

**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

April 17, 2025

Decision of the CCMC
April 17, 2025

Protocol No. 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

**EDUCATIONAL PROGRAM
discipline «Health and Safety»**

Specialty: 31.05.01 General Medicine

Course: 2

Semester: 3, 4

Total hours: 252 hrs.

Total credits: 7 credit units

Control form – examination, 4 semester

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 the 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).

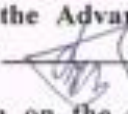
Authors: Ph.D. of Biological Sciences, Associate Professor, V.V. Zaritskaya, Head of the Department of Traumatology with a course in Disaster Medicine, Holder of the Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Professor, I.V. Borozda

Reviewers:

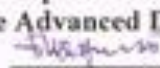
Head of the Department of Hospital Therapy with a Course in Pharmacology, Federal State Budgetary Educational Institution of Higher Education "Amur State Medical Academy", Holder of an Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Professor, V.V. Voitsekhovskiy;

Head of the Department of Surgical Diseases of the Faculty of Postgraduate Education, Holder of the Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Associate Professor, O.S. Olifirova

APPROVED at the meeting of the Department of Traumatology with a course in Disaster Medicine, Protocol No. 8 dated April 02, 2025

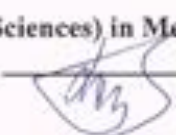
Head of the Department, Holder of the Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Professor  I.V. Borozda

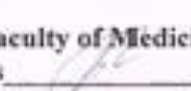
Conclusion of the Expert Commission on the review of the Educational Programs: Protocol No. 2 dated April 10, 2025

Expert of the expert commission,
Holder of the Advanced Doctorate (Doctor of Sciences) in Medical Sciences,
Professor  A.A. Blotsky

APPROVED at the meeting of the Cycle Methodical Committee No. 4: Protocol No. 2 dated April 15, 2025

Chairman of the CMC No. 4

Holder of the Advanced Doctorate (Doctor of Sciences) in Medical Sciences, Professor  I.V. Borozda

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

April 17, 2025

**FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
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1. EXPLANATORY NOTE

1.1. Characteristics of the discipline

The safety of any activity for each person and their environment, as well as for society as a whole, must be considered taking into account all economic, social and environmental consequences. The discipline "Health and Safety" (LS) is designed to equip students with theoretical knowledge and practical skills integrated on a common methodological basis into a single complex necessary to ensure a comfortable state and safety of a person in interaction with the environment.

Studying life safety and medical care should broaden the graduate's horizons, teach them to analyze cause-and-effect relationships, evaluate and compare a large set of conditions and factors that can affect the life of an individual and population contingents in emergency situations. A future doctor should develop the ability to quickly and adequately navigate the situation, plan their actions and conduct the necessary treatment and preventive measures, master the skills and abilities of providing medical care with standard and improvised means, etc.

1.2. Objectives and tasks of the discipline

The purpose of mastering the discipline «Health and Safety» is the professional training of medical school graduates to work on providing medical care to those affected in emergency situations in peacetime and wartime.

Objectives of mastering the discipline «Health and Safety»:

- to form in students an understanding of the role and place of extreme medicine and life safety among fundamental and medical sciences, the directions of development of the discipline and its achievements;
- to familiarize students with the main stages of the development of extreme medicine and life safety as a medical and biological discipline;
- to familiarize students with the legal, regulatory, technical and organizational foundations for ensuring life safety;
- to familiarize students with the principles of ensuring safe interaction between humans and the environment, rational conditions of activity, and security systems;
- to familiarize students with the specifics of medical care for the population in wartime and in emergency situations during peacetime;
- to familiarize students with the content of measures taken to protect the population, patients, personnel and property of medical institutions in wartime and in emergency situations in peacetime ;
- to familiarize students with the basics of organizing medical and psychological support for the population, medical workers and rescuers in emergency situations;
- to familiarize students with the peculiarities of the development of neuropsychiatric disorders among the population, medical personnel and rescuers in emergency situations;
- to train students to provide first medical, pre-medical and first medical aid to the affected population in wartime and emergency situations in peacetime;
- to train students to practically implement basic measures to protect the population, patients, medical personnel and property from the damaging factors of various types of weapons and in emergency situations in peacetime;
- to train students to assess the radiation and chemical environment;
- to train students to organize and carry out special treatment;
- to train students to use medical protective equipment competently;
- to train students to carry out sanitary, hygienic and anti-epidemic measures in affected areas;
- to develop in students the skills of a healthy lifestyle, work organization, safety regulations

and control over compliance with environmental safety.

- to develop in students a culture of professional safety, the ability to identify hazards and assess risks in their professional activities; to develop in students the motivation and ability to independently improve the level of safety culture.

1.3.The place of the discipline in the structure of the main educational program of higher education

In accordance with the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine (2020), the discipline "Health and Safety" refers to Block 1 of the basic part. The total workload is 7 credits (252 hours). The form of control is an exam in the 4th semester.

The discipline "Life Safety" consists of 2 sections:

Section 1: Life Safety.

Section 2: Disaster Medicine.

1.4 Requirements for students

To study this academic discipline (module), the following are required: background knowledge, skills and competencies in the disciplines of the humanitarian, social and economic cycles in the amount of complete secondary education.

To study the discipline, knowledge, skills and abilities formed by previous disciplines are necessary:
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: reading and writing in Latin general medical and pharmaceutical terms and prescriptions; analysis and translation of general medical and pharmaceutical terms.
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: direct communication, including in the context of a scientific conference, in situations of exchanging work experience, familiarization with specific methods, familiarization with the work of medical institutions; providing medical assistance to foreign citizens.
History of Medicine
Knowledge: outstanding figures in medicine and healthcare, outstanding medical discoveries in the field of pediatric orthopedics, 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 pediatric orthopedics.
Skills: historical and medical terminology
Philosophy
Knowledge: methods and techniques of philosophical analysis of problems; forms and methods of scientific knowledge, their evolution; basic patterns and trends in the development of the world historical process; laws of dialectical materialism in medicine. (II - III level)
Skills: be able to competently and independently express, analyze the forms and methods of scientific knowledge and the laws of dialectical materialism in medicine.
Skills: educational activities through appropriate forms and methods of its discussion and comprehension for the precise focus of the future doctor on understanding the roots, beginnings,

historical and current forms of organismic realization (in norm and pathology) of the main ability of a person - the ability to be self-aware.
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).
Skills: be able to build and maintain working relationships with patients and other team members.
Skills: perception and analysis of special texts with ethical and legal content, methods of conducting discussions and polemics, public speaking skills and written, reasoned presentation of one's own point of view on current bioethical issues.
Histology, embryology, cytology
Knowledge: embryogenesis, histological structure of tissues and systems (II - III level).
Skills: be able to determine age-related patterns of development of organs and systems; analyze the results of histophysiological research.
Skills: recognition of the teratogenic and embryogenic effects of toxic chemicals with poisonous effects; application of knowledge in the field of protein biosynthesis, nucleic acid composition, and energy metabolism in the cell when studying the effects of cytotoxic toxic substances.
Microbiology with virology
Knowledge: the impact of microbes, viruses, rickettsia, fungi on the body. Microbiological diagnostics of infectious diseases (II level).
Skills: be able to analyze the results of microbiological diagnostics of infectious diseases.
Skills: study of the destructive effects of biological weapons; skills in identifying biological agents capable of causing widespread severe diseases in humans, animals, and plants.
Modern problems of regeneration
Knowledge: biological essence, main forms and phases of the main types of regeneration - physiological and reparative ; 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 and reparative regeneration and the importance of the immune system.
Skills: rehabilitation direction for restoring the patient's health through the integrated use of various medical technologies aimed at maximum restoration of the body's impaired physiological functions; skills in the mechanisms of regulation of the regenerative capacity of organs and tissues.
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 literature, the Internet for professional activities, work with equipment taking into account safety regulations .
Skills: work with computer technology to perform calculations using formulas, skills in statistical processing of experimental results; calculations for the analysis of physical phenomena and the impact of various physical factors on the human body .
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 the cardiovascular , respiratory, digestive, urinary, and hematopoietic systems.
Skills:

Biochemistry	
Knowledge: blood composition, biochemical blood constants, hormones, buffer systems, hemoglobin oxygenation factors , erythrocyte metabolism (II - III level).	
Skills: be able to analyze the contribution of biochemical processes to the functioning of organs and the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems, and interpret the results of the most common laboratory diagnostic methods to identify disorders in orthopedic diseases.	
Skills: independent work with educational, scientific and reference literature; conduct a search and make general conclusions; use the achievements of chemistry V medicine ; the relationship between chemistry and medicine and pharmacy.	
Biology	
Knowledge: laws of genetics and its importance for medicine; patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases; biosphere and ecology, the phenomenon of parasitism and bioecological diseases (II - III level).	
Skills: be able to analyze patterns of heredity and variability in the development of orthopedic diseases	
Skills : pathogenesis and clinical picture of the impact of xenobiotics on the human body .	
Anatomy	
Knowledge: Anatomical and physiological features of the respiratory, cardiovascular, digestive, and hematopoietic systems (II - III levels).	
Skills: be able to analyze age- and gender-related features of the structure of the human musculoskeletal system.	
Skills: in the field of structure and topography of organs and tissues, organ systems and apparatuses of the human body based on modern scientific achievements and taking into account the requirements of practical medicine.	
Normal Physiology	
Knowledge: reflex arc, conditioned and unconditioned reflexes, physiology of the human musculoskeletal system; physiology of the respiratory, cardiovascular, nervous systems under normal conditions and when the body is exposed to toxicants general toxic , pulmonary toxic , cytotoxic action (II - III level).	
Skills : be able to analyze the significance of regulation of biological processes in the human body on the functioning of the musculoskeletal system	
Skills: regulation of the activity of cells, organs, systems, the organism as a whole and its interaction with the environment; skills in determining functional disorders on the part of organs and systems involved in the toxic process, the absence of structural and morphological changes in the tissues of the poisoned.	

1.5 Interdisciplinary links with subsequent disciplines

The knowledge and skills acquired in the discipline "Life Safety" are necessary for studying the following disciplines:

No. p /p	Name of subsequent disciplines	Section numbers of the discipline, necessary for study subsequent disciplines	
		Section 1 Safety life activity	Section 2 Medicine disasters

1	Philosophy	+	+
2	Bioethics	+	+
3	History of the Fatherland	+	+
4	History of Medicine	+	+
5	Psychology and Pedagogy	+	+
6	Physics	+	+
7	Chemistry	+	+
8	Anatomy	+	+
9	Physiology	+	+
10	Pharmacology	+	+
11	Hygiene	+	+
12	Epidemiology	+	+
13	Propaedeutics of internal diseases	+	+
14	General surgery	+	+
15	Medical rehabilitation	+	+
16	Infectious diseases	+	+
17	Medical psychology	+	+
18	Faculty therapy	+	+
19	Faculty surgery	+	+
20	Anesthesiology, resuscitation, intensive care therapy	+	+
21	Radiation diagnostics	+	+
22	General surgery	+	+
23	Neurology, neurosurgery	+	+
24	Medical genetics	+	+
25	Public health and healthcare, health economics	+	+
26	Medical rehabilitation	+	+
27	Psychiatry, medical psychology	+	+
28	Occupational diseases	+	+
29	Otorhinolaryngology	+	+
30	Ophthalmology	+	+
31	Pathological anatomy . to linical pathological anatomy	+	+
32	Pathological physiology, clinical pathophysiology	+	+
33	Clinical pharmacology	+	+
34	Phthisiology	+	+
35	Outpatient therapy	+	+
36	Hospital therapy	+	+
37	Oncology, radiation therapy	+	+
38	Current issues in cardiology	+	+
39	Laboratory diagnostics	+	+

1.6 Requirements for the results of mastering the discipline

The study of the discipline "Health and Safety" is aimed at the formation/improvement of the following competencies: universal (UK), general professional (OPK)

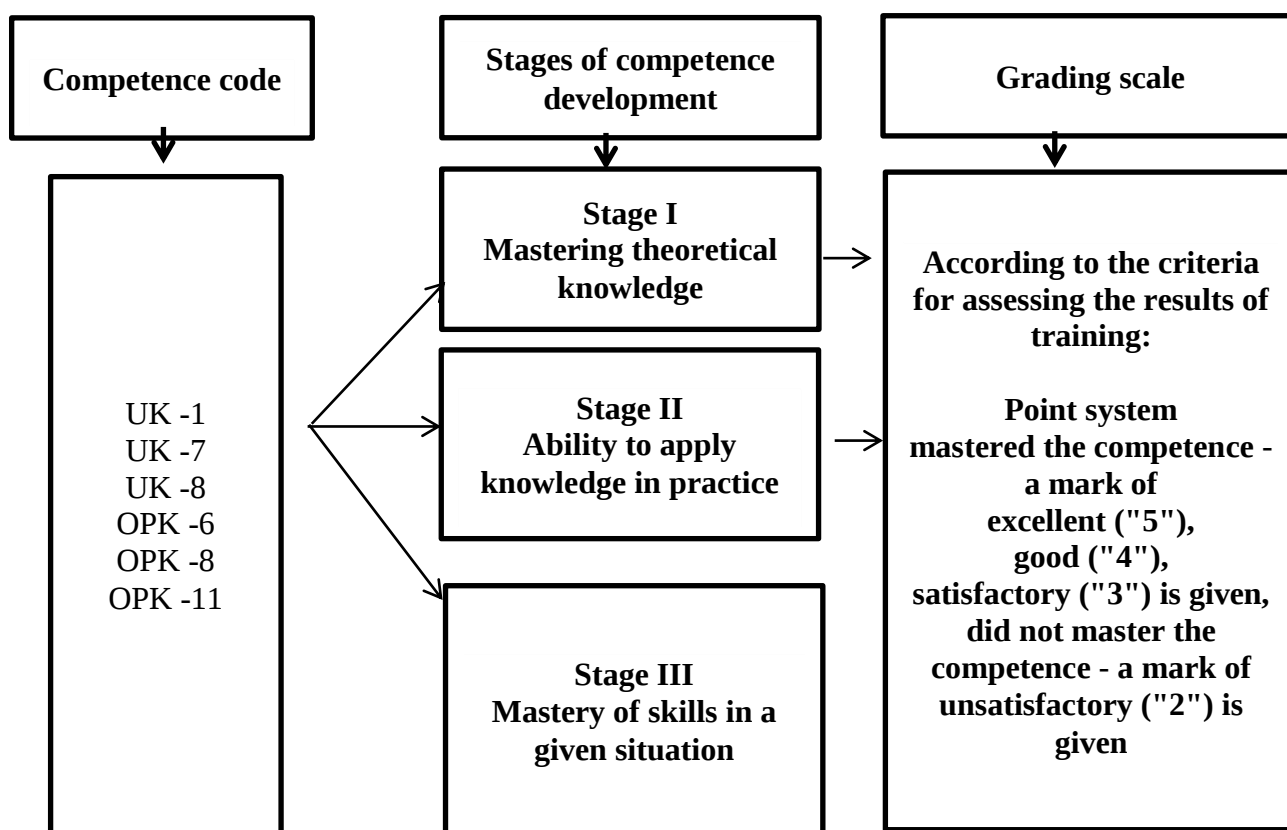
No. p /p	Code and name of competence	Code and name of the indicator of achievement of competence
Universal competencies		
1	UK-1 Able to carry out critical analysis of problematic situations based on a systems approach, develop an action strategy	ID UK-1.1. Analyzes a problem situation as a system, identifying its components and the connections between them ID UK-1.2. Identifies gaps in information needed to solve problem situations and designs processes to eliminate them ID UK-1.3. Applies systems analysis to resolve problematic situations in the professional sphere
	UK-7 Able to maintain an adequate level of physical fitness to ensure full social and professional activity	ID UK-7.1. Observes and promotes healthy lifestyle standards in various life situations and in professional activities. ID UK-7.3 . Selects health-saving technologies to maintain a healthy lifestyle, taking into account the physiological characteristics of the body.
	UK-8 Capable of creating and maintaining safe living conditions in everyday life and professional activities to preserve the natural environment, ensure sustainable development of society, including in the event of a threat or occurrence of emergency situations and military conflicts	ID UK-8.3. Analyzes activities and behavior in the event of emergency situations of natural and man-made origin; provides first aid, describes methods of participation in recovery activities
General professional competencies		
2	OPK-6. Capable of organizing patient care, providing primary health care, ensuring the organization of work and	ID OPK-6.1. Organizes and provides primary, medical and emergency care to patients. ID OPK-6.2. Uses medical means of protection, prevention, provision of medical care and treatment of injuries caused by toxic substances of various nature, radioactive substances and biological agents.

	making professional decisions in emergency situations at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction	ID OPK-6.3. Makes professional decisions in emergency situations and provides first medical aid at the pre-hospital stage, in emergency situations, epidemics and in areas of mass destruction. ID OPK-6.4. Organizes the work of medical personnel and carries out anti-epidemic measures to protect the population in emergency situations, epidemics and in areas of mass destruction.
	OPK-8. Capable of implementing and monitoring the effectiveness of medical rehabilitation of a patient, including when implementing individual rehabilitation and habilitation programs for a disabled child, and assessing the patient's ability to perform work activities	ID OPK-8.1. Assesses the functional reserves and adaptive abilities of a person, reduced by the adverse impact of environmental factors and activities or as a result of illness. ID OPK-8.2. Identifies risk groups for the purpose of improving health and determining rehabilitation potential for subsequent restorative treatment and rehabilitation of patients.
	OPK-11 Capable of preparing and applying scientific, scientific-production, design, organizational-managerial and regulatory documentation in the healthcare system	ID OPK 11.3. Interprets and applies data from physical, chemical, mathematical and other natural science concepts and methods for solving professional problems. ID OPK-11.5. Analyzes and compiles accounting and reporting medical documentation and calculates qualitative and quantitative indicators used in professional activities.

Section of the discipline (or module) and the code of the competence being formed

Item No.	Section name	Code of the competence being formed
1	Life safety	UK-1; UK-7; UK-8; OPK-6; OPK-8; OPK-11
2	Disaster Medicine	UK-1; UK-7; UK-8; OPK-6; OPK-8; OPK-11

1.7 Stages of competencies development and description of assessment scales



1.8 Forms of training organization and types of control

Form of organization of students' training	Brief description
Lectures	Lecture material contains key And most problematic questions disciplines , most significant V preparation specialist .
Practical classes	Intended For analysis (consolidation) of theoretical provisions And control over their assimilation With subsequent application received knowledge V in the course study of the topic.
Interactive forms of education	- solution of practical situational problems tasks and exercises followed by discussion , - interactive survey; - execution creative tasks ,

	- small group method, - discussions, - online course of the discipline in the Moodle system , - testing, including in the Moodle system .
Participation in the department's research work, student circle and conferences	- Preparation oral messages and poster presentations for speeches at a student club or scientific conference; - writing theses and abstracts on the chosen scientific field; - preparation of a literature review using educational, scientific, reference literature and Internet sources .
Types of control	Brief description
Incoming inspection	Testing theoretical knowledge and practical skills developed by the program on life safety and medical care in secondary (complete) general education institutions. The entrance knowledge control includes: - testing in the Moodle system (test of incoming knowledge control), - solving situational problems and exercises. The results of the incoming inspection are systematized, analyzed and used by the teaching staff of the department to develop measures to improve and update the teaching methods of the discipline.
Current control	Current knowledge control includes: - checking the solution of situational problems and exercises completed independently (extracurricular independent work); - assessment of the assimilation of theoretical material (oral survey and computer testing); - control over the technique of performing the experiment during practical classes and drawing up the protocol; - testing on all topics of the discipline (tests include questions of a theoretical and practical nature); - individual assignments (practical and theoretical) for each topic of the discipline being studied.
Intermediate certification	The midterm assessment is represented by an exam, which students are renting out at the end of 4th semester a. The exam includes the following stages: - assessment of knowledge of theoretical material (oral survey and interview); - testing in the Moodle system (interim assessment test); - check of assimilation practical skills And skills ; - solving situational problems and exercises on each topic of the discipline, included in the examination tickets.

2. STRUCTURE AND CONTENT OF THE DISCIPLINE

2.1 Scope of the discipline and types of educational activities

No. p/p	Types of educational work	Total hours	Semester	
			3	4
1	Lectures	40	20	20
2	Practical classes	104	52	52
3	Independent work of students	72	36	36
	Total labor intensity in hours	252	108	144
	Total workload in credit units	7	3	4

2.2 Thematic plan of lectures and their brief content

No p /p	Topics and content of lectures	Codes of formed competencies	Labor intensity (hours)
3rd semester			
1	Methodological and legal foundations of human health and safety. Human life. Human habitat. Pathogenic situations. Environment. Environmental factors. Risk factors. Pathological conditions of the human body. Human adaptation. Life safety. Types, directions, approaches, methods, ways and means of ensuring life safety. Legal basis for ensuring life safety in the Russian Federation. Life safety culture.	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	4
2	National security . National security of Russia. The role and place of Russia in the world community. The system of national interests of Russia. Fundamentals of mobilization preparation and mobilization of health care. State material reserve for medical and sanitary-economic purposes. Military registration and reservation of medical workers. Modern wars and armed conflicts. Definition and classification of wars and armed conflicts. Means of armed struggle. Damaging factors of modern types of weapons. Safety of society and the individual. Dangers and their impact on the human body. System of measures to ensure the safety of organized groups. Measures to ensure the personal safety of citizens	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	6
3	Emergencies. Unified state system for prevention and elimination of consequences of emergencies . Basic concepts, definitions, classification, medical and health consequences of emergency	UK-1 UK-7 UK-8 OPK-6 OPK-8	4

	situations. Phases of development and damaging factors of emergency situations. Methods of forecasting and assessing the situation in emergency situations. Unified state system for preventing and eliminating the consequences of emergency situations .	OPK-11	
4	Protection of people from harmful and dangerous factors of natural and man-made origin . Basic principles and legal framework for protecting the population. Basic principles for organizing emergency rescue and other urgent work in emergency situations. Civil defense system and its main areas of activity. Basic principles for organizing and protecting the population in peacetime and wartime. System and methods for protecting people from the main types of hazardous and harmful effects of natural and man-made origin. Methods for monitoring and identifying hazardous and negative factors. General characteristics and classification of protective equipment. Protective structures, individual technical and medical protective equipment. Sanitary and special treatment.	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	2
5	Fundamentals of organizing medical and psychological support for the population, medical workers and rescuers in emergency situations . Fundamentals of organizing medical and psychological support for the population, medical workers and rescuers in emergency situations. The main psychological causes of erroneous actions and the emergence of dangerous situations. Psychotraumatic factors of an emergency. Features of the development of neuropsychiatric disorders in the population and rescuers in emergency situations. Organization of medical and psychological assistance to the population, medical workers and rescuers in emergency situations	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	2
6	Life safety in medical organizations . Safety of medical work. Characteristics of threats to life and health of medical workers. Occupational health and safety system in medical organizations. Basic approaches, methods and means of ensuring physician safety. Features of ensuring fire, radiation, chemical, biological and psychological safety of medical personnel. Safety requirements when working in structural divisions of medical organizations. Safety of medical services. Characteristics of threats to the	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	2

	life and health of hospital patients. Forms of manifestation of threats to patient safety. The system of ensuring patient safety in medical organizations. Therapeutic and protective mode of operation of medical organizations. Sanitary treatment of patients. Evacuation of patients in emergency situations .		
Total hours for 3rd semester 20			
4th semester			
7	Objectives, organizational structure and governing bodies of the All-Russian Disaster Medicine Service . Objectives, principles, modes of operation of the All-Russian Disaster Medicine Service. Organizational structure, characteristics of institutions and formations of the All-Russian Disaster Medicine Service. Legislative and regulatory framework for the management of the All-Russian Disaster Medicine Service .	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	2
8	Fundamentals of medical and evacuation support for the population in emergency situations in peacetime and wartime . The essence of the system of medical evacuation support of the population in emergency situations. Organization of medical sorting in medical evacuation support of the population and personnel of medical institutions in emergency situations. Features of the organization of medical care for children in emergency situations. Features of the organization of medical evacuation measures in case of use of modern types of weapons .	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	4
9	Medical and sanitary support of the population during the elimination of the consequences of emergency situations of chemical and radiation nature . Medical and sanitary support of the population during the liquidation of consequences of emergency situations of chemical nature. Sources of chemical hazard. Classification of toxic and highly toxic substances (THS). Brief characteristics of THS (the main patterns of interaction of the organism and toxicants). The course of intoxication, the main clinical manifestations. General principles of emergency care, antidote therapy. The concept and medical and tactical characteristics of contamination zones and foci of damage created by THS. Features of medical evacuation support (organizational, medical and diagnostic measures,	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	6

	forces and means). Modern systems of toxicological information support. Medical and sanitary support of the population during the liquidation of consequences of emergency situations of radiation nature. Types of ionizing radiation and their properties. Quantitative assessment of ionizing radiation. Classification and brief characteristics of radiation accidents. The concept of radioactive contamination zones. Foci of radiation damage. Factors causing human damage in nuclear explosions and radiation accidents. Medical characteristics of radiation injuries, immediate and long-term consequences of irradiation. Medical and sanitary support of the population during the liquidation of consequences of radiation accidents. Means of prevention and therapy of radiation injuries.		
10	Medical and sanitary support of the population during the elimination of the consequences of natural and man-made emergencies. Medical and tactical characteristics of natural emergencies. Medical and tactical characteristics of transport and road traffic accidents Medical and tactical characteristics of emergency situations of explosive and fire hazardous nature Organization of medical and sanitary support of the population in the liquidation of the consequences of emergency situations of natural character, road transport, explosion and fire hazard nature	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	4
11	Sanitary and anti-epidemic (preventive) measures in the elimination of the consequences of emergency situations . Fundamentals of organizing and conducting sanitary and anti-epidemic (preventive) measures among the population in emergency situations. Classification and content of sanitary and anti-epidemic (preventive) measures. Principles of organizing sanitary and anti-epidemic (preventive) measures in emergency situations. Features of organizing sanitary and anti-epidemic (preventive) measures in epidemic conditions.	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	2
12	Organization of medical supplies in emergency situations. Objectives and principles of supplying QMS formations and institutions with medical property. Medical property: classification and characteristics. Determining the need for medical	UK-1 UK-7 UK-8 OPK-6 OPK-8 OPK-11	2

	property. Organization of accounting and reporting on medical property.		
Total hours for 4th semester			20
Total hours:			40

2.3 Thematic plan of practical classes and their content

em	Name of the topics of practical classes	Contents of practical classes	Codes formed competencies and indicators their achievements	Types control	Labor intensity (hours)
3rd semester					
1	Methodological and legal foundations of human life safety	Entrance control (checking theoretical knowledge and practical skills) Theoretical part: Basic concepts and types of activities to ensure human life safety. Legal basis for ensuring life safety in the Russian Federation. Human life safety system in the Russian Federation Practical part: completing practical situational tasks using knowledge of legal medical documents, working with handouts, legal, regulatory and reference sources, completing a workbook, preparing for testing.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Testing, frontal survey, checking the solution of practical situational tasks	9
2	National safety	Theoretical part: National security of Russia. Fundamentals of mobilization preparation and mobilization of healthcare. Modern wars and armed conflicts. Security of society and the individual. Practical part: design of the workbook, preparation for testing. Solving situational problems and their discussion. Preparation of the abstract, according to the topics of the methodological instructions.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, checking the solution of situational problems, testing, examination abstracts	12
3	Emergencies. Unified state system for prevention and elimination of consequences of emergencies.	Theoretical part: Phases of development and damaging factors of emergency situations of natural, road transport, explosion and fire hazard nature. Methodology for assessing the medical situation when foci of damage occur in emergency situations. Tasks and	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3	Survey, testing,	6

		organizational structure of the Russian system for the prevention and elimination of consequences of emergency situations. Practical part: Study of the methodology for assessing the medical situation in emergency situations (about assessing the medical situation: a) calculating sanitary losses at facilities; b) determining the availability and need for the forces and means of the MSGO to provide first medical and first medical aid; c) assessing the losses of forces and means of the MSGO). Design of the workbook. Preparation for testing. Preparation of the abstract, according to the methodological guidelines.	UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	examination abstracts	
4	Protection of people from harmful and dangerous factors of natural and man-made origin.	Theoretical part: Fundamentals of organizing the protection of the population from harmful and dangerous factors of natural, anthropogenic and technogenic origin . Means and methods of control and monitoring of dangerous and negative factors. Technical means of individual and collective protection. Individual medical means of protection. Sanitary and special treatment Practical part: Formation of students' skills in the ability to use collective and individual protection equipment, as well as primary fire extinguishing equipment. Study of a set of measures to eliminate contamination of rescue personnel and the population. Design of a workbook. Preparation for testing. Preparation of an abstract, according to the methodological guidelines.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination abstracts	12
5	Fundamentals of organizing medical and	Theoretical part: Features of the development of neuropsychiatric			

	psychological support for the population, medical workers and rescuers in emergency situations	disorders in the population, medical personnel and rescuers in emergency situations. Methods of medical and psychological correction of the impaired mental and functional state of those affected in emergency situations Practical part: Definition and selection of forms and methods medical and psychological assistance in extreme situations, based on the prevalence of certain clinical manifestations of a neuropsychic nature . Design of a workbook. Preparation for testing, solving situational problems	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2,6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination solutions situational tasks	3
6	Life safety in medical organizations	Theoretical part: Safety of medical services. Safety of medical work. Practical part: Study of the universal algorithm for providing first aid . (drawing up the algorithm diagrams). Study of the life safety requirements of medical and service personnel; introductory, primary, repeated, unscheduled and targeted briefings. Design of the workbook. Preparation for testing.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2,6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination solutions situational tasks	10
4th semester					
7	Objectives, organizational structure and governing bodies of the All-Russian Disaster Medicine Service	Theoretical part: Definition and tasks of the All-Russian Disaster Medicine Service. Organizational structure of the All-Russian Disaster Medicine Service. Formation and institutions of the Disaster Medicine Service. Operating modes of the All-Russian Disaster Medicine Service. Territorial and production principle of the VSMK activity. Practical part: The principle of unity of medical science and practices . Modes of operation of the VSMK	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2,6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination abstracts	3.25

		and their characteristics . Preparation of the abstract, according to the topics of the methodological instructions. Design of the workbook. Preparation for testing.			
8	Legislative and regulatory framework for the management of the All-Russian Disaster Medicine Service	Theoretical part: Organization of medical supplies in emergency situations. Tasks, principles, modes of operation of the All-Russian Disaster Medicine Service. Organizational structure, characteristics of institutions and formations. Practical part: Study of the regulatory framework for the organization and provision of medical care in emergency situations. Regulations of the All-Russian Disaster Medicine Service . Design of a workbook. Preparation for testing.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing	3.25
9	System of medical and evacuation support for the population in emergency situations	Theoretical part: The concept of LEO. Conditions that determine the system LEO population in emergency situations . The basis and essence of LEO , the main principles of organization. The concept of the stage of medical evacuation, tasks, basic deployment scheme. Types and scope of medical care, their brief characteristics. Medical sorting of the injured (sick). Features of medical sorting in emergency situations . Medical evacuation of the injured (sick), its features in emergency situations . Features of the organization of medical evacuation measures when the enemy uses modern types of weapons. Practical part: Drawing up evacuation plans for victims in peacetime and wartime. Designing a workbook. Preparing for testing. Preparation of an abstract in	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination abstracts	9.75

		accordance with the methodological guidelines.			
10	Basic concepts of toxicology and medical protection	Theoretical part: Toxic chemicals with irritant action. Toxic chemicals with pulmonary toxic action. Toxic chemicals with general toxic action. Toxic chemicals with cytotoxic action. Toxic chemicals with neurotoxic action. Poisonous technical liquids. Practical part: xenobiotics affect the body . Solving situational problems on the topics of the section. Preparation for a survey on self-control issues. Design of a workbook. Preparation for testing. Preparation of an abstract in accordance with the methodological guidelines.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2,6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination abstracts	16.25
11	Medical and sanitary support of the population during the elimination of the consequences of emergency situations of a radiation nature.	Theoretical part: Medical means for prevention and assistance in case of radiation injuries. Radiation injuries resulting from external general irradiation. Radiation injuries resulting from internal radioactive contamination. Local radiation damage. Practical part: Solving situational problems on the topics of the section. Preparing for a survey on self-control issues. Designing a workbook. Preparing for testing. Preparation of an abstract in accordance with the methodological guidelines.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2,6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination abstracts	9.75
12	Fundamentals of organizing and conducting sanitary and anti-epidemic	Theoretical part: Fundamentals of organizing and conducting sanitary and anti-epidemic (preventive) measures among the population in emergency situations. Medical and sanitary support of the	UK-1: ID 1.1., 1.2., 1.3	Survey,	

	(preventive) measures among the population in emergency situations	population during the elimination of the consequences of emergency situations of natural, road transport, explosion and fire hazard. Practical part: Solving situational problems on the topics of the section. Preparing for a survey on self-control issues. Designing a workbook. Preparing for testing. Preparation of an abstract in accordance with the methodological guidelines.	UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	testing, examination abstracts	6.5
13	Determining the need and drawing up an application for medical equipment for institutions and formations intended for medical and sanitary support of the population in emergency situations in peacetime and wartime.	Theoretical part: The concept of medical property, its classification, requirements. Fundamentals of organizing medical supplies of the QMS and MSGO. Sources of medical property. Organization of providing property to QMS and MSGO formations and institutions. Protection of medical property in emergency situations and in wartime. Practical part : Calculation of needs medical property to staff QMS formations and institutions and provide medical care to victims of emergencies. Design of a workbook. Preparation for testing.	UK-1: ID 1.1., 1.2., 1.3 UK-7: ID 7.1, 7.3 UK-8: ID 8.3 OPK-6: ID 6.1, 6.2, 6.3, 6.4 OPK-8: ID 8.1, 8.2 OPK-11: ID 11.3, 11.5	Survey, testing, examination solutions situational tasks	3.25
Total hours					104

2.4 Interactive forms of learning

interactive methods are widely used in practical classes. training (interactive survey, work in small groups, computer testing, etc.), participation in educational and research and scientific research work.

No. p/p	Topic of the practical lesson	Labor intensity in hours	Interactive form of education	Labor intensity in hours, in % of classes
3rd semester				
1	Basic concepts and types of activities to ensure human life safety	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%
2	Legal basis for ensuring life safety in the Russian Federation	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%
3	Human life safety system in the Russian Federation	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
4	National security of Russia	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
5	Fundamentals of mobilization preparation and mobilization of health care	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%
6	Modern wars and armed conflicts	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
7	Safety of society and individual	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
8	Phases of development and damaging factors of emergency situations of natural, road transport, explosive and fire hazardous nature Methodology for assessing the medical situation when foci of damage occur in emergency situations	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%

9	Tasks and organizational structure of the Russian system for the prevention and elimination of consequences of emergency situations	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
10	Fundamentals of organizing the protection of the population from harmful and dangerous factors of natural, anthropogenic and man-made origin . Means and methods of control and monitoring of hazardous and negative factors	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
11	Technical means of individual and collective protection.	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
12	Personal medical protective equipment.	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
13	Special treatment. Features of the development of neuropsychiatric disorders in the population, medical personnel and rescuers in emergency situations	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
14	Methods of medical and psychological correction of the impaired mental and functional state of those affected in emergency situations	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
15	Safety of medical work	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
16	Safety of medical services	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
4th semester				
1	1. Tasks, principles, modes of operation of the All-Russian Disaster Medicine Service. Organizational structure, characteristics of institutions and	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%

	formations			
2	2. Legislative and regulatory framework for the management of the All-Russian Disaster Medicine Service	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
3	3. System of medical and evacuation support for the population in emergency situations	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%
4	4. Definition, justification and organization of medical triage in the medical evacuation provision of the population, personnel and patients of medical institutions in emergency situations	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
5	5. Features of the organization of medical and evacuation measures when the enemy uses modern types of weapons	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
6	6. Toxic chemicals with irritating and pulmonary toxic effects.	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
7	7. Toxic chemicals of general poisonous action	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) /10%
8	8. Toxic chemicals with cytotoxic action	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
9	9. Toxic chemicals with neurotoxic action	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%
10	10. Toxic technical liquids	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
11	11. Medical means of prevention and assistance in case of radiation injuries	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
12	12. Radiation injuries resulting from external general irradiation	3.25	Working with a multimedia presentation	Working with a multimedia presentation
13	13. Radiation injuries	3.25	Working with a	

	resulting from internal radioactive contamination. Local radiation injuries		multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%
14	14. Medical and tactical characteristics of emergency situations of natural and man-made nature	3.25	Working with a multimedia presentation Testing	20 minutes (0.33 hours) / 11.5% 15 min (0.1 hour) / 10%
15	15. Fundamentals of organizing and implementing sanitary and anti-epidemic (preventive) measures among the population in emergency situations.	3.25	Work in groups Testing	20 minutes (0.33 hours) / 11.5%
16	16. Determining the need and drawing up an application for medical equipment for institutions and formations intended for medical and sanitary support of the population in emergency situations in peacetime and wartime.	3.25	Working with a multimedia presentation Small group method Testing	40 min (0.25 hour) / 27.4%
17	Exam		Testing in Moodle system	90 min (61.5%)

2.5 Criteria for assessing students' knowledge

The assessment of learning outcomes is carried out in accordance with the “Regulations on the system for assessing 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 "Health and Safety" 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.

Evaluation criteria

Quality of development	Mark on a 5-point scale
90 - 100%	"5"
80 - 89%	"4"
70 - 79%	"3"
less than 70%	"2"

Incoming inspection

Conducted during the first lesson, includes: solving problems and exercises; testing in the Moodle system <https://educ-amursma.ru>

Current control

Current control includes initial and final control of knowledge.

Initial control **is** carried out by the teacher at the beginning of each lesson in the form of a survey on self-control issues, according to the topics of the lessons, solving problems and checking tests after each practical lesson.

Final control – includes test control in the system " Moodle " <https://educ-amursma.ru> ; answers to theoretical questions of the examination ticket. Conducting the Olympiad.

Criteria for assessing the oral response

"5" - 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.

"4" - 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.

"3" - 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; when tested, allows up to 30% of erroneous answers.

"2" - 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 concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers when tested.

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 assignments 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 grade of “2” for all activities in the class, he is required to make it up.
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.

Regulations on the Olympiad

The purpose of the Olympiad: to identify and develop students’ creative abilities and interest in practical and scientific research activities, dissemination and popularization of scientific knowledge and innovative technologies among young people in the field of life safety.

Olympiad objectives:

- developing practical skills and abilities in students, identifying their abilities and the level of motivation;
- determining the general level of readiness of students for professional activities;
- organization of career guidance work.

The general management and organization of the Olympiad is carried out by the organizing committee. The chairman of the organizing committee of the Olympiad is the head of the department of traumatology with a course in disaster medicine. The organizing committee and jury are formed from among the employees of the department of traumatology with a course in disaster medicine of the medical faculty, as well as other interested persons.

The procedure for holding the Olympiad:

- Second-year students whose current score in the life safety discipline is at least 4.0 are allowed to participate in the Olympiad;
- list of competitions;
- distance learning testing;
- solving a situational problem;

- the determination of winners and prize-winners is carried out by members of the jury after checking all completed tasks based on the total points;
- The winner and prize winners of the Olympiad automatically receive an “excellent” grade on the exam.

Criteria for assessing midterm assessment.

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>
Complete completion of the practical part of the discipline: requires attendance of all practical classes. Answers to theoretical questions on the examination ticket.
2. Passing practical skills (control of the level of development of competencies).

Criteria for final assessment (midterm assessment).

"Excellent" - for the depth and completeness of mastering 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.

A student can claim to receive an "excellent" grade automatically if he/she has won a prize in disciplinary or interdisciplinary Olympiads (university, regional) and has an average grade for the current academic performance of at least 4.8 points. A student can refuse the "automatic" grade and take an exam or test together with a group on a general basis.

Assessment criteria for midterm assessment

Stages	Mark out of 5 point scale	Binary scale
Test control in the system " Moodle "	3-5	5 - "excellent" 4 - "good" 3 – “satisfactory”
Complete completion of the practical part of the course	3-5	
Delivery of practical skills (control of the formation of competencies)	3-5	
Test control in the system " Moodle "	2	2 – “unsatisfactory”
Complete completion of the practical part of the course	2	
Delivery of practical skills (control of the formation of competencies)	2	

2.6 Independent work of students (in-class, out-of-class)

Independent work of students consists of two components: classroom and extracurricular (mandatory for all students and optional) work.

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 the main theoretical questions for study, a list of practical work and the methodology for conducting it, instructions for the presentation of the results obtained, their discussion and conclusions, assignments for self-control with standard answers, a list of recommended literature.

From 1/4 to 1/2 of the practical lesson time is allocated for independent work of students: conducting research, recording results, discussing them, formulating conclusions, completing individual assignments. The preparatory stage, or the formation of an approximate basis for actions, begins for students outside of class time when preparing for the practical lesson, and ends in class.

No. p / p	Topic practical lesson	Time on student preparation to class	Forms of extracurricular independent work	
			Mandatory and identical for all students	At the student's choice (abstract on topics)
1	Methodological and legal foundations of human life safety	8.5 hours	– prepare for a lecture (read the lecture text, make lecture notes, prepare questions for the lecturer); – preparation for testing – prepare for a practical (seminar) lesson (read basic and additional literature on the topic of the lesson, prepare to solve problems; answer self-assessment questions); – write an essay on the topic of the lesson "Legal framework of the Russian Federation regulating life safety issues". "Types of regulatory legal acts, the procedure for their adoption"	Computer presentation, compilation of tables, review of legal, regulatory and reference sources on the topic; Messages on the topic "Life safety as a science. Basic concepts and definitions"; "Principles, methods and means of ensuring life safety". Solve a situational problem using the legal framework on the topic of the lesson.
2	National Security	6.5 hours	– prepare for testing – prepare for the practical lesson, read the main and additional literature, lecture materials on the topic of the lesson. Write an	Computer presentation. Prepare reports on the topic: "Problems and priorities of the national security of the Russian Federation."

			essay on the topic of the lesson: "National Security Strategy of the Russian Federation"; – " Basic provisions, principles and content of mobilization training of health authorities"	
3	Emergencies. Unified state system for prevention and elimination of consequences of emergencies.	7.5 hours	– prepare for a practical (seminar) lesson (read basic and additional literature on the topic of the lesson, prepare to solve problems; answer self-assessment questions); – write an essay on the topic of the lesson "Russian system of prevention and elimination of emergency situations"; "Consequences of emergency situations".	Solve practical situational tasks on the topic of the practical lesson, suggested by the teacher .
4	Protection of humans from harmful and dangerous factors of natural and man-made origin	7.5 hours	– prepare for a lecture (read the lecture text, make lecture notes, prepare questions for the lecturer); – preparation for testing – prepare for a practical (seminar) lesson (read the main and additional literature on the topic of the lesson, prepare to solve problems; answer self-control questions); write an essay on the topic of the lesson " Man-made hazards and protection from them."	Solve practical situational tasks on the topic of the practical lesson, suggested by the teacher.
5	Life safety in medical organizations	7.5 hours	– prepare for a lecture (read the lecture text, make lecture notes, prepare questions for the lecturer);	Computer presentation, compilation of tables . Solve a situational problem using the legal framework on the topic of

			– preparation for testing – prepare for a practical (seminar) lesson (read basic and additional literature on the topic of the lesson, prepare to solve problems; answer self-assessment questions); – write an essay on the topic of the lesson "Occupational health and safety systems in medical organizations."	the lesson
6	Fundamentals of medical and evacuation support for the population in emergency situations of peacetime and wartime	7.5 hours	– prepare for a practical (seminar) lesson (read basic and additional literature on the topic of the lesson, prepare to solve problems; answer self-assessment questions); – learn the basic diagram of medical evacuation deployment	Computer presentation. Prepare messages on the topic: "Elimination of health care consequences of emergency situations"
7	Toxic chemicals with irritating and pulmonary toxic effects	7.5 hours	– prepare for a practical (seminar) lesson (read basic and additional literature on the topic of the lesson, prepare to solve problems; answer self-assessment questions); – answer the test questions	Solve practical situational tasks on the topic of the practical lesson, suggested by the teacher.
8	Medical and sanitary support of the population during the elimination of the consequences of emergency situations of a radiation nature.	7.5 hours	– prepare for a lecture (read the lecture text, make lecture notes, prepare questions for the lecturer); – preparation for testing – prepare for a practical (seminar) lesson (read basic and additional literature on the topic of the lesson, prepare to solve problems; answer self-assessment questions); – write an essay on the	Solve practical situational tasks on the topic of the practical lesson, suggested by the teacher .

			topic of the lesson " General and medical - sanitary characteristics of earthquakes"	
Labor intensity in hours	72	60	12	

2. 7 Research (project) work

Research (project) work of students is a mandatory section of the discipline and is aimed at the comprehensive formation of universal and general professional competencies of students. Research (project) work 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 are determined by students independently or in consultation with the teacher.

List of recommended topics for research (project) work:

1. Conventional means of attack. Precision weapons. Secondary factors of destruction."
2. Structure of sanitary losses by type, severity, localization, and nature of damage. Methodology for determining the possible magnitude and structure of sanitary losses depending on weapons of mass destruction, conventional means of attack, and high-precision weapons in areas of combined damage.
3. Bacteriological (biological) weapons. Brief description of toxins, pathogenic microbes.
4. Chemical weapons, their classification. Brief characteristics of toxic substances (TS). Problems of storage and destruction of stockpiles of toxic substances.
5. Development of measures to reduce industrial injuries.
6. Improving the regional civil defense and emergency response system in the Amur region.
7. Tactics of rescue operations and liquidation of consequences in case of a dam break of the Bureya hydroelectric power station reservoir.
8. Study of damaging factors of nuclear weapons and characteristics of the nuclear damage source.

Criteria for assessing students' research (project) work:

- the material on the results of the research in the report is presented in detail, the specialized literature is well-developed, scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge is studied - "passed".
- the material on the results of the research in the report is not presented accurately enough, the special literature is poorly studied, the scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge is not studied - "failed".

3. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT DISCIPLINES

3.1 Main literature:

1. Kolesnichenko, P. L. Life Safety: textbook / P. L. Kolesnichenko - Moscow: GEOTAR-Media, 2019. - 544 p. - ISBN 978-5-9704-5194-6. - Text: electronic // URL : <http://www.studmedlib.ru/book/ISBN9785970451946.html>

2. Life safety, disaster medicine: V. 1: textbook: in 2 volumes / edited by I. A. Narkevich - Moscow : GEOTAR-Media, 2019 - 768 p. - ISBN 978-5-9704-4596-9. -Text: electronic//URL: <http://www.studmedlib.ru/book/ISBN9785970445969.html>
3. Life safety, disaster medicine: Vol. 2 / edited by Narkevich I. A. - Moscow: GEOTAR-Media, 2019 - 400 p. - ISBN 978-5-9704-4597-6. - Text: electronic. Access mode: by subscription. //URL: <http://www.studmedlib.ru/book/ISBN9785970445976.html>
4. Rogozina, I.V. Disaster Medicine / I.V. Rogozina. - Moscow : GEOTAR-Media, 2019 - 152 p. : i l. - 152 s. - ISBN 978-5-9704-5162-5. - Text : electronic Access mode: [http ://www . studmedlib . ru / book / ISBN 9785970451625. html](http://www.studmedlib.ru/book/ISBN9785970451625.html)

3.2 Further reading:

1. Levchuk, I. P. Life Safety / Levchuk I. P., Burlakov A. A. - Moscow : GEOTAR-Media, 2014 - 144 p. - ISBN 978-5-9704-2969-3. - Text: electronic Access mode: <http://www.studmedlib.ru/ru/book/ISBN9785970429693.html>
2. Levchuk, I. P. Disaster Medicine : textbook / Levchuk I. P., Tretyakov N. V. - Moscow: GEOTAR-Media, 2021 - 288 p. - ISBN 978-5-9704-6014-6. – Access mode <http://www.studmedlib.ru/ru/book/ISBN9785970460146.html>
3. Rogozina, I. V. Disaster Medicine / I. V. Rogozina. - Moscow: GEOTAR-Media, 2019 - 152 p.: ill. - 152 p. - ISBN 978-5-9704-5162-5. - Text: electronic (date accessed: 04.05.2021). – Access mode <http://www.studmedlib.ru/ru/book/ISBN9785970451625.html>
4. Aleksandrovsky, Yu. A. Disasters and mental health / Yu. A. Aleksandrovsky. - Moscow: GEOTAR-Media, 2020 - 144 p. - ISBN 978-5-9704-5917-1. - Text: electronic - Access mode: <http://www.studmedlib.ru/book/ISBN9785970459171.html>

3.3 Educational and methodological support for the discipline prepared by the department staff:

Educational aids (Educational Methodology):

1. Safety of society and the individual. Medical and health consequences of emergencies. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 44 p.
2. Safety of medical services. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A. 35 p.
3. Fundamentals of the organization and measures to protect the population from harmful and dangerous factors of natural, anthropogenic and technogenic origin. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 31 p.
4. Occupational safety of medical personnel. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 48 p.
5. Basic principles and legal framework for protecting the population and territories from emergency situations. Civil defense system and its main areas of activity. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 60 p.
6. Fundamentals of organizing medical and psychological support for the population, medical workers and rescuers in emergency situations. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 35 p.
7. Tasks and principles of organizing a unified state system for preventing and eliminating emergency situations. A textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 34 p.
8. National Security of Russia. A Textbook for Students of Medical Universities.

- Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 24 p.
9. Modern wars and armed conflicts. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 28 p.
 10. Modern wars and armed conflicts: information weapons, prospects for the development of biological weapons of leading foreign countries, biological terrorism. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 58 p.
 11. Methodological and legal foundations of human life safety. Textbook for students of medical universities. Blagoveshchensk 2012. Plastinin M.L., Klipikov V.N., Guba L.A., Ermakov G.A., 58 p.

Electronic and digital technologies:

1. Online course on the subject "Life Safety" in the EIS FGBOU VO Amur State Medical Academy. Access mode:

<https://educ-amursma.ru/local/crw/course.php?id=388>

Characteristics of modules in electronic information and educational course

Educational

Theoretical (lecture) material, video experiments, scientific and educational films
Methodological recommendations for students for practical classes.
Methodological recommendations for solving problems and exercises on the topics of the discipline.

Reference material, tables of standard values.

Controlling

Methodological recommendations for students on independent extracurricular work.
List of recommended topics for abstracts and guidelines for abstract design.

Tests of entrance, current and final knowledge control.

1. Multimedia materials on electronic media (CD , DVD)

For conducting classes on life safety, the department has classrooms in the morphological building . The department is equipped with multimedia equipment, video films on CD and DVD media. There are sets of test tasks, situational problems and thematic stands.

Electronic library:

1. Teaching and methodological complex for the discipline "Life Safety"
2. An electronic manual containing regulatory and other documents necessary for studying the specified discipline.

3. Video materials:

Video films, photographs used in teaching students:

Videos:

1. Military field surgery. First medical care.
2. Percutaneous osteosynthesis of the pelvis. Application of an anti-shock external fixation device.

Photo and video materials:

1. Electrical burn .
2. Gunshot wound to the shin
3. Gunshot wounds to the extremities (Experience of the war in Afghanistan)

3.4 Equipment used for the educational process

No. p /p	Name	Quantity
1.	Study room of the Department of Mobilization Training of Healthcare and Disaster Medicine	
	Multimedia projector	1
	Laptop	1
	Wall screen	1
	Board	1
	Teacher's desk	1
	Study table	10
	Chairs	20
	Visual aids	20
	Stands	10
2.	Study room of the Department of Mobilization Training of Healthcare and Disaster Medicine	
	Wall screen	1
	Board	1
	Teacher's desk	1
	Study table	10
	Chairs	20
	Visual aids	20
	Stands	10

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

Resource name	Resource Description	Access	Resource address
Electronic library systems			
"Student consultant. Electronic library of the medical university"	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	Remote access after registration under the university profile	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	Remote access after registration under the university profile	http://www.rosmedlib.ru/cgi-bin/mb4x

	practical medical society (world, European and Russian) in the relevant specialty. All materials have undergone mandatory independent review.		
EBS « Bookup »	Large medical library - information and educational platform for the joint use of electronic educational, educational and methodological publications of medical universities of Russia and the CIS countries	Remote access after registration under the university profile	https://www.books-up.ru/
EBS "Lan"	Network electronic library of medical universities - an electronic database of educational and scientific works on medical topics, created for the purpose of implementing network forms of professional educational programs, open access to educational materials for partner universities	Remote access after registration under the university profile	https://e.lanbook.com/
Scientific electronic library "CyberLeninka"	CyberLeninka is a scientific electronic library built on the paradigm of open science (Open Science), the main objectives of which are the popularization of science and scientific activity, public control over the quality of scientific publications, the development of	free access	https://cyberleninka.ru/

	interdisciplinary research, a modern institute of scientific review, increasing the citation of Russian science and building a knowledge infrastructure. Contains more than 2.3 million scientific articles.		
Oxford Medicine Online	A collection of Oxford 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 , electronic versions of which are constantly updated.	free access	http://www.oxfordmedicine.com
Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	free access	http://humbio.ru/
Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	free access	https://www.medlib.ru/library/library/books
Information systems			
Clinical Guidelines Rubricator	A resource of the Russian Ministry of Health that contains clinical recommendations	Link to download the application	https://cr.minzdrav.gov.ru/#/

	developed and approved by medical professional non-profit organizations of the Russian Federation, as well as methodological guidelines, nomenclatures and other reference materials.		
Federal Electronic Medical Library (FEMB)	The Federal Electronic Medical Library is part of the unified state information system in the field of healthcare as a reference system . FEMB was created on the basis of the funds of the Central Scientific Medical Library named after I.M. Sechenov.	free access	https://femb.ru/
Russian Medical Association	Professional Internet resource . Objective: to promote effective professional activity of medical personnel. Contains the charter, personnel, structure, rules of entry, information about the Russian Medical Union.	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.	free access	http://webmed.irkutsk.ru/
Databases			

World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	free access	http://www.who.int/ru/
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more	free access	http://www.minobrnauki.gov.ru
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	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.	free access	http://www.edu.ru/
Polpred.com	Electronic library system Business media. Media Review	free access	https://polpred.com/news
Bibliographic databases			
Database "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	free access	https://rucml.ru/

	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.		
PubMed	A text database of medical and biological publications in English. The PubMed database is an electronic search engine with free access to 30 million publications from 4,800 indexed journals on medical topics. The database contains articles published from 1960 to the present day, including information from MEDLINE, PreMEDLINE, NLM. Each year, the portal is replenished with more than 500 thousand new works.	free access	http://www.ncbi.nlm.nih.gov/pubmed/
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	Full functionality of the site is available after registration	http://elibrary.ru/defaultx.asp

	journals.		
Electronic library of dissertations (RSL)	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	free access	http://diss.rsl.ru/?menu=disscatalog/
Medline .r u	Medical and biological portal for specialists. Biomedical journal.	free access	https://journal.scbmt.ru/jour/index
Official Internet portal of legal information	The single official state information and legal resource in Russia	free access	http://pravo.gov.ru/

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

No. p/p	List of software (commercial software products)	Details of supporting documents
1.	MS Operating System Windows 7 Pro	License number 48381779
2.	MS Operating System Windows 10 Pro	CONTRACT No. UT-368 from 09.21.2021
3.	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for business Extended	Agreement 326po/21-IB dated November 26, 2021
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022
6.	1C: PROF University	LICENSE AGREEMENT No. IJB-1151 dated 01.14.2022
7.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8.	Consultant Plus	Agreement No. 37/C dated 02/25/2022
9.	Aktion 360	Agreement No. 574 dated November 16, 2021
10.	E-learning environment 3KL(Russian Moodle)	Agreement No. 1362.2 dated November 15, 2021
11.	Astra Linux Common Edition	Agreement No. 142 A dated September 21, 2021
12.	Information system "Plans"	Agreement No. 8245 dated 06/07/2021
13.	1C:Document Management	Agreement No. 2191 dated 10/15/2020
14.	R7-Office	Agreement No. 2 KS dated 12/18/2020

List of freely distributed software

No. p/p	List of freely distributed software	Links to license agreement
1.	Yandex Browser	Freely distributed

		License agreement for the use of Yandex Browser programs https://yandex.ru/legal/browser_agreement/
2.	Yandex.Telemost	Freely distributed License Agreement for the Use of Programs https://yandex.ru/legal/telemost_mobile_agreement/
3.	Dr.Web CureIt !	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/>

4. ASSESSMENT TOOLS FUND

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

4.1.1 Examples of entrance control test tasks (with standard answers)

Test assignments are located in the Moodle system .

Access mode: <https://educ-amursma.ru/local/crw/course.php?id=388>

Total number of tests – 100.

1. THE SHOCK INDEX IS THE RATIO

- 1) pulse rate to systolic blood pressure
- 2) pulse rate to central venous pressure
- 3) systolic blood pressure to pulse rate
- 4) systolic blood pressure to diastolic blood pressure

Correct answer: 1

2. METHODS OF TEMPORARY STOPPING OF BLEEDING INCLUDE

- 1) application of a hemostatic clamp
- 2) vascular plastic surgery
- 3) ligation of the vessel along the length
- 4) ligation of a vessel in a wound

Correct answer: 1

3. BONE TISSUE REGENERATION IS THE LONGEST IN

- 1) old age
- 2) at an early age
- 3) youth
- 4) middle age

Correct answer: 1

Examples of test tasks for initial control (with standard answers)

Test assignments are located in the Moodle system .

Access mode: <https://educ-amursma.ru/local/crw/course.php?id=388>

Total number of tests – 200.

1. THE DISASTER MEDICINE SERVICE FUNCTIONALLY UNITES

- 1) medical institutions and formations of all interested ministries and departments
- 2) only specially created institutions and formations of the Russian Ministry of Health
- 3) all services of the Russian Ministry of Health in a given territory (republic, region, territory)
- 4) stations (substations, departments) of emergency medical care, planned and emergency advisory care (air ambulance) and health authorities in the emergency zone (district)

Correct answer: 1

2. THE MODES OF FUNCTIONING OF THE DISASTER MEDICAL SERVICE INCLUDE

- 1) daily activities, high alert, emergency
- 2) daily activities, constant readiness, emergency
- 3) constant readiness, emergency, autonomous mode
- 4) daily activities, full readiness, emergency

Correct answer: 1

3. TYPES OF MEDICAL SORTING INCLUDE

- 1) intra-point and evacuation -transport
- 2) pre-medical, medical, qualified and specialized
- 3) preliminary , main and by purpose
- 4) general, medical and specialized

Correct answer: 1

Examples of test tasks for final control (with standard answers)

Test assignments are located in the Moodle system .

Access mode: <https://educ-amursma.ru/local/crw/course.php?id=388>

Total number of tests – 200.

1. THE PURPOSE OF INTRA-POINT SORTING IS TO DISTRIBUTE THE INJURED INTO SORTING GROUPS DEPENDING ON

- 1) the degree of danger to others, the nature and severity of the injury to make a decision on providing medical assistance
- 2) their need for further evacuation
- 3) the degree of danger they pose to others in order to make a decision on providing assistance

- 4) need for medical care at this stage

Correct answer: 1

2. THE MAIN SORTING CHARACTERISTICS ARE

- 1) danger to others, medical , evacuation
- 2) medical, evacuation, transport
- 3) danger to others, medical , transport
- 4) danger to others, evacuation , medical

Correct answer: 1

3. THE EMERGENCY MEASURE FOR A BURN FROM CONCENTRATED ACID IS

- 1) rinse with water and neutralize with alkali
- 2) treatment with alcohol solutions
- 3) application of oil dressing
- 4) application of a dry occlusive dressing

Correct answer: 1

4.2.Situational tasks, exercises

Task number 1.

A small child accidentally stuck a button in his nose while playing. General condition is satisfactory. Frightened, crying. Skin is of normal color. Breathing through the mouth is free. There are no peculiarities in the organs and systems.

What is your diagnosis? What first aid will you provide?

Answer: Foreign body (button) in the nasal passage. If there is a foreign body (button) in the nasal passage, you should try to calm the baby, then you need to pinch the opposite nostril and ask the victim to exhale sharply, the button will fly out. Otherwise, consult a doctor. You cannot try to remove a foreign body with sharp objects.

Task number 2.

The woman had been sunbathing on the beach all day. She got up from her sunbed and suddenly fell down, losing consciousness. Her general condition was grave. Her skin, despite her tan, was pale and hot to the touch. Blood pressure was 105/75 mm Hg. Pulse was 73 per minute. The tones were rhythmic. There were no abnormalities in the organs or systems.

What is your diagnosis? What first aid will you provide?

Answer: Sunstroke. Immediately stop exposure to direct sunlight, take the victim to the shade, to a cool, ventilated room. Lay her on her back on a hard surface. In case of loss of consciousness while maintaining respiratory and cardiac activity, it is necessary to cool the lateral surfaces of the neck, chest, arms by applying cold, ice, bottles of cold water. If possible , use olfactory, pain irritants (apply a cotton swab soaked in ammonia, perfume to the nose; gently beat on the cheeks, etc.); sprinkle water on the face. If consciousness is not restored after the measures taken, it is necessary to lay the victim on his side until the ambulance team arrives to avoid possible aspiration.

Task number 3.

To conduct chemical reconnaissance on the ground in the summer, a chemical reconnaissance group was sent to the site of the alleged use of chemical weapons by the enemy. The air temperature is about 28 degrees Celsius above zero. The group is equipped with isolating personal protective equipment and filtering personal protective equipment .

Question: Your suggestions for improving the equipment, in the absence of the possibility of improving the equipment - make suggestions for preserving the life and health of the group members.

Answer: In summer, there is a high probability of heat stroke when using insulating personal protective equipment, so it would be preferable for group members to use KZFO-58 (a set of protective filtering clothing), which reduces the probability of heat stroke. Also, if there is no information in the preliminary data on the type of toxic substance used, it would be more effective to equip the group with insulating gas masks of the IP-4, IP-5, IP-46 type. If there is no possibility of changing personal protective equipment, the group's work time should be limited to one hour, which will reduce the degree of overheating of people and reduce the likelihood of the end of the protective action of the filter element of the gas mask.

4.3. Test tasks for the exam in the discipline "Life Safety"

Test assignments are located in the Moodle system .

Access mode: <https://educ-amursma.ru/local/crw/course.php?id=388>

Total number of tests – 200.

1. AN EARLY SYMPTOM OF THE DEVELOPMENT OF THE ALVEOLAR PHASE OF TOXIC PULMONARY EDEMA IS

- 1) the appearance of crepitations and dry wheezing in the lungs
- 2) secretion of foamy sputum from the upper respiratory tract
- 3) increased respiratory rate with decreased depth
- 4) the appearance of wet wheezing in the lungs

Correct answer: 1

2. THE MAIN MECHANISM OF THE TOXIC EFFECT OF HYDROCHLORIC ACID IS

- 1) blockade of cytochrome A3
- 2) inhibition of enzymes of the Krebs cycle
- 3) methemoglobin formation
- 4) formation of thiocyanates

Correct answer: 1

3. IN CARBON MONOXIDE POISONING, PRIMARY HYPOXIA IS

- 1) hemic
- 2) fabric
- 3) circulatory
- 4) hypoxic

Correct answer: 1

4.4. List of practical skills that a student should have after mastering the discipline

1. Use personal respiratory protective equipment and personal medical protective equipment.
2. Diagnose damage from toxic substances and toxic chemicals, conduct medical triage of damage and provide assistance at the site and during medical evacuation.
3. Measure the dose rate of radioactive radiation on the ground and the degree of contamination of various objects with radioactive substances using dose rate meters.
4. Conduct special treatment in case of contamination with radioactive substances, toxic agents, and toxic chemicals.
5. Conduct indication of toxic substances and toxic agents in the air, water and food.
6. Use a personal first aid kit (PFC)
7. Fill out the primary medical card.
8. Use isolating gas masks IP-4, IP-5.
9. Administer antidotes from a syringe tube , inhalation antidote under a gas mask helmet.

10. Organize medical evacuation, sanitary and hygienic and anti-epidemic measures in emergency situations during peacetime and wartime.
11. Use the medical equipment of the disaster medicine units and the civil defense medical service.
12. To identify dangerous and harmful factors in the environment that affect human life safety.

4.5. List of questions for the exam

Section: Health and Safety

1. Human life. Human habitat.
2. Pathogenic situations. Environment.
3. Environmental factors. Risk factors.
4. Pathological conditions of the human body. Human adaptation.
5. Life safety. Types, directions, approaches, methods, ways and means of ensuring life safety.
6. Legal basis for ensuring life safety in the Russian Federation.
7. Life safety culture.
8. National security of Russia. The role and place of Russia in the world community.
9. The system of national interests of Russia.
10. Fundamentals of mobilization preparation and mobilization of healthcare.
11. State material reserve for medical and sanitary purposes.
12. Military registration and reservation of medical workers.
13. Modern wars and armed conflicts.
14. Definition and classification of wars and armed conflicts.
15. Means of armed struggle.
16. Damaging factors of modern weapons.
17. Safety of society and the individual.
18. Hazards and their impact on the human body. System of measures to ensure the safety of organized groups.
19. Measures to ensure personal safety of citizens.
20. Basic concepts, definitions, classification, medical and health consequences of emergency situations.
21. Phases of development and damaging factors of emergency situations.
22. Methods of forecasting and assessing the situation in emergency situations.
23. Unified state system for the prevention and elimination of consequences of emergency situations.
24. Basic principles and legal framework for the protection of the population.
25. Fundamentals of organizing emergency rescue and other urgent work in emergency situations.
26. The civil defense system and its main areas of activity.
27. Fundamentals of organizing and measures to protect the population in peacetime and wartime.
28. The system and methods of protecting people from the main types of hazardous and harmful impacts of natural and man-made origin.
29. Methods of control and identification of hazardous and negative factors.
30. General characteristics and classification of protective equipment.
31. Protective structures, individual technical and medical protective equipment.
32. Sanitary and special treatment.
33. Fundamentals of organizing medical and psychological support for the population, medical workers and rescuers in emergency situations
34. The main psychological reasons for erroneous actions and the emergence of dangerous situations.

35. Psychotraumatic factors of an emergency situation;
36. Features of the development of neuropsychiatric disorders in the population and rescuers in emergency situations
37. Organization of medical and psychological assistance to the population, medical workers and rescuers in emergency situations
38. Safety of medical work.
39. Characteristics of threats to the life and health of medical workers.
40. Occupational health and safety system in medical organizations.
41. Basic approaches, methods and means of ensuring the safety of a physician.
42. Features of ensuring fire, radiation, chemical, biological and psychological safety of medical personnel.
43. Safety requirements when working in structural divisions of medical organizations.
44. Safety of medical services.
45. Characteristics of threats to life and health of hospital patients. Forms of manifestation of threats to patient safety.
46. Patient safety system in medical organizations.
47. Therapeutic and protective regime of operation of medical organizations.
48. Sanitary treatment of patients. Evacuation of patients in emergency situations.

Chapter: Disaster Medicine

1. The essence of the system of medical and evacuation support for the population in emergency situations.
2. Organization of medical triage in the medical evacuation provision of the population and personnel of medical institutions in emergency situations.
3. Features of the organization of medical care for children in emergency situations.
4. Features of the organization of medical and evacuation measures in case of the use of modern types of weapons
5. Medical and sanitary support of the population during the elimination of the consequences of chemical emergencies.
6. Sources of chemical hazard.
7. Classification of toxic and highly toxic substances (THTS).
8. Brief characteristics of the OVTV (basic patterns of interaction between the organism and toxicants).
9. The course of intoxication, the main clinical manifestations.
10. General principles of emergency care, antidote therapy.
11. The concept and medical-tactical characteristics of contamination zones and lesions created by hazardous waste.
12. Features of medical and evacuation support (organizational, medical and diagnostic measures, forces and means).
13. Modern systems of toxicological information support.
14. Medical and sanitary support of the population during the elimination of the consequences of emergency situations of a radiation nature.
15. Types of ionizing radiation and their properties. Quantitative assessment of ionizing radiation.
16. Classification and brief characteristics of radiation accidents.
17. The concept of radioactive contamination zones. Radiation damage foci.
18. Factors causing human injury during nuclear explosions and radiation accidents.
19. Medical characteristics of radiation injuries, immediate and long-term consequences of irradiation.
20. Medical and sanitary support of the population during the elimination of the consequences of radiation accidents.
21. Means of prevention and therapy of radiation injuries.
22. Medical and tactical characteristics of natural emergencies.

23. Medical and tactical characteristics of transport and road traffic accidents.
24. Medical and tactical characteristics of emergency situations of explosive and fire hazardous nature
25. Organization of medical and sanitary support for the population in the elimination of the consequences of emergency situations of a natural, road transport, explosive and fire hazardous nature.
26. Fundamentals of organizing and conducting sanitary and anti-epidemic (preventive) measures among the population in emergency situations.
27. Classification and content of sanitary and anti-epidemic (preventive) measures.
28. Principles of organizing sanitary and anti-epidemic (preventive) measures in emergency situations.
29. Features of the organization of sanitary and anti-epidemic (preventive) measures in epidemic conditions.
30. Tasks and principles of supplying medical equipment to QMS formations and institutions.
31. Medical property: classification and characteristics. Determination of the need for medical property.
32. Organization of accounting and reporting on medical property.
33. Objectives, principles, and modes of operation of the All-Russian Disaster Medicine Service.
34. Organizational structure, characteristics of institutions and formations of the All-Russian Disaster Medicine Service.
35. Legislative and regulatory framework for the management of the VSMK.