribed in connection with sexual conditions?
135. What, from a forensic point of view, should be considered a permanent loss of working capacity? In what cases of examination is this criterion used?
136. What is indecent assault? What are the possibilities of forensic examination?
137. What is meant by violent sexual acts and the possibilities of forensic medical examination for each of them?
138. What objects during obstetric and gynecological examination in connection with sexual activities should be sent to the forensic biology laboratory?
139. What is the basis for determining the harm to health caused by a thermal burn?
140. Give a definition of the concepts of true and pathological simulation, aggravation and the possibility of their diagnosis?

141. What is the peculiarity of determining the severity of harm to health in the presence of damage from repeated traumatic impacts ?
142. List the types of harm to health that are not life-threatening but have serious consequences?
143. Forensic toxicology
144. What is used for autopsy diagnostics of barbiturate poisoning? What are the signs of aspiration and spastic drowning?
145. What are the features of a forensic examination of a corpse if poisoning is suspected?
146. What is the diagnosis of acute arsenic poisoning based on?
147. Provide a definition of poison and classification of toxic substances depending on the nature of their effect on the body?
148. What factors most influence changes in the concentration of alcohol in the body and are necessary when assessing alcohol intoxication?
149. List drug intoxications? Features and importance of forensic medical examination?
150. What is the significance of the different routes of poison introduction into the body?
151. What are the basics of diagnosing drug poisoning (opium, cocaine, morphine)?
152. What is the diagnosis of mercury poisoning based on?
153. Provide evidence of death due to methyl alcohol poisoning?
154. Mechanical asphyxia
155. Provide evidence of death from compression asphyxia?
156. Provide evidence that allows one to prove that the hanging took place during one's lifetime ?
157. What signs characterize sharp compression of the chest and abdomen and what localization of compression is most dangerous?
158. What is the forensic significance of nooses used in hangings?
159. What are the signs of mechanical asphyxia from the closure of the mouth and nose openings?
160. Organization of forensic medical examination, legal issues, history of forensic medicine
161. History of forensic medicine
162. The influence of Peter the Great's reform on the development of domestic forensic medicine?
163. History of the organization of forensic medical examination in the North Caucasus and the Department of Forensic Medicine of the Russian State Medical University?
164. When and where was the first textbook on forensic medicine published in Russian, who is the author? What domestic forensic doctors do you know and their contribution to the development of forensic medicine?
165. General questions
166. What are the features of deontology in the work of a forensic expert?
167. In what cases and by whom can a medical certificate of death be issued without an autopsy of a suddenly deceased person?
168. What is forensic medicine and what are its objectives?
169. How do the main deficiencies in the medical history affect the treatment process and the conduct of forensic medical examination based on documents?
170. What exactly is the legal significance of a medical history?
171. Organization
172. What is the organization of the forensic medical service in the Russian Federation?
173. What is the role of forensic medicine in the formation of a general practitioner?
174. Code of Criminal Procedure of the Russian Federation
175. When, in accordance with the Criminal Procedure Code, is it mandatory to appoint an expert examination?
176. What evidence is provided for by the Code of Criminal Procedure? What is the difference between expert evidence and the rest?

177. In what cases is an examination ordered in accordance with the Code of Criminal Procedure? Who carries it out?
178. What do the words: examination and expert mean? What types of forensic examinations are most often assigned during criminal investigations?
179. What are the official federal regulatory documents governing the conduct of forensic medical examination?
180. What types of examinations do you know and what are their features?
181. What law regulates forensic medical expertise in the Russian Federation? What are the tasks and principles of forensic expertise?
182. In what cases does an expert participate in court hearings, at what stages of the trial and what is the procedure for conducting an examination?
183. List the rights of an expert, in which document are they set out?
184. What objects are an independent basis for conducting forensic medical examination? In which departments of the Bureau of Forensic Medical Examination?
185. Name the articles of the Criminal Code of the Russian Federation under which an expert, when conducting each examination, gives a written undertaking and, in case of violation, bears criminal liability?
186. List the duties and criminal liability of a forensic expert?
187. What is the procedure for appointing a forensic medical examination and a forensic medical study? What are the expert documents called?
188. What legislative documents are the basis for compensation for harm caused to the health of citizens, including by medical workers?
189. In what investigative actions and for what purpose can a medical specialist participate? Who decides on his participation?
190. In what cases and for what purpose does an expert participate in an investigative experiment?
191. Right
192. How should complications arising during surgical interventions be classified? What is the procedure for this examination and when is harm to health established?
193. What is the procedure for handling citizens' claims against a healthcare facility or a healthcare worker?
194. Name what crimes committed by medical workers can be classified as professional and official crimes, and define them?
195. How is a refusal of medical intervention formalized? What amount of information should be reflected?
196. List the patient's rights, the violation of which may create a conflict legal situation?
197. Who has the right to engage in private practice and traditional medicine? What law regulates the procedure for obtaining these rights?
198. Give a definition and examples of the concept of "accident" in medical practice?
199. How is it customary to classify defects in medical activity in forensic medicine? What are the limits of liability for them in case of adverse consequences?
200. How is artificial illness and self-mutilation understood? What are the features of conducting an examination, its role in establishing them?
201. What is meant by compensation for material and moral damage? Who makes the decision and the role of the forensic medical examination?
202. What is the essence of the concept of "medical error", and what is the doctor's responsibility for it in the event of an unfavorable outcome?
203. Give a definition of an official and list the crimes of medical workers?
204. Provide a definition and examples of the concept of "accident" in medical practice.
205. Give a definition of crime and misdemeanor. Name their types.

206. When is an induced abortion considered illegal? Can a doctor who performed it selflessly be subject to criminal prosecution?
207. What is “medical confidentiality” and when, in accordance with the law (which one?), is its disclosure permitted without the patient’s consent?
208. How is patient consent for medical intervention formalized? What conditions must be met?
209. What is the structure and subordination of the Main and Regional Bureau of Forensic Medicine?
210. What is moral damage? Can the question of compensation be raised in the case of improper medical treatment?
211. Features of the appointment and organization of forensic medical examination in case of suspected professional violations of medical workers?
212. What are the rights and social protection of doctors and other medical workers?
213. In what regulatory documents and what fundamentally important things are noted in them regarding the transplantation of human organs and tissues?
214. When is it possible to provide medical care without the consent of citizens? Who makes this decision and on the basis of what regulatory document?
215. What constitutes consent and when can a patient's refusal of medical intervention be accepted? What conditions must be met according to the law?
216. What is the criminal liability of a doctor for careless actions? What articles of the Criminal Code of the Russian Federation are there that can be brought against a doctor in such cases?
217. Give a definition of careless action. For what defects in professional work can it be applied to a doctor?
218. What is "extreme necessity" when it occurs in medical practice?
219. What are the characteristics of forensic medicine compared to other clinical disciplines?
220. What is the role of forensic medicine in the formation of a general practitioner?
221. Who is a medical expert? On what grounds can he be assigned an examination? What are his rights?
222. What are the tasks of the Bureau of Forensic Medicines in accordance with and its subordination?
223. What exactly is the legal significance of a medical history?
224. List the duties and criminal liability of a forensic expert?
225. In what regulatory documents and what fundamentally important things are noted in them regarding the transplantation of human organs and tissues?
226. What circumstances, provided for by the Criminal Code of the Russian Federation, exclude guilt in the presence of its signs? Using the example of an unfavorable outcome in the provision of medical care?
227. When and by whom is an official investigation conducted in the event of a complaint about a defect in medical care? What is the procedure and features of drawing up a document?