



MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN FEDERATION  
Federal state autonomous educational institution  
of higher education  
«Far Eastern Federal University»  
(FEFU)

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**SCHOOL OF BIOMEDICINE**

«AGREED»

Head of education program  
«General medicine»

  
\_\_\_\_\_  
(signature) Khotimchenko Yu.S.  
(Full name)  
«09» of July 2019

«APPROVED»

Director of the Department of Clinical  
Medicine

  
\_\_\_\_\_  
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(Full name)  
«09» of July 2019



**WORKING PROGRAM OF ACADEMIC DISCIPLINE (WPAD)**

«Disaster Medicine»

Education program

Specialty 31.05.01 «General medicine»

**Form of study: full time**

year 5, semester 9  
lectures 18 hours  
practical classes 36 hours  
laboratory works not provided  
total amount of in-classroom works 54 hours  
independent self-work 54 hours  
including preparation to exam 45 hours  
control works ()  
pass-fail exam not provided  
exam year 5, semester 9

The working program is drawn up in accordance with the requirements of the Federal state educational standard of higher education (level of training), approved by the order of the Ministry of education and science of the Russian Federation from 09.02.2016 № 95.

The working program of the discipline was discussed at the meeting of the Department of fundamental and clinical medicine. Protocol No. 8, 09 of July 2019

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## RESUME

The discipline "Disaster Medicine" is purposed for students enrolled in the educational program 31.05.01 "General medicine»

Discipline is implemented on 5th year as a basic discipline.

Development of the working program of the discipline was made in accordance with the Federal state educational standard of higher education in the specialty 31.05.01. "General medicine" and the curriculum of training in the specialty 31.05.01. "General medicine".

The total complexity of the discipline is 3 credits, 108 hours. The curriculum provides 18 hours of lectures, 36 hours of practical classes and independent self-work of the student (54 hours.).

The course program is based on the basic knowledge gained by students:

- readiness to use first aid techniques, methods of protection in emergency situations (GPC-7);
- ability and willingness to implement ethical and deontological principles in professional activity (GPC 4);
- readiness to ensure the organization of care for patients and the provision of primary health care (GPC-10);
- readiness to participate in the provision of emergency medical care in conditions requiring urgent medical intervention (PC-11)
- readiness to participate in the provision of medical assistance in emergency situations, including participation in medical evacuation (PC-13)
- ability to organize medical care in emergency situations, including medical evacuation (PC-19)

The peculiarity in the construction and content of the course is the use of methods of active learning, software and hardware, methodological funds, evaluate

### **Purpose of the course:**

Formation of knowledge in students aimed at the safe and comfortable human interaction with surrounding natural, human-made and biological-social

environment, reducing mortality and health problems from adverse factors of natural, human-made and biological-social nature in a war and emergency situations, surgical treatment, rehabilitation of patients with surgical pathology.

**Objectives:**

1. Acquisition of knowledge of the public health care system in emergency situations and ability to organize provision of medical care for population in emergency situations.

2. Formation of skills in students in assessment the health consequences of emergencies, providing medical assistance at the pre-hospital stage to victims of emergency situations, in war and peace time, participation in medical evacuation.

3. Formation of readiness to participate in the protective activities for population and medical personnel in emergency situations; - ability and readiness to organize health care of the population in the aftermath of emergency situations; - ability to substantiate reasoned decisions in terms of security;

4. Formation of motivation and ability of independent decision-making specialist in the organization of health care in the aftermath of an emergency.

As a result of the discipline studying students form the following general cultural and general professional competence (elements of competence):

<b>Code and formulation of competence</b>	<b>Stages of competence formation</b>	
GPC-4- ability to act in unusual situations, to take social and ethical responsibility for decisions	Knows	methods and tools for protection of patients, medical personnel and property of medical institutions in emergency situations
	Able to	find and make responsible decisions, assess the medical situation in emergency situations
	Masters	methods of evaluation of medical and tactical characteristics of injuries

GPC-7- the readiness to use techniques of first aid and techniques of protection in emergency situations	Knows	methods of the first aid, methods of protection in emergency situations
	Able to	provide the first aid, apply ways and methods of protection in emergency situations of different nature
	Masters	methods of the first aid and the main technical tools of individual and medical protection in emergency situations
GPC-10- the willingness to ensure care for sick people and primary pre-hospital care	Knows	Algorithms for performing basic medical diagnostic and therapeutic measures to provide primary first aid to victims of emergency and life-threatening conditions.
	Able to	Identify life-threatening disorders and provide primary first aid to victims in emergency situations.
	Masters	the technique of providing the first aid in case of emergency
PC-6 the ability of determining the patient's basic pathological conditions, symptoms, syndromes, diseases in accordance with the International Statistical Classification of Diseases and problems related to health, the 10 <sup>th</sup> review.	Knows	the main pathological symptoms and syndromes of diseases, using the knowledge of the basics of biomedical and clinical disciplines taking into account the rules of the pathology course of inner organs, systems and the whole body.
	Able to	to analyze the patterns of functioning of various organs and systems in different diseases and pathological processes, to use the algorithm of diagnostics (main, concomitant, complications), taking into account The international statistical classification of diseases and health-related problems (ICD),
	Masters	perform the basic diagnostic measures to identify urgent and life-threatening conditions
PC-19- the ability to organize medical aid in case of emergencies, including medical evacuations	Knows	Basic principles of organization of medical care and theoretical foundations of the modern system of medical evacuation supporting population in emergency situations
	Able to	to organize medical care in emergency situations, to determine the order of evacuation of victims in emergency situations
	Masters	Skills of the medical care organization, receptions and ways of evacuation of victims at emergency situations

The key feature in the construction and content of the course is the use of

methods of active learning, software and hardware, teaching fund, evaluation and electronic tools for discipline provision.

## **I. THE STRUCTURE AND CONTENT OF THE THEORETICAL PART OF THE COURSE**

**9<sup>th</sup> semester (18 hours)**

### **Section I. General issues of safety (2 hours)**

#### **Theme 1. Objectives, organizational structure and bases of activity of the Russian service of emergency medicine. (2 hours)**

Definition of national security of Russia. Concepts of national security of Russia.

A brief history of RSEM. Objectives and organizational structure of the Russian service of emergency medicine. The formation and institutions of emergency medicine service.

Modes of operation of the Russian service of emergency medicine. Brief description of specialized medical care teams.

The concept of civil defense. The main objectives of civil defense. A set of measures to protect the population and economy. Principles of organization and conduct of civil defense. Civil defense system. CD forces. CD administration. Powers of the President and the government of the Russian Federation in the field of CD. Powers of executive authorities in the field of civil defense. Civil organizations CD.

### **Section II. Health care in the aftermath of emergencies (6 hours)**

#### **Theme 1. Health care in the aftermath of emergencies of technogenic and natural character (2 hours)**

Health care in transport emergencies, road accidents, explosion and fire hazards. Features of health care in terrorist acts. Features of health care in local armed conflicts. Health care in the aftermath of natural disasters (natural

catastrophes) the concept of the "first aid". Principles of the first aid (correctness and expediency, speed, thoughtfulness, determination and peace of mind). The sequence of the first aid. The sequence of transportation of the injured persons. Rules for the treatment of victims.

**Theme 2. Medical protection of population and rescuers in emergency situations. (2 hours)**

Basic principles and methods of protection of population. A set of measures to protect the population in emergencies. Alert and the information means for the public about the emergency. Radiation and chemical protection. Evacuation and dispersal. Medical protection. The concept of "medical tools of individual protection of MTIP". The basic requirements for MTIP. Classification of MTIP. Protection from bacterial (biological) weapons of destruction. Medical protection from chemical compounds and toxic substances. The supply MTIP.

**Theme 3. Health and safety in health care organizations. (2 hours)**

Characteristics of threats for life and health of medical personnel. The system of labor protection and safety in medical organizations. Basic requirements for safety of medical and maintenance personnel. Fundamentals of medical and preventive care of medical personnel. Features of occupational safety of medical staff (technological discipline, fire, chemical, radiation, biological).

**Section III. Medical and evacuation support in a case of emergency (12 hours)**

**Theme 1. Basis of medical and evacuation support of population in emergency situations of peace and wartime. (2 hours)**

The concept of "evacuation measures". The purpose of the evacuation measures. The concept of dispersion. Types of evacuation (general, partial). The principles of evacuation (the need of sufficient, the maximum possible use of forces and tools, territorial-production). The concept of a suburban area. Evacuation authorities.

**Theme 2. Stage of medical evacuation. Types and volume of medical care at the stages of evacuation. (2 hours)**

The concept of the stage of medical evacuation. Objectives of the first stage of medical evacuation. Objectives of the second stage of medical evacuation. The main types of care at the stages of evacuation (first medical, pre-medical, first medical, etc.). First non-qualified aid. Pre-medical care (first qualified). First aid. Qualified medical aid. Specialized medical care.

**Theme 3. Medical evacuation of the injured persons in emergency situations. Medical sorting of the injured persons in emergency situations. (2 hours)**

The concept of medical evacuation and medical sorting of the injured persons. Sorting signs (by N.I. Pirogov). Methods of sorting. Sorting groups (4 groups). Medical sorting (intra-unit, evacuation and transportation).

**Theme 4. Sanitary and anti-epidemic (preventive) measures in the aftermath of emergencies. (2 hours)**

Organization of sanitary and hygienic measures in emergency situations. Factors that may influence the occurrence of unfavorable hygienic situation and the spread of infectious diseases. Hygienically important objects (water supply and sewerage systems, objects of food industry, public catering and trade; utilities; preschool and school institutions, etc.) Control over the environment. Planning of sanitary-hygienic and anti-epidemic measures in emergency situations. Forces and tools involved in the implementation of sanitary-hygienic and anti-epidemic measures in the centers of emergencies.

**Theme 5. Preparation and organization of work of medical institutions in emergency situations. (2 hours)**

Basic principles of organization of public medical support in emergency situations. General tasks for health facilities to prepare for work in emergency conditions. Notification and collection of the management of medical institution. Preparation of a hospital for the mass reception of the injured persons in the emergency: transfer of the admission department into admission and sorting, preparation of therapeutic departments.

## **II. THE STRUCTURE AND CONTENT OF THE PRACTICAL PART OF THE COURSE**

### **9<sup>th</sup> semester (36 hours)**

**Lesson 1. Objectives and bases of organization of the United state system of prevention and liquidation of emergency situations. Objectives, organizational structure and management bodies of the Russian service of emergency medicine (2 hours)**

1. Organization of prevention and response. Objectives and content of the forces of emergency relief teams.

2. The main activities of RSEM in prevention and elimination of consequences of emergency situations.

3. Definition and objectives of Russian service of emergency medicine.

4. Organizational structure of the Russian service of emergency medicine.

5. The formation and institutions of service of emergency medicine.

6. The concept of "management bodies of the Russian service of emergency medicine".

7. Modes of operation of the Russian service of emergency medicine.

8. Brief description of specialized medical care teams.

**Lesson 2. Basics of medical and evacuation support of population in emergency situations of peace and wartime (2 hours)**

1. The concept of "evacuation measures". Objectives of the event.

2. The concept of dispersion.

3. Types of evacuation (general, partial). Principles of evacuation (necessary sufficiency, maximum possible use of forces and means, territorial-production principle).

4. The concept of a suburban area.

5. Evacuation authorities.

**Lesson 3. Objectives, principles of organization and conduct of civil**



### **defense (2 hours)**

1. The concept of civil defense. The main objectives of civil defense.
2. A set of measures to protect the population and economy.
3. Principles of organization and conduct of civil defense.
4. Civil defense system. CD forces. CD administration.
5. Powers of the President and the government of the Russian Federation in the field of CD. Powers of executive authorities in the field of civil defense. Civil organizations CD.

### **Lesson 4. Organization of public protection in emergency situations (2 hours)**

1. Basic principles and methods of public protection.
2. A set of measures to protect population in emergencies.
3. Alert and information of the public about the emergency.
4. Radiation and chemical protection.
5. Evacuation and dispersal.
6. Medical protection.

### **Lesson 5. Medical protection of population and rescuers in emergency situations (2 hours)**

1. The concept of "medical tools of individual protection of MTIP".
2. The basic requirements for MTIP.
3. Classification of MTIP. Protection from bacterial (biological) weapons of destruction. Medical protection poisoning compounds and chemical substances.
4. Supply of medical MTIP.

### **Lesson 6. Medical sorting and evacuation of injured persons in emergency situations (2 hours)**

1. The concept of medical evacuation and medical sorting of the injured persons.
2. Sorting signs (by N.I. Pirogov).
3. Methods of sorting. Sorting groups.
4. Types of medical sorting.

5. The concept of the stage of medical evacuation.
6. Objectives of the first stage of medical evacuation.
7. Objectives of the second stage of medical evacuation.
8. The main types of assistance at the stages of evacuation.

### **Lesson 7. Sanitary and anti-epidemic (preventive) measures in emergency response (2 hours)**

1. Organization of sanitary and hygienic measures in emergency situations.
2. Factors that may influence the occurrence of unfavorable hygienic situation and the spread of infectious diseases.
3. Hygienically important objects (water supply and sewerage systems, objects of food industry, public catering and trade; public service enterprises; preschool and school institutions, etc.))
4. Monitoring the environment conditions. Planning of sanitary-hygienic and anti-epidemic measures in emergency situations.
5. Forces and tools involved in the implementation of sanitary-hygienic and anti-epidemic measures in the emergency centers.

### **Lesson 8. Preparation and organization of work of medical institutions in emergency situations (2 hours)**

1. Basic principles of organization of medical support of the population in emergency situations.
2. General objectives of health facilities to prepare for work in emergency conditions.
3. Notification and collection of the medical institution management.
4. Preparation of the hospital for the mass admission of the injured persons in the emergency: transfer of the admission department into the admission and sorting, preparation of therapeutic departments.

### **Lesson 9. Emergency psychological aid for victims in emergency situations (2 hours)**

1. Emergency psychological aid for victims in emergency situations: definition, types and objectives of the provision.

2. Features of medical aid in emergency situations of different origin.
3. Representation of the groups of victims.

### **Lesson 10. General principles of the first aid (2 hours)**

1. The concept of the "first aid".
2. Principles of the first aid (correctness and expediency, speed, thoughtfulness, determination and peace of mind).
3. The sequence of the first aid.
4. The sequence of transportation of the injured persons.
5. Rules for the treatment of victims

### **Lesson 11. Terminal conditions and basics of resuscitation (2 hours)**

1. The concept of terminal conditions.
2. Clinical death.
3. The algorithm of the first aid.
4. Rules of resuscitation.

### **Lesson 12. Bandages, bleeding control (2 hours)**

1. Types and methods of bandage application ways.
2. Stopping bleeding (classification, tools).
3. At the end of the class, all students demonstrate the skills of applying different types of bandages (on the limbs, on the head, etc..)

### **Lesson 13. First aid for the injured, open injuries. First aid for fractures and dislocations, closed injuries (2 hours)**

1. Definition of wounds, types of wounds.
2. Penetrating and non-penetrating wounds.
3. Features of the first aid for wounds.
4. The concept of dislocations and fractures.
5. Transport immobilization: rules and methods.
6. Features of the first aid.

### **Lesson 14. First aid for burns and frostbite, general hypothermia and overheating (2 hours)**

1. Burns: definition of the concept, types of burns, the concept of the damage degree.
2. Features of the first aid for chemical and thermal burns.
3. Frostbite: the definition of the concept, the degree of frostbite, specific first aid.
4. General hypothermia: definition.
5. Reasons, special first aid.
6. General overheating: the concept of heat and solar shock, first aid.

**Lesson 15. First aid for traumatic shock, long-term compression syndrome (2 hours)**

1. Traumatic shock: causes, types, stages of development.
2. The main anti-shock measures performed in the first aid.
3. The concept of long-term compression syndrome, the mechanism of development, special first aid.

**Lesson 16. Injuries of skull, chest (2 hours)**

1. The concept of open and closed injuries.
2. Characteristics of maxillofacial injuries.
3. Pneumothorax: definition of the concept, causes, types, features of the first aid.

**Lesson 17. First aid for asphyxia, drowning, electrical trauma. First aid in the injuries caused by poisonous substances (2 hours)**

1. First aid for asphyxia: causes, signs, methods of the first aid.
2. Types of drowning: the concept of true and pale drowning, special aid.
3. Electric shock, action in electric shock.
4. Poisoning with venoms of plant and animal origin, first aid.
5. Poisoning with household chemicals, special first aid.

**Lesson 18. General characteristics of radiation injuries (2 hours)**

1. Local radiation lesions of the skin, mucous membranes, pathogenesis, the main clinical manifestations.
2. Features of exposure to radionuclides by inhalation, through the

gastrointestinal tract, through the skin.

3. Acute radiation disease. Clinical forms, periods, consequences.
4. Toxicokinetics of radionuclides. Removal of radioactive substances from the body.
5. Chronic radiation disease.
6. Tools of prevention of internal radiation injuries.

### **III. TRAINING AND METHODOLOGICAL SUPPORT INDEPENDENT WORK OF STUDENTS**

Educational and methodological support of independent self-work of students in the discipline "Emergency medicine" is presented in Appendix 1 and includes:

- characteristics of tasks for independent self-work of students and guidelines for their implementation;
- requirements for the presentation and execution of the results of independent work;
- criteria for evaluating the performance of independent work.

### **IV. MONITORING THE ACHIEVEMENT OF THE COURSE OBJECTIVES**

<b>Code and formulation of competence</b>		<b>Stages of competence formation</b>			
№ п/п	Controlled modules / sections / topics of the discipline	Codes and stages of competence formation		Evaluation tools - name	
				Current control	intermediate certification
1	Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical	GPC-4- ability to act in unusual situations, to take social and ethical responsibility for decisions	<b>To know</b>	OQ-1 Interview	Exam questions 1-25
			<b>Be able to</b>	PW-1 Test	PW-1 Test

	evacuation support in case of emergency		<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
2	<b>Модуль I.</b> Общие Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	GPC-7- the readiness to use techniques of first aid and techniques of protection in emergency situations	<b>To know</b>	OQ-1 Interview	Exam questions 26-64
			<b>Be able to</b>	PW-1 Test	PW-1 Test
			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
3	Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	GPC-10- the willingness to ensure care for sick people and primary pre- hospital care	<b>To know</b>	OQ-1 Interview	Exam questions 64-100
			<b>Be able to</b>	PW-1 Test	PW-1 Test
			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
	Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	PC-6 the ability of determining the patient's basic pathological conditions, symptoms, syndromes, diseases in accordance with the International Statistical Classification of Diseases and problems related to health, the 10 <sup>th</sup> review.	<b>To know</b>	OQ-1 Interview	Exam questions 26-64
			<b>Be able to</b>	PW-1 Test	PW-1 Test
			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
	Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	PC-19- the ability to organize medical aid in case of emergencies, including medical evacuations	<b>To know</b>	OQ-1 Interview	Exam questions 64-100
			<b>Be able to</b>	PW-1 Test	PW-1 Test

			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
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Control and methodological materials, as well as criteria and indicators necessary for the assessment of knowledge, skills and characterizing the stages of formation of competencies in the process of development of the educational program are presented in Appendix 2.

## **V. A LIST OF TEXTBOOKS AND METHODOLOGICAL SUPPORT OF THE DISCIPLINE**

### **Main literature**

1. Disaster and Military Medicine / BioMed Central 2015  
<https://link.springer.com/journal/40696>
2. Disaster Medicine / Springer, Cham 2016  
[https://link.springer.com/chapter/10.1007/978-3-319-16586-8\\_25](https://link.springer.com/chapter/10.1007/978-3-319-16586-8_25)
3. Orthopedics in Disasters / Springer-Verlag Berlin Heidelberg 2016  
<https://link.springer.com/book/10.1007/978-3-662-48950-5#editorsandaffiliations>

### **Additional literature**

1. Disasters and Mass Casualty Incidents / Springer Nature Switzerland AG 2019  
<https://link.springer.com/book/10.1007/978-3-319-97361-6#editorsandaffiliations>
2. Surgery During Natural Disasters, Combat, Terrorist Attacks, and Crisis Situations / Springer International Publishing Switzerland 2016  
<https://link.springer.com/book/10.1007/978-3-319-23718-3#editorsandaffiliations>

### **On-line resources**

1. Safety lectures in the terms and definitions [http://isi.sfu-kras.EN/sites/is.institute.sfu-kras.EN/files/BZhD.\\_Konspekt\\_lekcij..pdf](http://isi.sfu-kras.EN/sites/is.institute.sfu-kras.EN/files/BZhD._Konspekt_lekcij..pdf)

2. Protection of population and territories in epidemics <http://studall.org/all-158011.html>

3. Protection of the population from emergency situations / [http://pnu.edu.ru/media/filer\\_public/a3/8b/a38bbf5e-d837-4a5d-95d1-c4160d11200f/bzhd\\_practicum-michenko.pdf](http://pnu.edu.ru/media/filer_public/a3/8b/a38bbf5e-d837-4a5d-95d1-c4160d11200f/bzhd_practicum-michenko.pdf)

4. Organization of protection and livelihoods in emergencies <http://bgdstud.ru/podborka-lekczij-po-bzhd/22-organizaciya-zashhity-naseleniya-ot-chrezvychajnyx/1111-organizaciya-zashhity-i-zhizneobespecheniya-2.html>

Labour protection. Information pecypc/[http://ohrana-bgd.ru/bgdpravo/bgdpravo1\\_123.html](http://ohrana-bgd.ru/bgdpravo/bgdpravo1_123.html)

## V. LIST OF INFORMATION TECHNOLOGIES AND SOFTWARE

The location of the computer equipment on which the software is installed, the number of jobs	List of licensed software
Multimedia auditorium Vladivostok Russian island, Ayaks 10, building 25.1, RM. M723 Area of 80.3 m2 (Room for independent work)	Windows Seven enterprise SP3x64 Operating System Microsoft Office Professional Plus 2010 office suite that includes software for working with various types of documents (texts, spreadsheets, databases, etc.); 7Zip 9.20 - free file archiver with a high degree of data compression; ABBYY FineReader 11 - a program for optical character recognition; Adobe Acrobat XI Pro 11.0.00 - software package for creating and viewing electronic publications in PDF; WinDjView 2.0.2 - a program for recognizing and viewing files with the same format DJV and DjVu.

In order to provide special conditions for the education of persons with disabilities all buildings are equipped with ramps, elevators, lifts, specialized places equipped with toilet rooms, information and navigation support signs

## VI. METHODOICAL INSTRUCTIONS ON THE MASTERING OF DISCIPLINE

In the process of studying the discipline "Emergency medicine" various methods and tools for learning the educational content are offered: lecture, practical exercises, tests, testing, independent work of students.



The lecture is the main active form of performing the classroom studies, explaining the fundamental and most difficult theoretical sections of human anatomy, which involves intense mental activity of student and this is especially difficult for first-year students. A lecture should always be informative, educational, and organizing. Lecture notes help to learn the theoretical material of the discipline. Listening to a lecture it is necessary to take note of the most important and preferably by student's own formulations, which allows to memorize the material better. Synopsis is useful when it is written by a student. Student can develop his/her own word reduction scheme. The name of the paragraphs can be highlighted with colored markers or pens. In a lecture the teacher gives only a small fraction of the material on one or other topics that are given in textbooks. Therefore, when working with the lecture notes, it is always necessary to use the main textbook and additional literature that are recommended in this discipline. It is such serious work of a student with lecture material that allows him to achieve success in mastering new knowledge. For the presentation of the lecture course on the discipline "Anesthesiology, resuscitations, intensive therapy", the following forms of active learning are used: lecture-conversation, lecture-visualization, which are made on the basis of knowledge obtained by students in interdisciplinary disciplines: "Human Anatomy", "Normal Physiology" "Pathological anatomy", "Pathological physiology". Presentations, tables, charts on a blackboard are used to illustrate the verbal information. In the course of the presentation of the lecture material posed questions or questions with elements of discussion.

### **Lecture – visualization**

Lecture is accompanied by tables, slideshows, which contributes to a better perception of the material. Lecture - visualization requires certain skills - verbal presentation of the material must be accompanied and combined with visual form. The information presented in the form of diagrams on the board, tables, slides, allows you to form problematic issues, and contributes to the development of

professional thinking of future specialists.

### **Lecture - conversation.**

Lecture-conversation, or it is also called in pedagogy a form of education “dialogue with the audience,” is the most common form of active learning and allows you to involve students in the learning process, as there is direct contact with the teacher audience. Such contact is achieved in the course of the lecture, when students are asked questions of a problem or informational matter, or when invite students to ask the questions themselves. Questions are offered to the entire audience, and any of the students can offer their own answer, another can complement it. At the same time, from lecture to lecture it is possible to identify more active students and try to activate students who are not participating in the work. This form of lecture allows teacher to engage students in work, increase their attention, thinking, gain collective experience, learn how to formulate questions. The advantage of the lecture-conversation is that it allows to attract the attention of students to the most important issues of the topic, to determine the content and pace of presentation of educational material.

### **Lecture - press conference**

At the beginning of the lesson, the teacher announces the topic of the lecture and invites students to ask him in writing questions on this topic. Each student must formulate the most interesting questions on the topic of the lecture within 2-3 minutes, write them on a piece of paper and pass the note to the teacher. The teacher within 3-5 minutes sorts the questions according to their semantic content and begins to give a lecture. The presentation of the material is presented in the form of a coherent disclosure of the topic, and not as an answer to each question asked, but during the lecture the corresponding answers are formulated. At the end of the lecture, the teacher conducts a final assessment of the questions, revealing the knowledge and interests of the students.

### **Practical classes in the discipline "Emergency medicine"**

Practical classes is a collective form of consideration of educational material. Seminars, which are also one of the main types of practical classes designed for in-depth study of the discipline, held interactively. At the workshop on the topic of the seminar, questions are sorted out and then, together with the teacher, they hold a discussion, which is aimed at consolidating the material under discussion, developing skills to debate, develop independence and critical thinking, the students' ability to navigate through large information flows, develop and defend their own position on problematic issues academic disciplines. As active learning methods are used in practical classes: a press conference, a detailed conversation, a dispute. A detailed conversation involves preparing students for each issue of the lesson plan with a uniform list of recommended and additional literature recommended for all. Reports are prepared by students on pre-proposed topics.

**Dispute** in the group has several advantages. The dispute may be called by the teacher during the course of the lesson or planned by him in advance. In the course of the controversy, students form resourcefulness, quick thinking reaction.

**Press conference.** The teacher instructs 3-4 students to prepare short reports. Then one of the participants from this group makes a report. After the report, students ask questions that are answered by the speaker and other members of the expert group. Based on the questions and answers, a creative discussion takes place along with the teacher.

## **VII. MATERIAL AND TECHNICAL MAINTENANCE OF DISCIPLINE**

Disaster Medicine	Monoblock Lenovo C360G-i34164G500UDK; projection Screen Projecta Elpro Electrol, 300x173 cm; Multimedia projector, Mitsubishi FD630U, 4000 ANSI Lumen 1920 x 1080; Flush interface with automatic retracting cables TLS TAM 201 Stan; Avervision CP355AF; lavalier Microphone system UHF band Sennheiser EW 122 G3 composed of a wireless microphone	Multimedia audience
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	<p>and receiver; Codec of videoconferencing LifeSizeExpress 220 - Codeconly - Non-AES; Network camera Multipix MP-HD718; Two LCD panel, 47", Full HD, LG M4716CCBA; Subsystem of audiocommentary and sound reinforcement; centralized uninterrupted power supply</p> <p>Accreditation and simulation center:  Model of the adult to demonstrate and practice removing a foreign body  (reception geimlich) (2 PCs.)  Defibrillator Schiller Fred mod. Easy Trainer with accessories (1 PC.)  Adult simulator with electronic control, training, computerized (1 PC.)  AED defibrillator training (1 PC .)  Phantom respiratory system, NMS and defibrillation (1 PC.)  Dummy for resuscitation and patient care (1 PC.)  Pulse oximeter (1 PC.)  Yxh-1A6A spinal immobilization shield complete with foldable immobilization head retainer( 1 PC.)  Splint – collar for adults shtivv-01  Stretchers longitudinally-cross folding NPPS-MM (2 PCs.)  Set of tires transport ladder KSTL-MP-01nosilki medical (1 PC .)  Medical universal goniometer</p>	<p>690922,  Primorsky Krai,  Vladivostok, island  Russian, the Saperny Peninsula,  the village of ayaks, 10,  RM. M 507</p>
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MINISTRY OF EDUCATION AND SCIENCE OF THE RUSSIAN  
FEDERATION  
Federal state autonomous educational institution  
of higher education  
**« Far Eastern Federal University »**  
(FEFU)

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SCHOOL OF BIOMEDICINE

**TRAINING AND METHODOLOGICAL SUPPORT OF INDEPENDENT  
WORK OF STUDENTS**  
on discipline «Emergency medicine»  
**Direction of training (specialty) 31.05.01 General medicine**  
**Form of training: full-time**

**Vladivostok**  
**2018**

### Schedule of independent work on the discipline

<b>N o.</b>	<b>Date / Deadline</b>	<b>Type of independent work</b>	<b>Estimated norms of time for execution (hour)</b>	<b>Form of control</b>
1	2-6 week	Essay	14 hours	OA-3-Report
2	7-16 week	Presentation report on the essay topic	6 hours	YO-3-Report
3	2-17 week	Preparation for testing	7 hours	Test
4	17-18 week	Preparation to exam	27 hours	OA-1-Interview
		Total	54 hours	

### Methodical instructions on preparation for practical classes

Control of the results of independent self-work is performed in the course of practical classes, oral interviews, interviews, solving situational problems, control work, including through testing.

1. Student must prepare or practical classes: repeat the lecture material, read the required section on the topic in the textbook.
2. The lesson begins with a quick frontal oral questioning on a given topic.
3. In the classroom, students work with lecture notes, slides.
4. For classes it is necessary to have a notebook for writing theoretical material, a textbook.
6. At the end of the lesson homework on a new topic is given and is invited to make tests on the material passed, which were studied in the classroom (summary).
7. Performances and activity of students are evaluated by the current assessment.

### Guidelines for the report preparation

1. Student's independent choice of the report topic.
2. Selection of literary sources on the selected topic from the recommended basic and additional literature offered in the working program of the discipline, as well as work with the resources of the information and telecommunication network

"Internet" specified in the working program.

3. Work with the text of scientific books, textbooks is not reduced to just reading material, it is also necessary to analyze the selected literature, compare the presentation of material on the topic in different literary sources, choose the material, so that it reveals the topic of the report.

4. The analyzed material is summarized, the most important thing is that it should not be just a conscientious rewriting of the source texts from selected literary sources without any comments and analysis.

5. On the basis of the analysis and synthesis of literature, the student makes a plan of the report, on the basis of which the text of the report is prepared.

6. The report should be structured logically, the material is presented integrally, coherently and consistently, conclusions are drawn. It is desirable that the student could express opinion on the formulated problem.

7. The report takes 7-10 minutes. The report is told, not read on paper.

### **Guidelines for working with literature**

1. Students need to make an initial list of sources. As a basis there may be a list of literature recommended in the working program of the course. For convenience, student can his/her your own card file of selected sources (author's name, title, characteristics of the publication) in the form of a working file in computer. This card file has the advantage, because it allows student to add sources, replace the need for one to the other, to remove those that were not relevant to the subject. The initial list of literature can be supplemented using the electronic catalogue of the FEFU library.

2. Working with literature on a particular topic it is necessary not only to read, but also to learn the study methods: to make a brief summary, algorithm, scheme of the material being read, which allows student to understand it faster, remember. It is not recommended to rewrite the text word by word.

## **Criteria for evaluation of the oral report**

Oral report on the discipline "Emergency medicine" are evaluated by the grade system: 5, 4, 3.

"5 grade" is given to a student if he/she expressed the opinion on the formulated problem, reasoned it, having precisely defined its contents and components, is able to analyze, generalize material and to draw the correct conclusions, using the basic and additional literature, freely answers questions that testifies that he knows and owns material.

"4 grade" is given to a student, if he/she presents the material on the chosen topic coherently and consistently, gives arguments to prove a particular position in the report, demonstrates the ability to analyze the main and additional literature, but admits some inaccuracies in the wording of concepts.

"3 grade" is given to a student if he/she carried out the independent analysis of the main and additional literature, however those or other provisions of the report are not always enough reasoned, mistakes are allowed at the presentation of material and not always fully answers additional questions on the subject of the report.

### **Methodical recommendations for the presentation preparation**

For preparation of presentation it is recommended to use: PowerPoint, MS Word, Acrobat Reader, LaTeX-bev package. The simplest program for creation of presentations is Microsoft PowerPoint. To prepare a presentation, it is necessary to process the information collected while writing the essay.

The sequence of preparation of the presentation:

1. Clearly state the purpose of the presentation.
2. Determine what the presentation format will be: live presentation (then how long it will be) or e-mail (what will be the context of the presentation).
3. Select the entire content of the presentation and build a logical chain of presentation.
4. Identify key points in the content of the text and highlight them.



5. Determine the types of visualization (pictures) to display them on slides in accordance with the logic, purpose and specificity of the material.

6. Choose the design and format the slides (the number of pictures and text, their location, color and size).

7. Check the visual perception of the presentation.

The types of visualization include illustrations, images, charts, tables. The illustration is a representation of a real-life visual. The images - as opposed to illustrations - are metaphor. Their purpose is to cause an emotion and create an attitude towards it, to influence the audience. With the help of well-designed and presented images, information can remain permanently in a person's memory. Chart is visualization of quantitative and qualitative relationships. They are used for convincing data demonstration, for spatial thinking in addition to the logical one. Table is a specific, visual and accurate data display. Its main purpose is to structure information, which sometimes facilitates the perception of data by the audience.

### **Practical hints on preparing a presentation**

- printed text + slides + handouts are prepared separately;
- slides -visual presentation of information that should contain a minimum of text and maximum of images that bring a meaning, to look visually and simply;
- textual content of the presentation - oral speech or reading, which should include arguments, facts, evidence and emotions;
- recommended number of slides 17-22;
- mandatory information for the presentation: the subject, surname and initials of the speaker; message plan; brief conclusions from all that has been said; list of sources used;
- handout - should be provided with the same depth and coverage as the live performance: people trust more what they can carry with them than disappear images, words and slides are forgotten, and handouts remain a constant tangible

reminder; handouts are important to distribute at the end of the presentation; Handouts should be different from slides, should be more informative.

### **Guidelines for writing and design of an essay**

Essay is a creative activity of the student reproducing in its structure the research activities to solve theoretical and applied problems in a particular branch of scientific knowledge. That is why the course certification work is an essential component of the educational process in higher education.

The essay is a model of scientific research, independent self-work in which a student solves a problem of a theoretical or practical nature, applying the scientific principles and methods of a given branch of scientific knowledge. The result of this scientific search may have not only subjective, but also objective scientific novelty, and therefore can be presented for discussion by the scientific community in the form of a scientific report or presentation at scientific-practical conferences, as well as in a form of research article.

Essay involves the acquisition of skills for building business cooperation, based on ethical standards of scientific activity. Purposefulness, initiative, disinterested cognitive interest, responsibility for the results of their actions, conscientiousness, competence - personality traits that characterize the subject of research activities corresponding to the ideals and norms of modern science.

The essay is an independent educational and research activity of the student. The teacher assists in a consultative manner and assesses the process and the results of the activity. Teacher provides an approximate topic of the essay work, specifies the problem and topic of research with a student or intern, helps to plan and organize research activities, assigns time and a minimum number of consultations.

The teacher receives the text of the essay for verification at least ten days before the defense.

Generally there is a certain structure of the essay, the main elements of which in order of their location are the following:

1. Title page.

2. Goal.
3. Table of Contents
4. List of abbreviations, symbols and terms (if necessary).
5. Introduction.
6. Main part.
7. Conclusion.
8. Reference list.
9. Appendixes.

The title page contains educational institution, graduating department, author, teacher or supervisor, research topic, place and year of the essay.

The title of the essay should be as short as possible and fully consistent with its content.

The table of contents (content) reflects the names of the structural parts of the essay and the pages on which they are located. The table of contents should be placed at the beginning of work on one page.

The presence of a detailed introduction - a mandatory requirement for the abstract. Despite the small volume of this structural part, its preparation causes considerable difficulties. However, this is a qualitatively executed introduction that is the key to understanding the entire work, which testifies to the professionalism of the author.

Thus, the introduction is a very crucial part of the essay. The introduction should start with a justification of the relevance of the chosen topic. As applied to the essay, the concept of "relevance" has one feature. From how the author of the essay can choose a topic and how correctly he understands and evaluates this topic from the point of view of modernity and social significance, characterizes his scientific maturity and professional preparedness.

In addition, in the introduction it is necessary to isolate the methodological basis of the essay, name the authors, whose works constituted the theoretical basis of the study. A review of the literature on the topic should show the author's thorough acquaintance with special literature, his ability to systematize sources, critically

examine them, highlight the essential and determine the most important in the up-to-date state of knowledge of the topic.

The introduction reflects the importance and relevance of the chosen topic, defines the object and subject, purpose and objectives, and the chronological framework of the study.

The introduction ends with a statement of the general conclusions about the scientific and practical significance of the topic, the degree of its knowledge and sources, and the hypothesis being put forward.

The main part describes the essence of the problem, reveals the topic, determines the author's position, factual material is given as an argument and for display of further provisions. The author must demonstrate the ability to consistently present the material while analyzing it simultaneously. Preference is given to the main facts, rather than small details.

The essay ends with the final part called "conclusion". Like any conclusion, this part of the essay serves as a conclusion due to the logic of the study which is a form of synthesis accumulated in the main part of scientific information. This synthesis is a consistent, coherent presentation of the results obtained and their relation to a common goal and specific tasks set and formulated in the introduction. At this place there is a so-called "output" knowledge, which is new in relation to the original knowledge. The conclusion may include suggestions of practical matter, thereby increasing the value of theoretical materials.

So, the conclusion of the essay should contain: a) presents the conclusions of the study; b) theoretical and practical significance, novelty of the essay; c) indicated the possibility of applying the results of the study.

After conclusion it is acceptable to place the reference list of the literature used throughout. This list is one of the essential parts of the essay and reflects the independent creative work of the author of the essay.

The list of sources used is placed at the end of the work. It is made either in alphabetical order (by the name of the author or the name of the book), or in the order in which the references appear in the text of the prepared work. In all cases, the full

title of the work, the names of the authors or the editor of publication are indicated if the writing team involved a group of authors, data on the number of volumes, the name of the city and publisher in which the work was published, year of publication, number of pages.

### **Evaluation criteria for essays.**

The stated understanding of the essay as a holistic copyright text defines the criteria for its evaluation: the novelty of the text; the validity of the source choice; the degree of disclosure of the issue essence; compliance with the requirements for registration.

**Essay novelty:** a) the relevance of the research topic; b) novelty and independence in the problem formulation, formulation of a new aspect of the well-known problem in the establishment of new connections (interdisciplinary, intra-subject, integration); c) ability to work with research and critical literature, systematize and structure research material; d) the appearance of the author's position, independence of assessments and judgments; d) stylistic unity of the text, the unity of genre features.

**The degree of disclosure of the question essence:** a) the plan compliance with an essay; b) compliance with the content of topic and plan of an essay; c) completeness and depth of knowledge on the topic; d) the validity of the methods and techniques of work with the material; e) ability to generalize, draw conclusions, compare different points of view on one issue (problem).

**The validity of the source choice:** a) evaluation of the used literature: whether the most famous works on the research topic are involved (including recent journal publications, recent statistics, reports, references, etc.)

**Compliance with the requirements for registration:** a) How true are the references to the used literature, quotes; b) assessment of literacy and presentation culture (including spelling, punctuation, stylistic culture), knowledge of terminology; c) compliance with the requirements for the volume of essay.

**The reviewer should clearly state** the remarks and questions, preferably

with references to the work (possible on specific pages of the work), to research and evidence that the author did not take into account.

**The reviewer may also indicate:** whether student has addressed the topic earlier (essays, written works, creative works, olympic works, etc.) and whether there are any preliminary results; how the graduate has conducted the work (plan, intermediate stages, consultation, revision and processing of the written or lack of a clear plan, rejection of the head recommendations).

**The student submits** an essay for review no later than a week before the defense. The reviewer is the teacher. Experience shows that it is advisable to acquaint the student with the review a few days before the defense. Opponents are appointed by the teacher from the students. For an oral presentation a student needs about 10–20 minutes (approximately as long as he answers with tasks for the exam).

**Grade 5** is given if all the requirements for writing and defending an essay are fulfilled: the problem is indicated and its relevance is justified, a brief analysis of different points of view on the problem under consideration is made and one's own position is logically presented, conclusions are formulated, the topic is fully disclosed, the volume is met, external requirements are met design, given the correct answers to additional questions.

**Grade 4** is given if the basic requirements for the essay and its defense are met, but there are some shortcomings. In particular, there are inaccuracies in the presentation of the material; or there is no logical sequence in the judgments; not sufficient volume of the essay; there are omissions in the design; additional questions for the defense are accompanied with incomplete answers.

**Grade 3** is given if there are significant deviations from the requirements for referencing. In particular: the topic is covered only partially; factual errors in the content of an essay or when answering additional questions; there is no output c.

**Grade 2** - the topic of an essay is not disclosed, a significant misunderstanding of the problem is found.

**Grade 1** - student's essay is not presented.

## Topics of reports and essays

Discipline has 27 hours of independent self-work, within these hours there are the 2 oral report on the proposed topics.

1. Methodological and legal basis of human life safety.
2. Health and safety in health care organizations.
3. The system of labor protection and safety in medical organizations.
4. Features of occupational safety of medical staff.
5. A healthy lifestyle is a necessary condition for life safety.
6. General principles of the first aid.
7. The sequence of the first aid.
8. Rules for the treatment of victims.
9. Types and methods of applying bandages.
10. Stopping bleeding (classification, tools).
11. Russian national security.
12. Components of the national security of Russia.
13. Objectives, organizational structure and management bodies of the Russian service of emergency medicine.
14. The formation and institutions of the emergency medicine service.
15. Modes of operation of the Russian service of emergency medicine.
16. Brief description of the specialized medical care teams (surgical SMCT, traumatic SMCT, neurosurgery SMCT, burning SMCT).
17. Objectives, principles of organization and conduct of civil defense.
18. Organization of the public protection in emergency situations.
19. Alert and information the public about the emergency.
20. Medical protection of the population and rescuers in emergency situations.
21. Medical protection from poisoning compounds and chemical substances.
22. Basics of medical and evacuation support of population in emergency situations in peace and wartime

23. The principles of evacuation (the need for sufficient, the maximum possible use of forces and means, territorial production).

24. Stage of medical evacuation. Types and volume of medical care at the stages of evacuation.

25. Objectives of the first stage of medical evacuation.

26. Objectives of the second stage of medical evacuation.

27. Medical evacuation of the injured persons in emergency situations.

28. Medical sorting of the injured persons in emergency situations.

29. Medical sorting (intra-unit, evacuation and transportation).

30. Organization of sanitary and hygienic measures in emergency situations.

31. Factors that may influence the occurrence of unfavorable hygienic situation and the spread of infectious diseases.

32. Basic principles of organization of medical support of population in emergency situations.

33. Sanitary and hygienic measures in the emergency centers: hygiene of movement and accommodation of the evacuated population.

34. Sanitary and hygienic measures in the emergency centers: hygiene of water supply.

35. Bacteriological (biological) weapons. Methods and signs of the use, ways of penetration, anti-epidemic measures.

36. Mobile anti-epidemic unit. Functions. Activities being carried out in the epidemiological focus.

37. Basic concepts of emergency medicine. Classification of emergency situations.

38. Structure and functions of the Russian emergency medicine service.

39. The equipment of emergency medicine service.

40. Methods of searching and methods of removal (moving) of victims in the emergency centers.

41. Medical sorting of victims at the prehospital stage.

42. Types of medical care.



43. Organization of public protection in emergency situations.
44. Tools of respiratory protection (personnel, improvised).
45. Tools of skin protection (personnel, improvised).
46. Collective tools of protection (characteristics of protection).
47. Hurricane, typhoon, cyclone, tornado. Characteristic. Actions of the population with the threat of their occurrence.
48. Blizzard. Characteristic. Actions of the population at the threat of its occurrences.
49. Forest fire. Characteristic. Actions of the population in the emergence of forest fire, improvised methods of extinguishing the fire.
50. Drought (unusually high heat). Characteristic. Hyperthermia. Symptoms, help, prevention of overheating.
51. Earthquakes. Characteristic. Preventive measure. Actions of the population in the event of an earthquake. Human actions in the case of finding persons under the rubble of the building.
52. Tsunami. Characteristic. Ways to protect against tsunamis. Actions of the population in the event of a tsunami.
53. Flood. Characteristic. Way of protection. Actions of the population in the event of a flood threat
54. Snow avalanche. Characteristic. Actions of the population at the threat of an avalanche. Actions of the population in the snow avalanche. Search for victims of avalanches.
55. Acute inhalation injuries caused by ammonia, chlorine, oxides of nitrogen, fluorides of chlorine and sulphur, phosgene, perfluoroisobutylene, isocyanates. Provision of medical care in the hearth and at the stages of medical evacuation
56. Sources of radionuclides in nature and national economy.
57. General characteristics and classification of radiation injuries as a result of external irradiation, depending on the type and conditions of exposure.
58. The main clinical forms of acute radiation disease with external

relatively uniform irradiation: bone marrow, intestinal, toxemic, cerebral.

59. Features of radiation lesions under the influence of neutrons.

60. Destruction of radioactive substances when they enter the body.

61. Prevention of injuries caused by radionuclides. Medical protection and early treatment.

62. Local radiation skin injuries. General characteristic.

63. Dependence of the severity of radiation skin injuries from the dose of external gamma radiation.

64. Pathogenesis and main clinical manifestations of radiation skin lesions.

Principles of prevention and treatment of radiation skin lesions.

65. Toxic technical fluids - symptoms, diagnostics and assistance in the lesion.

66. Toxic substances of common venomous action: symptoms, diagnostics and medical care in the lesion.



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SCHOOL OF BIOMEDICINE

**ASSESSMENT FUND**  
**on discipline «Emergency medicine»**  
**Specialty 31.05.01 «General medicine»**  
**Form of study: full time**

**Vladivostok**  
**2018**

## Passport of Assessment Fund

### Passport of assessment fund

Completed in accordance with the Regulations on the Funds of Evaluation Assets of Educational Programs of Higher Education - Bachelor's Programs, Specialties, FEFU Magistrates, approved by order of the Rector No. 12-13-850 of May 12, 2015.

Code and formulation of competence	Stages of competence formation	
GPC-4- ability to act in unusual situations, to take social and ethical responsibility for decisions	Knows	methods and tools for protection of patients, medical personnel and property of medical institutions in emergency situations
	Able to	find and make responsible decisions, assess the medical situation in emergency situations
	Masters	methods of evaluation of medical and tactical characteristics of injuries
GPC-7- the readiness to use techniques of first aid and techniques of protection in emergency situations	Knows	methods of the first aid, methods of protection in emergency situations
	Able to	provide the first aid, apply ways and methods of protection in emergency situations of different nature
	Masters	methods of the first aid and the main technical tools of individual and medical protection in emergency situations
GPC-10- the willingness to ensure care for sick people and primary pre-hospital care	Knows	Algorithms for performing basic medical diagnostic and therapeutic measures to provide primary first aid to victims of emergency and life-threatening conditions.
	Able to	Identify life-threatening disorders and provide primary first aid to victims in emergency situations.
	Masters	the technique of providing the first aid in case of emergency
PC-6 the ability of determining the patient's basic pathological conditions, symptoms, syndromes, diseases in	Knows	the main pathological symptoms and syndromes of diseases, using the knowledge of the basics of biomedical and clinical disciplines taking into account the rules of the pathology course of inner organs, systems and the whole body.

accordance with the International Statistical Classification of Diseases and problems related to health, the 10 <sup>th</sup> review.	Able to	to analyze the patterns of functioning of various organs and systems in different diseases and pathological processes, to use the algorithm of diagnostics (main, concomitant, complications), taking into account The international statistical classification of diseases and health-related problems (ICD),
	Masters	perform the basic diagnostic measures to identify urgent and life-threatening conditions
PC-19- the ability to organize medical aid in case of emergencies, including medical evacuations	Knows	Basic principles of organization of medical care and theoretical foundations of the modern system of medical evacuation supporting population in emergency situations
	Able to	to organize medical care in emergency situations, to determine the order of evacuation of victims in emergency situations
	Masters	Skills of the medical care organization, receptions and ways of evacuation of victims at emergency situations

## MONITORING THE ACHIEVEMENT OF THE COURSE OBJECTIVES

Code and formulation of competence		Stages of competence formation			
№ п/п	Controlled modules / sections / topics of the discipline	Codes and stages of competence formation	Evaluation tools - name		
			Current control	intermediate certification	
1	Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	GPC-4- ability to act in unusual situations, to take social and ethical responsibility for decisions	<b>To know</b>	OQ-1 Interview	Exam questions 1-25
			<b>Be able to</b>	PW-1 Test	PW-1 Test
			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
2	<b>Модуль I. Общие</b> Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	GPC-7- the readiness to use techniques of first aid and techniques of protection in emergency situations	<b>To know</b>	OQ-1 Interview	Exam questions 26-64
			<b>Be able to</b>	PW-1 Test	PW-1 Test
			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
3	Module I. General issues of life safety Module II. Medical care in emergency	GPC-10- the willingness to ensure care for sick people and primary pre-	<b>To know</b>	OQ-1 Interview	Exam questions 64-100
			<b>Be able to</b>	PW-1 Test	PW-1 Test

	response Module III. Medical evacuation support in case of emergency	hospital care	<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
	Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	PC-6 the ability of determining the patient's basic pathological conditions, symptoms, syndromes, diseases in accordance with the International Statistical Classification of Diseases and problems related to health, the 10 <sup>th</sup> review.	<b>To know</b>	OQ-1 Interview	Exam questions 26-64
			<b>Be able to</b>	PW-1 Test	PW-1 Test
			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium
	Module I. General issues of life safety Module II. Medical care in emergency response Module III. Medical evacuation support in case of emergency	PC-19- the ability to organize medical aid in case of emergencies, including medical evacuations	<b>To know</b>	OQ-1 Interview	Exam questions 64-100
			<b>Be able to</b>	PW-1 Test	PW-1 Test
			<b>To master</b>	OQ-3 Report Presentation	YO-2 Colloquium

### Scale of assessment of the level of competence formation

Code and formulation of competence	Stages of competence formation		criteria	indicators	points
GPC-4- ability to act in unusual situations, to take social and ethical responsibility for decisions	Knows (threshold level)	the main methods of the first aid, methods of protection in non-standard situations	Knowledge of the basic methods of the first aid, methods of protection in unusual situations	Ability to apply skills of the first aid, methods of protection in non-standard situations	65-71

	Able to (advanced)	explain the need of the first aid, methods of protection in unusual situations	Ability to explain the emergence of the reasons for which there is a need for the first aid and protection in unusual situation	Ability to use correctly the basic methods of the first aid and resuscitation in accordance with the situation	71-84
	Masters (high)	the first aid skills, methods of protection, making responsible decisions, evaluate medical and tactical characteristics in non-standard situations	Skill to assess medical situation, choose an individual type of assistance in accordance with the situation	Ability to determine the need for the first aid, possession of methods and tools of protection in unusual situations	85-100
GPC-7- the readiness to use techniques of first aid and techniques of protection in emergency situations	Knows (threshold level)	Basic methods of the first aid, methods of protection in emergency situations	The ability to use the basic methods of the first aid, methods of protection in emergency situations	Ability to use the basic methods of the first aid, methods of protection in emergency situations	65-71
	Able to (advanced)	use the basic methods of the first aid, methods of protection in emergency situations	Knowledge of the basic methods of the first aid, methods of protection in emergency situations	Ability to list and apply the basic methods of first aid, the protection in emergency situations	71-84
	Masters (high)	the main methods of the first aid, methods of protection in emergency situations	Ability to use the basic methods of the first aid, methods of protection in emergency situations	Ability to use the basic methods of the first aid, methods of protection in emergency situations	85-100
GPC-10- the willingness to ensure care for sick people and primary pre-hospital care	Knows (threshold level)	basic methods of the first aid, methods of protection in emergency situations	Knowledge of the basic methods of the first aid, methods of protection in emergency situations	Ability to correctly use the basic methods of the first aid, methods of protection in emergency situations	65-71
	Able to (advanced)	explain the need for the first aid, methods of protection in emergency situations	Ability to explain the emergence of the reasons for which there is a need for the first aid and protection in emergency situations	Ability to apply skills of the first aid, methods of protection in emergency situations	71-84
	Masters (high)	The first aid skills, methods of protection in emergency situations	Ability to provide the first aid care, knowledge of methods of protection in	Ability to determine the need for the first aid, possession of methods of	85-100

			emergency situations	protection in emergency situations	
PC-6 the ability of determining the patient's basic pathological conditions, symptoms, syndromes, diseases in accordance with the International Statistical Classification of Diseases and problems related to health, the 10 <sup>th</sup> review.	Knows (threshold level)	General principles and methods of the first aid, methods of protection in emergency situations	Able to provide the first aid care and implement protection methods in emergency situations	Ability to provide the first aid care and protection in emergency situations	65-71
	Able to (advanced)	Analyze information on the need for the first aid and the use of methods of protection in emergency situations	Able to collect, analyze information about the need for the first aid and the use of methods of protection in emergency situations	Ability to work with literature sources and electronic databases of tests to provide information on the first aid and the use of methods of protection in emergency situations	71-84
	Masters (high)	First aid techniques and methods of protection in emergency situations	Able to provide primary care and apply protection methods in emergency situations	Ability to confidently deliver reports and presentations, use multimedia and projection technology in public presentation of information	85-100
PC-19- the ability to organize medical aid in case of emergencies, including medical evacuations	Knows (threshold level)	the importance of readiness to participate in the provision of medical care in emergency situations, including participation in medical evacuation	Ability to navigate in modern methods of medical care in emergency situations, including participation in medical evacuation	Ability to find publications of scientists and apply them in practice	61-71
	Able to (advanced)	use scientific literature	Ability to work with library catalogues, electronic databases	Ability to work with databases and different directories	71-84
	Masters (high)	use systematic theoretical and practical knowledge to provide medical care in emergency situations, including participation in medical evacuation	The ability to use this knowledge in solving problems of medical care in emergency situations, including participation in medical evacuation числе участия в медицинской эвакуации	Ability to independently provide medical care in emergency situations, including participation in medical evacuation	85-100



*\* **Criterion** is a sign by which to judge the difference between the state of one phenomenon from another. The criterion is broader than the indicator, which is an integral element of the criterion and characterizes its content. The criterion expresses the most common feature by which the evaluation, comparison of real phenomena, qualities, processes. And the degree of manifestation, quality formation, certainty of criteria is expressed in specific indicators. The criterion is a tool, a necessary assessment tool, but the assessment itself is not. The functional role of the criterion is in determining or not determining the essential features of the object, phenomenon, quality, process, etc.*

***The indicator** acts in relation to the criterion as a particular to the General.*

*The indicator does not include a universal dimension. It reflects the individual properties and characteristics of the cognizable object and serves as a means of accumulation of quantitative and qualitative data for criteria generalization.*

*The main characteristics of the concept of "indicator" are the specificity and diagnostic, which implies its availability for observation, accounting and recording, and also allows us to consider the indicator as a more specific in relation to the criterion, and hence the meter of the latter.*

## **Evaluation tools for interim certification**

### **Question for exam**

1. Subject and objectives of emergency medicine
2. Basic concepts and definitions of emergency medicine.
3. Classification of emergencies and disasters.
4. Unified state system of emergency prevention and liquidation.
5. Features of medical sorting in the disaster focuses and emergencies at various stages, the rules of documentation
6. Organization principles of treatment of injured persons and patients in the destruction focuses and at the evacuation stages. Preparation of an action plan.
7. Types of medical care. Methods of medical care in extreme situations.
8. Stage-by-stage treatment of the injured persons and patients in destruction focuses.
9. The structure of losses in disasters.
10. Clinical and biological death.

11. Primary care. Cardiopulmonary resuscitation (primary) in cardiac arrest and breathing cessation.
12. Cardio-pulmonary resuscitation. Methods of artificial ventilation and their execution.
13. Drug therapy as an element of resuscitation.
14. Shock. Classification of shock conditions.
15. The system of medical and diagnostic measures for shock in emergency conditions. Prevention of shock.
16. Traumatic injury. Classification.
17. Wounds. Types of wounds.
18. Principles of care for open wounds
19. Bruises, sprains. Definition, mechanism, symptoms. Principles of primary care of patients with bruises, sprains.
20. Fractures. Definition, mechanism, classification, symptoms.
21. Principles of primary care in fractures
22. Dislocations. Definition, mechanism, classification, symptoms.
23. Principles of primary care for dislocations
24. Burns. Definition, classification, symptoms.
25. Thermal injuries. Systemic reactions to burns. Burn disease.
26. The principles for the provision of primary care for burns
27. Hypothermia and frostbite in emergency conditions.
28. Frostbites. Definition, classification, symptoms.
29. Principles of medical care for frostbite
30. Concepts of bleeding and blood loss. Types of bleeding. The body's reaction to the bleeding.
31. Ways to stop bleeding. Treatment of blood loss.
32. Long-term compression syndrome. Methods of treatment of victims with long-term compression syndrome.
33. The concept of radiation accident (catastrophe) and injuring radiation factors.

- 34. Medical care in terminal conditions (primary resuscitation).
- 35. Medical care for obturation and strangulation asphyxia.
- 36. Medical assistance in drowning.
- 37. Medical care for heat and sunstroke.
- 38. Medical care for electric shock and lightning.
- 39. Oral and inhalation poisoning.
- 40. Medical care for acute oral poisoning.
- 41. Medical care for eye injuries.
- 42. Monoxide poisoning.

**Criteria for grading a student on the exam in the discipline  
"Emergency Medicine»**

<b>Exam grade</b>	<b>Requirements to the formed competences</b>
«excellent»	Grade "excellent" is given to a student, if he/she deeply and firmly learned the program material, exhaustively, consistently, clearly and logically presents it, is able to closely link the theory with practice, freely copes with tasks, questions and other types of application of knowledge, and does not complicate with the answer when modifying tasks, uses the material of monographic literature in the answer, correctly justifies the decision, has versatile skills and techniques of performing practical tasks;
«good»	Grade "good" is given to a student, if he/she knows the material, competently and essentially sets it without allowing significant inaccuracies in the answer to the question, correctly applies the theoretical provisions in solving practical issues and problems, has the necessary skills and techniques of their

	implementation;
«satisfactory»	Grade "satisfactory" is given to a student if he/she has knowledge only of the basic material, but did not learn its details, admits inaccuracies, insufficiently correct formulations, violations of logical sequence in the statement of program material, has difficulties at performance of practical works;
«unsatisfactory»	Grade "unsatisfactory" is given to a student who knows the significant parts of the program material, allows substantial errors, uncertain, with great difficulty performs practical work.

### **Evaluation tools for current certification**

#### **Control tests are designed for students studying the course "Emergency medicine»**

Working with the tests it is offered to choose one variant of the answer from three – four offered. At the same time, the tests vary in their complexity. There are tests among the proposed that contain several options for correct answers. The student must provide all correct answers.

Tests are designed for both individual and collective solutions. They can be used in the process of classroom work and independent work. The selection of tests necessary for the knowledge control in the process of interim certification is made by each teacher individually.

Results of the test task execution are assessed by the teacher using five-grade scale for certification or on system "credit" - "no credit". The grade "excellent" is set when the number of correct answers is more than 90% of the tests

offered by the teacher. Grade "good" is set when the number of correct answers is more than 70% of the tests. Grade "satisfactory" is set when the number of correct answers is more than 50% of the proposed tests.

### **Sample test tasks**

1. Define the Russian service of emergency medicine

a) service for integration of medical forces in the elimination of a nuclear explosion or the prevention of the spread of infectious diseases in rural areas

b) service uniting all medical institutions and organizations providing medical examination of various groups of the population, and also providing vaccination of various layers of the population and age groups

c) functional subsystem of the Uniform state system of prevention and liquidation of emergency situations, functionally uniting services of medicine of accidents of the Russian ministry of health and social development, the Russian ministry of defence, and also medical forces and tools of the Russian Ministry of internal Affairs and other federal executive authorities intended for elimination of emergency situation.

the correct answer is c.

2. List the main tasks of RSEM

a) organization and provision of evacuation of population as well as individual age groups from the foci of chemical, biological and radiation contamination in suburban areas

b) organization and implementation of medical and sanitary support of the population in the aftermath of emergency situations, including local armed conflicts and terrorist acts

c) coordination and management forces and tools involved in the elimination of health consequences of emergencies

the correct answers are b, c

3. List the basic principles of the organization of RSEM

a) short duration and timeliness  
b) state and priority nature, creation of the most favorable conditions for emergency medical care

c) planned character, the principle of universalism

the correct answer is b, c

4. List the modes of operation of RSEM

a) regime of daily activities, increased readiness

b) state of emergency

c) mode of data collection

the correct answer is a, b

5. List the levels of the organizational structure of the Russian service of emergency medicine

a) federal, regional

b) territorial, local

c) object

the correct answer is a, b, c

6. List the regular formation of the disaster medicine service

a) mobile multidisciplinary hospitals, medical teams

b) teams of specialized medical care

c) vaccination rooms

the correct answers are a, b

7. List the main objectives of RSEM

a) medical sorting of the injured persons, needing specialized medical care, rendering specialized medical care to the injured persons

b) appointment of SPA-resort treatment and filling in outpatient cards

c) treatment of non-transportable affected persons, preparation of affected persons for evacuation to specialized medical institutions

the correct answers are a, b

8. How many teams of specialized medical care has a service of emergency medicine?

a) 10 types of teams

b) 21 teams

c) 53 teams

the correct answers are b

9. What care a surgical emergency team provides?

a) clinical and instrumental examination of the affected persons; complex anti-shock therapy; interventions for urgent indications; all types of surgical interventions in case of chest and abdominal cavity and pelvis injuries

b) surgical treatment of wounds, providing medical care to the affected persons with long-term compression syndrome, injuries of the main blood vessels, various types of acute vascular pathology in combination with extensive damage to adjacent anatomical formations

c) disinfection of reservoirs with drinking water, control of bacteriological conditions in district, control of radiological infection of the district

the correct answers are a, b

10. How many people are included in the surgical emergency care team?

a) 2 persons

b) 8 persons

c) 15 people

the correct answer is b

11. What trauma emergency team provides?

a) immobilization and anesthesia, osteosynthesis surgery

b) vaccination against especially dangerous infections, decontamination of food

c) anesthetic and resuscitation measures

the correct answers are a, b

12. How many people are included in the trauma emergency team?

a) 7 persons

b) 8 persons

c) 10 persons

the correct answer is a

13. Give the concept of Civil Defense (GO)

a) a system of measures to preparation to protection and protection of the population, material and cultural values on the territory of the Russian Federation from dangers arising due to the conduct of military operations or as a result of these actions

b) a system of measures to prepare for vaccination of all segments of population and age groups in the focus of particularly dangerous infections and elimination of the consequences of the use of bacteriological weapons

c) the system of measures for the preparation and organization of evacuation of the population in the event of low temperature in a certain area

the correct answer is a

14. List the guidance documents on the organization and management of CD

a) the Federal law of 21.12.1994 No. 68-FZ "about protection of the population and territories from emergency situations of natural and technogenic character", the Order of the Government of the Russian Federation of December 30, 2003 N 794 "About the uniform state system of prevention and liquidation of emergency situations"

b) the Federal law of 12.02.1998 No. 28 – FZ "on civil defense", the Order of the Government of the Russian Federation of November 26, 2007 N 804 "about the statement of regulations on civil defense in the Russian Federation»

c) the Federal law of 01.04.2016 "on carrying out anti-influenza vaccinations in institutions of higher medical education in the territory of the Russian Federation"

the correct answers are a, b

15. Who is in the management of CD in the territories of municipalities?

a) heads of local self-government bodies

b) heads of party organizations

c) heads of voluntary national teams and sports sections

the correct answer is a



16. Specify the objectives of CB

- a) urgent restoration of essential public services in wartime
- b) urgent census of population that is subjected to medical examination and vaccination
- c) ensuring the constant readiness of the country's civil defense forces and tools

the correct answers are a, b

17. Specify the main activities carried out by the management bodies and the forces of the unified CD system in the mode of daily activities

- a) the study of the environmental conditions and forecasting emergency situations; training of population for their actions in emergency situations
- b) management of creation, placement, storage and replenishment of reserves of material resources for liquidation of emergency situations;
- c) carrying out evacuation measures if necessary

the correct answers are a, b

18. Describe the main activities of the management bodies and forces of uniform system in the mode of increased readiness

- a) taking operational measures to prevent the occurrence and development of emergency situations, reduce the amount of damage and losses in case of their occurrence, as well as increase the stability and safety of organizations in emergency situations;
- b) carrying out measures to provide public life support in emergency situations
- c) replenishment, if necessary, of reserves of material resources created for liquidation of emergency situations

the correct answers are a, b

19. Specify the main activities carried out by the authorities and the forces of the unified CD system in an emergency

- a) continuous monitoring of the environmental condition, forecasting the development of emergencies and their consequences; carrying out measures to

protect population and territories from emergencies

b) distribution of propaganda literature among various population groups and age groups on the dangers of drug addiction and tobacco smoking

c) involvement of different segments of population to ensure vaccination of children and adolescents

the correct answer is a

20. Specify the emergencies of wartime

a) use of nuclear and chemical weapons

b) use of bacteriological (biological) and precision weapons

c) volcanic eruptions, floods

the correct answer is a, b

21. Specify emergency situations in peacetime

a) use of nuclear and chemical weapons

b) tsunamis, the convergence of mudflows

c) volcanic eruptions, floods

the correct answer is b, c

22. Specify the powers of the President of the Russian Federation in the field of civil defense

a) approve the plan of civil defense of the Russian Federation

b) enacts the plan of civil defence of the Russian Federation in the territory of the Russian Federation or in its separate districts in full or partially

c) establishes a schedule of vaccinations throughout the territory of the Russian Federation

the correct answers are a, b

23. What is included in the activities of radiation and chemical protection of population?

a) warning, shelter, respiratory and skin protection

b) emergency vaccination against especially dangerous infections

c) identification among the population of persons suffering from allergies

the correct answer is a

24. List the simplest types of shelters.

- a) cracks, trenches
- b) air-RAID shelters, bunkers
- c) dugouts, cellars

the correct answers are a, b

25. What is the chemical protection?

- a) individual anti-chemical package (IACp)
- b) gas masks of various modifications, respirators
- c) sunglasses

the correct answers are a, b

26. List the types of evacuation.

- a) types of risk, methods of evacuation
- b) distance, duration, start time of the event
- c) the velocity of the shock wave, the number of destructions

the correct answers are a, b

27. List the types of evacuation of danger

- (a) evacuation from areas of possible and actual chemical, radioactive, biological contamination
- b) evacuation on the grounds of age
- c) evacuation from areas of possible severe destruction, catastrophic flooding

the correct answers are a, b

28. What are the types of evacuation duration

- a) temporary
- b) medium-term, long-term
- c) irrevocable

the correct answers are a, b

29. Definition and principles of protection

- a) a set of measures aimed at preventing or limiting the reduction of population losses and threats to life and health from the damaging factors of

emergency

b) a set of measures aimed at preventing the movement of the population in the border areas

C) a set of measures aimed at the resettlement of certain groups of the population in the highlands

the correct answer is a

30. Measures to protect the population in emergencies:

a) forecasting of possible emergencies and their consequences; monitoring the state of the environment; notification of the threat of occurrence and the fact of emergencies

b) analysis of the structure of morbidity of different population groups and qualitative analysis of the results of vaccination against ARVI in certain age groups

c) evacuation of people from hazardous areas and areas; engineering, medical, radiation and chemical protection

the correct answers are a, b

31. Classification of personal protective equipment (PPE)

a) respiratory PPE

b) skin PPE

c) PPE for reservoirs

the correct answers are a, b

32. List the personal protective equipment

a) radioprotectors, antidotes

b) multivitamin complexes

c) antibacterial agents, special treatment tools

the correct answers are a, b

33. Give the concept of medical-evacuation support (MAS)

a) a set of organizational and vaccination measures aimed at reduction of incidence in certain age groups

b) a set of organizational and technical measures aimed at the movement of

population in rural areas

c) a set of organizational, medical, technical measures to search for the affected persons (patients), their collection, removal (moving) from the destruction foci

the correct answer is c

34. What kind of evacuation do you know?

a) general, partial

b) seasonal

c) winter, summer

the correct answer is a

35. Give the concept of general evacuation

a) removal of all pre-school children from the emergency zone

b) removal of all able-bodied population from the emergency zone

c) removal of all categories of the population from the emergency zone

the correct answer is c

36. Give the concept of partial evacuation

a) removal from the emergency zone of the disabled population, preschool children, school students

b) removal of all categories of the population from the emergency zone

C) removal of all liable for military service from the emergency zone

the correct answer is a

37. What is included in the concept of the "first aid"?

a) a set of simple medical measures with the use of personnel and improvised means

b) a set of measures aimed at performing emergency surgical interventions in the emergency zone

C) a set of measures aimed at the implementation of planned surgical interventions in the emergency zone

the correct answer is a

38. What is included in the concept of "specialized medical care"?

a) the complex of the treatment and preventive actions performed by specialist doctors in specialized medical institutions (units) with use of the special equipment and the equipment

b) a set of medical and preventive measures carried out by sanitary instructors on the battlefield

c) the complex of the medical and preventive actions performed by paramedics of ambulance

the correct answer is a

39. What is a "suburb zone"?

a) the territory within the administrative boundaries of the subjects of the Russian Federation, located outside the zones of possible destruction

b) the territory within the administrative boundaries of the Russian Federation with a predominance of forests

c) the territory within the administrative boundaries of the subjects of the Russian Federation, the most remote from the residential sector

the correct answer is a

40. Give the concept of medical evacuation

a) the system of measures for the evacuation of the affected and sick persons from the battlefield or from the center of mass destruction and their delivery to medical centers

b) the system of measures for the evacuation of the population to the suburban area and execution of preventive vaccinations

C) population census system and its distribution by age groups

the correct answer is a

41. List the types of medical care

a) first aid, primary pre-medical care, primary medical care

b) qualified and specialized medical care

c) universal health care

the correct answers are a, b

42. What types of medical care are on the battlefield?

- a) first aid (self-and mutual care)
- b) first aid
- c) specialized medical care

the correct answers are a, b

43. What types of medical care are provided in the hospital?

- a) first aid
- b) qualified and specialized medical care
- c) self-and mutual assistance

the correct answers are a, b

44. What stages of medical evacuation do you know?

- a) providing of the first pre-medical and first medical care in the emergency area
- b) providing of the first pre-medical and first medical care outside of the emergency area
- c) provision of specialized medical care on the battlefield

the correct answers are a, b

45. What are the "sorting marks"?

- a) stamps intended for collecting
- b) mark, for sorting victims on the basis of age
- c) mark, for sorting the injured persons according to the degree of destruction

the correct answer is c

46. What types of transport are used to take injured persons from the battlefield?

- a) special sanitary transport and carrier transport
- b) any available transport
- c) only railway transport (special cars)

the correct answer is a

47. What is the purpose of medical sorting

- a) to ensure that affected persons get timely provision of medical care and

efficient evacuation

b) distribution of the affected persons by age groups

c) distribution of affected persons by the degree of remoteness from the epicenter of the explosion

the correct answer is a

48. What is the forecast in the sorting group "extremely heavy"?

a) the prognosis is favorable

b) the forecast is relatively favorable

c) the forecast is unfavorable

the correct answer is c

49. List the reasons why sanitary and epidemiological situation in the area of emergency is complicated

a) destruction of residential and public buildings; failure of water supply, sewage and treatment facilities, municipal and industrial enterprises;

b) lack of medical records of different population groups, lack of reliable information on vaccination of certain population groups

c) intensive migration of different groups of people; changes in people's susceptibility to infections

the correct answers are a, b

50. What is public health intelligence?

a) collection of information on population size and structure of morbidity among selected population groups

b) collection of information on fertility and mortality in certain population groups, as well as the movement of these groups within the country

c) collection and transmission of information on sanitary-hygienic and epidemiological situation in the emergency zone

the correct answer is c

### **Test evaluation criteria**

Evaluation is conducted in an e-learning session on a 100-point scale.



The test includes 20 tasks, the maximum score on the test is 100 points.

As part of the current level of knowledge of the discipline allowed the test result is not less than 61 points.

### **Examples of the case study tasks**

#### Task 1.

You are watching TV suddenly the image is gone, you hear a strong buzz, there is a smell of burning. Your action.

- a) not to panic (not to run, not to shout); disconnect the TV by pulling out the main plug from a socket;
- b) cover the TV with a blanket or other thick cloth (preferably wet), compress on all sides, thereby limiting the air tolerance;
- c) it is obligatory to inform relatives about the incident
- d) send SMS to all friends

the correct answer is a, b, c

#### Task 2.

The TV got fire. Your action.

- a) do not panic (do not run, do not scream), disconnect the TV by pulling the main plug from the outlet;
- b) cover the TV with a blanket or other thick cloth (preferably wet), compress on all sides, thereby limiting the air tolerance;
- c) if the tube explodes, there is dangerous poisonous smoke, so leave the room and warn others, especially children;
- d) notify the store where you purchased the TV

the correct answer is a, b, c

#### Task 3.

There's a fire in your apartment. Your action.

- a) if you do not have a fire extinguisher, the improvised tools of extinguishing can be: a dense fabric (preferably wet) and water; lit curtains need to be torn off and trampled or thrown in the bath, pouring water;

b) do not open windows because the fire with the advent of oxygen would flare up stronger, it also should be very careful to open the room where the fire occurs, the flame may flash forward;

c) to avoid electric shock, it is necessary to turn off the electricity when it is necessary to extinguish the wiring or pour water;

d) call the fire department by phone 01 from neighbors.

the correct answer is a, b, c, d

#### Task 4.

You went into the entrance of the house. There is a strong fuse of smoke in the entrance. Your action.

a) try to determine the source of the smell, call the nearest apartment and warn residents about the possible danger;

b) upon detection of the fire, try to extinguish the fire with improvised means, in the case of ignition wiring, disconnect the electrical shield, if the fire extinguishing with improvised means is not possible, it is necessary to call the fire service using phone number 01;

C) send SMS to all friends and acquaintances, call parents

the correct answer is a, b

#### Task 5.

Upon returning home, you find that the door of your apartment is broken into or open. Your action.

a) do not enter the apartment, call the next apartment and call the police on the phone 02;

b) watching the apartment, prepare to remember the possible "guests" (faces, clothes, body), wait for the arrival of the police attire, not entering his apartment;

c) try to detain the robbers on their own

d) block the front door with improvised means and keep the robbers inside the apartment until the police arrive

the correct answer is a, b

#### Task 6.

You have opened the door of the apartment, and there are strangers in your apartment. Your action.

a) close the door without removing it from the lock; ask for help to the neighbors, affordable way on the phone, neighbors, etc to call the police;

b) ask someone from the neighbors to be on duty at the entrance to find out which car and where the thieves will go;

c) watching the apartment, prepare to remember the "guests" (faces, clothes, physique)

e) call all your friends and call them for help

the correct answer is a, b, c

#### Task 7.

There was a call in your apartment door. Your action.

a) immediately open the door and offer to enter the apartment

b) look into eyehole, if on the threshold of a stranger, ask him to introduce himself; take the time to open the door offering to tell fortunes, buy cheap honey, etc; if the door official, you need to check it on the phone or arrange a meeting at a convenient time for you;

c) go out to the balcony or open a window and convince people on the street (in the yard) to report to the police or to come up to your site, being careful and acting not alone, but as a group;

d) if these actions are impossible, then call the police on the phone 02

the correct answer is b, c, d

#### Task 8.

You hear the noise, the cries for help in the entrance of your home. Your action.

a) immediately rush to the rescue, without waiting for the arrival of the police; call the neighbors for help

b) try to find out the reason without putting their lives in danger; without entering into combat and conflict with criminals, report what is happening to neighbors, people entering the entrance or passers-by on the street;

c) if it is not possible to resolve the conflict peacefully, it is necessary to call a

police squad.

the correct answer is b, c

#### Task 9.

You were attacked in the elevator. Your action.

a) forget about fear and indecision; use all available tools and known methods of self-defense; success depends on surprise, determination, pressure; remember that most criminals are afraid of their victims;

b) read excerpts from the Criminal Code indicating the illegality of the attacker's actions, name the terms of imprisonment for the offense (specify the articles of the criminal code)

C) to avoid such situations, do not enter the elevator with strangers.

the correct answer is a, b

#### Task 10.

You were invited to visit as a guest. What precautions should be taken?

a) ask what architectural style the house you were invited in was built; to specify age of a structure

b) tell your family where you are going and when you will return; if you are invited by strangers, ask someone you know to accompany you;

c) if you have to return in the dark, call before going home and ask to meet you.

the correct answer is b, c

#### Task 11.

There is a strong smell of gas in your apartment. Your action.

a) do not turn on the light and electrical appliances, do not light matches; check the burners (if open, close and shut off the main gas supply valve)

b) send SMS to friends and family, check the weather forecast

C) open windows and doors; go to neighbors and call emergency service by phone 04.

the correct answer is a, b

#### Task 12.

Strong smell of gas in the entrance. Your action.

a) do not turn on the light and electrical appliances, do not light matches; try to figure out a leak location (to block the main gas supply valve);

b) ventilate the area; tell the neighbors to call the emergency services on the phone 04.

c) move 100 meters away from the building, then call the police

the correct answer is a, b

#### Task 13.

You are at home, heard the sounds of sirens and intermittent beeps. Your action.

a) immediately turn on the radio or TV to listen the emergency messages; inform neighbors and relatives about the incident, bring children home and act according to the information received;

b) if necessary, the evacuation to collect in a small suitcase (backpack) essentials, prepare the apartment for conservation;

c) close windows and doors, turn off water and electricity, do not answer phone calls, do not approach the entrance doors

the correct answer is a, b

#### Task 14.

You were caught in an earthquake. Your action.

a) be attentive to the reports of local authorities of the state emergency service; strictly follow their instructions and recommendations; from the moment of the first fluctuations to destructive shocks usually takes 15-20 seconds, so if you are on 1-2 floors, quickly leave the building and move away from it to an open place;

b) being higher than 2 floors, out of the corner of the room; go to the safest place (away from windows, in the recesses of the inner main walls, in corners between walls, under the bed, the table, the other durable and stable object)

c) climb to the roof of the building and wait for the arrival of helicopters emergency rescues

the correct answer is a, b

#### Task 15.

You have received a signal about the threat of flooding. Your action.

a) report about the flood to your relatives, neighbors; be attentive to the reports of local authorities of the state emergency service; strictly follow their instructions and recommendations;

b) continuing listen to the radio (if we are not talking about a sudden catastrophic flooding), prepare for evacuation, move to the upper floors of valuables; windows and doors of the first floors clog boards or plywood;

c) in case of a sudden flood, it is necessary to take the nearest elevated place as soon as possible and be ready for an organized evacuation by water; it is necessary to take measures to allow rescuers to detect people cut off by water and in need of assistance in a timely manner; in the daytime to hang out a cloth on a high place, and in the dark - to give light signals.

the correct answer is a, b, C

#### Task 16.

There was an explosion at a nuclear power plant (NPP), there was a threat of radioactive contamination. Your action.

a) protect the respiratory system with available personal protective equipment-wear masks, gas masks, respirators, cotton bandages, dust masks or use improvised means (scarves, scarves, etc.); as soon as possible to hide in the nearest building, protective structure;

b) seal the room and protect food; make a supply of water in closed vessels;

c) take medicines that are issued by medical institutions in the first hours after the accident;

the correct answer is a, b, c

#### Task 17.

There was a release of toxic substances in your area of residence. Your action.

a) protect the respiratory system with available personal protective equipment-wear masks, gas masks, respirators, cotton bandages, dust masks or use improvised means (scarves, scarves, etc.); as soon as possible to hide in the nearest building, protective structure;

b) if you suspect poisoning, exclude any physical activity, take a copious warm

drink and contact a medical professional

c) find out the weather forecast for the next 3 days

the correct answer is a, b

You were in a train accident. Your actions to reduce the risk factors for life and health

a) jump out of the car, without waiting for a stop (in the course of the train), run off to a safe distance, inform relatives and the Ministry of emergency situations

b) close the head hands; rest legs against a wall in the course of movement of the train; after there was a blow and a full stop of the car, first of all it is necessary to define, in what position you are, whether the car burns;

c) if the doors did not open at once, most likely, they jammed, in this case it is necessary to beat out glasses; having got out of the car and having departed on safe distance, it is necessary to start survey of injuries and damages and to start rendering first aid to victims.

The correct answer is b, c

Task 19.

Patient has consumed 100 ml of ethylene glycol. Your tactics.

correct answer-

Tactics - assessment of the victim condition, removal of unabsorbed poison, the use of antidote therapy-ethyl alcohol, asymptomatic therapy, removal of absorbed poison.

Task 20.

After the use of tincture, patient felt dizziness followed by loss of consciousness. Pale, covered with cold sweat, a pulse - 30 per minute with weak filling. Your supposed diagnosis? What is the cause of this condition? The order of first aid.

correct answer-

1). Vascular collapse and bradycardia is possible due to poisoning with hellebore or aconite.

2) Collapse and bradycardia are the leading clinical manifestations of this

pathology.

3). Correction of hemodynamics (atropine, infusion therapy) followed by gastric lavage.