

The Ministry of Health of the Russian Federation  
State Budget Educational Institution of Higher Professional Education  
**I.M. SECHENOV FIRST MOSCOW STATE MEDICAL UNIVERSITY**

Seen and approved  
Rector \_\_\_\_\_ P.V. Glybochko

**STEERING DOCUMENT OF THE COURSE**

**Disaster medicine**

*(name of the course)*

major professional educational program of higher education - residency training program

31.00.00 Clinical medicine

*code and name of the consolidated group of professions (training directions)*

**31.08.54 General medical practice (family medicine)**

*code and name of the training directions (profession)*

Course credit value: 2 credits

### 1. The purpose and objectives of mastering the *Disaster medicine* course

The purpose of mastering the course: formation of safety culture, preparedness of a resident graduate to work during emergency situations in times of peace and in wartime.

When mastering *Disaster medicine*, a student acquires **professional competences (PC)** in:

#### **preventive activities:**

- preparedness for taking anti-epidemic measures, organizing civil protection in focal points of highly infectious diseases, in case of radiological environment aggravation, disasters and other emergency situations (PC-3).

#### **treating activities:**

- preparedness for providing medical aid in case of emergency situations, including participation in medical evacuation (PC-7).

#### **organizational and managerial activities:**

- preparedness for managing medical aid in case of emergency situations, including medical evacuation (PC-12).

### **Course tasks:**

#### **to know:**

- legislation of the Russian Federation concerning the organization of civil health service support during recovery after various emergencies;

- methodological and legal principles of managing medical aid in case of emergency situations, including medical evacuation;

- general characteristics and health care consequences of emergency situations;

- classification, definition and sources of emergency situations;

- civil protection organization in case of radiation environment aggravation and emergency situations;

- basics of organizing and conducting sanitary and anti-epidemic (preventive) measures during emergencies in times of peace and in wartime;

- specifics of providing and managing therapeutic aid in case of emergencies and disasters, terrorist attacks and local armed conflicts;

- organization of treating and evacuation activities, typical diagnostic and curative activities of primary health care;

- basics of organizing emergency call service in disaster medicine, principles of sanitary aviation evacuation;

- typical medical records in medical institutions in case of emergency situations;

- specific features of medical supply for organizations and formations dealing with civil health care in various emergency situations;

- purpose and organization principles of Russia's Unified State System as to Prevention and Response to Emergency Situations (RS ChS);

- purpose, operational structure and regulatory bodies of the All-Russian Agency for Disaster Medicine (VSMK).

#### **to develop skills in:**

- applicable legislative acts concerning organization of civil health care during emergency recovery, be able to use them in specific practical situations;

- organizing primary medical care for people injured in centers of destruction during emergency situations.

#### **to gain experience in:**

- basic medical diagnostic and curative activities aimed at providing primary medical care in case of life threatening conditions;

- organizing sanitary and anti-epidemic (preventive) activities during natural and technogenic emergency situations in times of peace and in wartime;

- correct medical record keeping during emergency situations.

## 2. Position occupied by the course within the University's BASIC PROFESSIONAL EDUCATIONAL PROGRAM OF HIGHER EDUCATION

2.1. *Disaster medicine* course is part of the base section of residency training program and is compulsory for mastering by the students .

2.2. To master the course, the students are required to have the following knowledge, capabilities and skills formed by the preceding disciplines:

### History of medicine

Knowledge of the following:

- history of research for effective treating and preventive means, establishment and development of medical science;
- outstanding personalities in medicine and pharmacy, significant medical discoveries, impact of humanistic ideology on medicine.

### Bioethics

Knowledge of the following:

- environmental impact on human health;
- healthy lifestyle doctrine, doctor-patient relations;
- moral and ethic standards, regulations and principles of professional medical behavior, patient's and doctor's rights, ethical principles in the core of today's medical legislation.

Skills in the following:

- informing patients and their relatives according to the "informed consent" requirements.

### Psychology and pedagogics

Knowledge of the following:

- major branches of psychology, common and individual features of adolescent and adult mentality, psychology of personality and small group psychology.

### Legal science

Capabilities:

- be familiar with the applicable legislative acts on labor, use labor legislation in specific practical situations.

### Social science

Knowledge of the following:

- concepts of society and its social structure, roles of various social groups in history: family, ethnic groups, social classes and states.

### Physics, mathematics

Knowledge of the following:

- major physical phenomena and objective laws lying at the root of the processes taking place in a human body;
- characteristics of physical factors' impact on human body;
- basic physics behind operation of medical hardware;
- accident-prevention rules for working with instruments in physical laboratories.

Capabilities:

- operating physical equipment.

### General chemistry, bioorganic chemistry

Knowledge of the following:

- physical and chemical essence and mechanisms of the processes taking place in human body at molecular and cell levels;
- principles of classification, nomenclature and isomerism of organic compounds underlying vital processes;
- structure and functioning mechanism of bioactive molecules;

- interrelation between the structure and chemical properties of biologically relevant classes of organic compounds, biopolymers and their structural components, regularities in their chemical behavior at molecular level of the processes taking place in a living organism;
- instructions and safety regulations for operation in a chemical laboratory, safety precautions when working with chemicals.

#### Capabilities:

- predicting the results of physico-chemical processes taking place in living systems, resting upon basic theoretical provisions, and being able to give scientific credence to observable phenomena;
- predicting the trend and the result of chemical transformations of organic compounds;
- operating chemical equipment.

#### Skills in the following:

- safe operation in a chemical laboratory, handling caustic, poisonous, volatile organic compounds, operating burners, alcohol lamps and electric heaters.

#### Biology, ecology

##### Knowledge of the following:

- general regularities of life origin and development;
- human anthropogenesis and ontogenesis;
- basic regularities of human body development and life activity based on the structural organization of cells, tissues and organs;
- biosphere and ecology, parasitism phenomenon and bioenvironmental diseases;
- accident-prevention rules for working with animals in biological laboratories.

##### Skills in the following:

- working with animals and biological equipment.

#### Biological chemistry

##### Knowledge of the following:

- basics of structural organization and functioning of basic cell biomacromolecules, subcellular organellas; basics of intermolecular interaction mechanisms.

##### Skills in the following:

- explaining molecular mechanisms for sustaining homeostasis under various impacts of internal and external factors;
- explaining methods aimed at decontamination of toxic substances in human body by utilizing the notion of decontamination mechanisms for endogenic substances and foreign compounds;
- explaining curative effect of some drugs utilizing knowledge of molecular processes and structures which are targeted by these drugs;
- analyzing possible routes of drug entry into the body, utilizing knowledge of digestion and absorption processes, drug biotransformation in the body;
- evaluating data on chemical composition of biological liquids in order to characterize norms and symptoms of diseases.

##### To master the following:

instructions on working with chemicals, vessels and measuring equipment in a chemical laboratory.

#### Microbiology, inframicrobiology, immunology

##### Knowledge of the following:

- classification, morphology and physiology of microgerms and viruses, their impact on human health, methods of microbiological diagnostics, application procedure for major antibacterial, antiviral and biological preparations;
- structures and functions of human immune system, its age specifics, development and functioning mechanisms, basic methods of immunodiagnostics, methods of immune status evaluation, indications for biologic response modifier therapy.

#### Capabilities:

- operating biological equipment.

Skills in the following:

- possessing information on sterilization principles, disinfection and antiseptic treatment of tools and equipment in order to avoid contagion of doctor and patient.

#### Morbid physiology

Knowledge of the following:

- definitions of aetiology, pathogenic mechanism, morphogenesis, pathomorphism of a disease, principles for classification of diseases;
- basic definitions of common nosology;
- functional systems of human body, their regulation and self-regulation when interacting with ambient environment in normal state and during pathological processes.

#### In-service education program Patient care in therapy and surgery

Knowledge:of the following:

- types of patient decontamination, fever types;
- specific features supervision and care for patients with diseases of various body systems.

Skills:

- performing sanitary treatment of a patient when admitted to hospital and while in hospital, changing the patient's underwear and bed-linen;
- providing care for patients of all ages, with diseases of various organs and systems, transportation of patients;
- organizing patients' feeding;
- performing disinfection and presterilizing preparation of medical instrumentation, materials and means of patient care.

Skills in the following:

- care for patients taking into account their age, character and disease severity.

**2.3** Mastering the course is required for knowledge, capabilities and skills formed by the subsequent courses/practices:

#### General medical practice (family medicine)

Knowledge:

therapeutic service organizational systems;  
causes, development mechanisms, clinical manifestations, diagnostic methods, principles of treatment and prevention of medical diseases.

Capabilities:

making a diagnosis according to modern classification;  
determining tactics for patient management;  
prescribing and performing treatment within the scope of his/her professional competence;  
providing patient care;  
executing medical documentation;  
rendering primary pre-hospital medical care in case of emergency conditions in the clinical picture of internal diseases;  
organizing and performing patient transportation to a medical facility.

#### - Pathology

Knowledge of the following:

aetiology, development mechanisms and diagnostics of pathological processes in organisms and systems. Skills:

assess organism parameters from the perspective of "normal" and "pathological"

#### Emergency conditions in the clinical picture of internal diseases

Knowledge of the following:

Major emergency conditions in the clinical picture of internal diseases

Capabilities:

organizing primary medical care for people injured in the center of destruction during emergency situations.

Skills in the following:

basic medical diagnostic and curative activities aimed at providing primary medical care in case of life threatening conditions;

### 3. Requirements to the results of mastering the course.

Mastering the course is aimed at forming the following common cultural (CC) and professional (PC) competences of the students:

Serial No	Code competences	Contents of the competence (or its part)	Upon mastering the course, the students must:			
			Know	Develop capabilities in	Become experienced in	Assessment methods <sup>1</sup>
1	2	3	4	5	6	7
	PC-3	preparedness for taking anti-epidemic measures, organizing civil protection in focal points of highly infectious diseases, in case of radiological environment aggravation, disasters and other emergency situations	organizing civil protection in focal points of highly infectious diseases, in case of radiological environment aggravation, disasters and other emergency situations; basics of organizing and conducting sanitary and anti-epidemic (preventive) measures during emergencies in times of peace and in wartime	applicable legislative acts concerning organization of civil health care during emergency recovery, be able to use them in specific practical situations;		Test assignments. Test questions. Papers. Situational tasks.
	PC-7	preparedness for providing medical aid in case of emergency situations, including participation in medical evacuation	specifics of providing and managing therapeutic aid in case of emergencies	organizing primary medical care for people injured in the center of		Test assignments: Test questions. Papers. Situational tasks.

<sup>1</sup> \*types of assessment methods which may be used when mastering the competences: colloquium, review work, conversation over situational tasks, written and computer tests, typical calculations, individual tasks, reports, essays, practical training reports

			es and disasters, terrorist attacks and local armed conflicts	destruction during emergency situations		
	PC-12	preparedness for managing medical aid in case of emergency situations, including medical evacuation.	general characteristics and health care consequences of emergency situations; classification, definition and sources of emergency situations; organization of curative and evacuation activities, typical diagnostic and curative activities of primary health care;	applicable legislative acts concerning organization of civil health care during emergency recovery, be able to use them in specific practical situations;		Test assignments: Test questions. Papers. Situational tasks.

#### 4. Course sections and competences formed during the process of their mastering:

Serial No	Code competences	Name of the course section	Section content in teaching units (section subjects)
1	2	3	4
<b>DISASTER MEDICINE</b>			
1.1	PC-12	Emergency situations. Unified State System of Prevention and Response to Emergency Situations. All-Russian Agency for Disaster Medicine (VSMK).	Definitions and classification of emergency situations and their sources. Phases (stages) of development and adverse factors during emergency situations. Medical and health consequences of emergency situations. An emergency situation in a medical institution. Purpose and major organization principles of the Unified State System of Prevention and Response to Emergency Situations Structure and functioning of the Unified State System of Prevention and Response to Emergency Situations and destination of its elements. Purpose, principles, operating modes of VSMK. Organizational structure, description of VSMK institutions and formations.
1.2		Basics of organizing and conducting treatment and evacuation activities during emergencies in times of peace and in wartime	Conditions governing the system of treatment and evacuation support. Essence of the system of treatment and evacuation support and major requirements to it. Types, volumes and procedures of providing medical care. Organization and grounding for medical graduation in the phases of civil medical evacuation in emergency situations. Organizing treatment and

			evacuation activities when providing medical care during emergencies.
1.3	PC-3	Civil health service support when recovering from emergencies of chemical and radiation origin.	<p>Civil health service support when recovering from emergencies of chemical origin. Classification of poisonous and high-toxic substances. Brief description of high-toxic substances posing a threat in emergencies of chemical origin (basic regularities of interaction between organism and toxic agents). Intoxication progress, major clinical manifestations. General principles of emergency aid. Specific features of treatment and evacuation support (organizational, treatment and diagnostic activities, workforce and means). Modern systems for toxicological information support. Purpose and management of a specialized toxico-therapeutic brigade of instant readiness.</p> <p>Public health service support when recovering from emergencies of radiation origin. Classification and brief description of radiation emergencies. Factors affecting people during nuclear explosions and radiation emergencies. Medical description of radiation injuries, prompt and delayed radiation effects. Public health service support when eliminating the consequences of radiation emergencies. Purpose and management of a specialized radiological brigade of instant readiness.</p>
1.4	PC-3	Sanitary and anti-epidemic (preventive) activities when recovering from emergency situations.	Classification and content of sanitary and anti-epidemic (preventive) activities. Sanitary and anti-epidemic (preventive) activities of medical nature. Organization and implementation of sanitary and anti-epidemic (preventive) activities among civil population in emergency situations.
1.5	PC-7	Health service support for the affected people when recovering from emergencies of various origins.	<p>Specific features of providing and managing therapeutic aid in emergency situations. Relevant issues of emergency call service in disaster medicine. Sanitary aviation evacuation. Organizing sanitary aviation evacuation when eliminating health care consequences of emergency situations by VSMK experts assisted by sanitary aviation.</p> <p>Organization of medical care for people affected in emergency situations of transport, explosion and fire origin. Health service support for the affected people when recovering from emergencies of transport, explosion and fire origin.</p> <p>Organization of civil health care during terrorist attacks and local armed conflicts.</p> <p>Protection and health care for children in emergency situations. Specific features of protecting children from hazardous and harmful factors in emergency situations.</p> <p>Management of medical, psychological and psychotherapeutic care for people affected in emergency situations.</p> <p>Provision of medical stock for organizations and formations of disaster medicine services in various modes of an emergency situation.</p>

## 5. Distribution of the course .credit value.

### 5.1. Distribution of the course credit value and types of studies throughout the terms:

Type of studies	Credit value		Credit value throughout the terms (AH)
	amount of credits (C)	amount of academic hours (AH)	
Auditorium hours, including	2	48	48
Lectures (L)		6	6
Laboratory practical studies (LP)			
Practical studies (PS)		24	24
Clinical practical studies (CPS)			
Seminars (S)		18	18



Student's individual work (IW)		24	24
Interim attestation (pass-fail exam )			
<b>TOTAL</b>		<b>72</b>	<b>72</b>

## 5.2 Course sections, types of studies and ongoing monitoring methods:

Serial No	Term No	Name of the course section	Types of studies (AH)					Assessment methods
			L	PS	S	IW	total	
1.	3	Emergency situations. Unified State System of Prevention and Response to Emergency Situations. All-Russia Agency for Disaster Medicine.	4		2	2	8	Test assignments: Test questions. Papers.
2.	3	Basics of organizing and conducting treatment and evacuation activities during emergencies in times of peace and in wartime	2	6	2	4	14	Test assignments: Test questions. Papers. Situational tasks.
3.	3	Public health service support when recovering from emergencies of chemical and radiation origin.		8	4	6	18	Test assignments: Test questions. Papers. Situational tasks.
4.	3	Health service support for affected people when recovering from emergencies of various origins.		10	8	10	28	Test assignments: Test questions. Papers. Situational tasks.
5.	3	Sanitary and anti-epidemic (preventive) activities when recovering from emergency situations.			2	2	4	Test assignments: Test questions. Papers.
<b>TOTAL</b>			<b>6</b>	<b>24</b>	<b>18</b>	<b>24</b>	<b>72</b>	

## 5.3 Distribution of lectures by semesters:

Serial No	Lecture subject name	Amount in academic hours (AH)	Semester
1.	Purpose and organization principles of Russia's Unified State System of Prevention and Response to Emergency Situations.	2	3

	All-Russian Agency for Disaster Medicine		
2.	General characteristics and health care consequences of emergency situations	2	3
3.	Organization of treatment and evacuation support for civil population in emergency situations.	2	3
	TOTAL (total - AH)	6	

## 5.4 Distribution of practical studies' subjects by semesters:

Serial No	Practical studies' subject names	Amount in academic hours (AH)	Term
1.	Organization and grounding for medical graduation in the phases of civil medical evacuation in emergency situations	6	3
2.	Organization of medical care for people affected in emergency situations of transport, explosion and fire origin	2	3
3.	Organization of civil health care during terrorist attacks and armed conflicts	4	3
4.	Procedure for applying antiradiation protection drugs in focal centers of radiation contamination.	4	3
5.	Procedure for using antidote at the phase of pre-hospital care when recovering from emergencies.	4	3
6.	Relevant issues of emergency call service in disaster medicine. Sanitary aviation evacuation	4	3
	TOTAL (total - AH)	24	

## 5.5. Distribution of seminars' subjects by semesters:

Serial No	Seminar subject name	Amount in academic hours (AH)	Term
1.	Purpose, operational structure and regulatory bodies of the All-Russian Agency for Disaster Medicine.	2	3
2.	Organization of treatment and evacuation support for civil population in emergency situations.	2	3
3.	Organization of therapeutic aid in emergency situations	2	3
4.	Protection and health care for children in emergency situations	2	3
5.	Organization of psychological and psychotherapeutic care for people affected in emergency situations.	2	3
6.	Health care management for people affected by chemical emergencies. Purpose and management of specialized toxicological brigades of instant readiness	2	3
7.	Health care management for people affected in radiation emergencies. Purpose and management of a specialized radiological brigade of instant readiness	2	3
8.	Sanitary and anti-epidemic (preventive) activities when recovering from emergency situations	2	3
9.	Provision of medical stock for organizations and units of disaster medicine services in various modes of an	2	3

	emergency situation		
	TOTAL (total - AH)	18	

### 5.6 Distribution of the resident's individual work (IW) by types and by semesters:

Serial No	Type of IW*	Amount in academic hours (AH)	Term
1.	Working with literary and other sources of information on the section under study.	9	3
2.	Preparation for interactive studies (role-playing and business games, trainings, imitation projection, computer simulation, discussion)	7	3
3.	Writing papers	8	3
	TOTAL (total - AH)	24	

\*types of individual work: working with literature and other sources of information on the section studied, including interactive forms, performing the tasks stipulated by the curriculum (group and/or individual tasks) in the form of executing case histories, papers, essays, reports, addresses; preparation for taking part in interactive studies (role playing and business games, training courses, imitation projections, computer simulations, discussions), working with digital educational resources at the University's educational web portal, writing course papers, etc.

## 6. Assessment methods used for checking the progress and results of mastering the course.

### 6.1 Examples of assessment methods:

Code and competence name

PC-7 - preparedness for providing medical aid in case of emergency situations, including participation in medical evacuation.

Course section (subject): HEALTH SERVICE SUPPORT FOR AFFECTED PEOPLE WHEN RECOVERING AFTER EMERGENCIES OF VARIOUS ORIGINS

Type of assessment method: *Test assignments:*

Assessment method	Model answer	Application level*
<p><b>1. WHEN SOLVING THE ISSUE OF TRANSPORTING A VICTIM OF A ROAD ACCIDENT TO A MEDICAL FACILITY, THE FOLLOWING MUST BE CONSIDERED:</b></p> <p>a) the condition of the injured person, severity and character of the traumas</p> <p>b) vehicle types, their fitness for transporting the injured</p> <p>c) distance to the medical facility where the injured is transported to;</p> <p>d) possibility of providing the necessary reanimation activities during transportation</p> <p>e) possibility of evacuation by air only</p>	1) a, b, c, d	OM (ongoing monitoring) OM-BC (borderline control) IA (interim attestation)
<p><b>2. AT NIGHT AND IN COLD WATER, THE SEVERITY OF AFFECTION</b></p> <p>a) increases significantly</p> <p>b) decreases</p> <p>c) these conditions have no impact on affection severity;</p>	2) a	OM (ongoing monitoring) OM-BC (borderline control) IA (Interim

d) at night, the severity of affection increases, and in cold water it decreases e) affection degree in these conditions depends on the people's psychological mood		<i>Attestation)</i>
--	--	---------------------

Type of assessment method: *Test questions:*

Assessment method	Criteria for the answer (complete, incomplete, none)	Application level*
1. What are basic features of medical and sanitary care after road accidents?	All the main features are listed.	<i>OM, IA</i>
2. What are the reasons of accidents on water?	All the reasons of accidents on water are listed.	<i>OM, IA</i>

Type of assessment method: *paper:*

Assessment method	Criteria for the answer ( <i>complete independent coverage, complete assisted coverage, not covered</i> )	Application level*
<i>Subject:</i> Adverse factors, medical and sanitary consequences of earthquakes		<i>OM-BC (borderline control)</i>

Type of assessment method: *Situational tasks:*

Assessment method	Model answer	Application level*
<b>Task 1.</b> The injured (58 years old) received heavy brain contusion in a road accident with extensive destruction of brain matter. The injured is motionless, pays no attention to calls. No visible breathing. No pulse on radial and carotid arteries. <i>Establish a preliminary diagnosis.</i> <i>Determine first aid volume.</i> <i>Evaluate the outcome for patients with mechanical polytraumas.</i>	The preliminary diagnosis is correct, first aid volume is determined correctly, outcome evaluated correctly	<i>OM-BC (borderline control)</i>
<b>Task2.</b> A 60-year old man was rescued from a burning building, unconscious. The injured has scratch marks on his head and face. His r trousers on the right leg are burning, shoes are smouldering. Distressed breathing, heart activity retained. <i>Formulating a preliminary diagnosis.</i> <i>Determine first aid volume.</i> <i>Evaluate the outcome for patients with mechanical polytraumas.</i>	The preliminary diagnosis is correct, first aid volume is determined correctly, outcome evaluated correctly	<i>IA (Interim Attestation)</i>

7. Educational and information provision for the discipline (printed and digital publications, Internet and other network resources).

7.1 List of fundamental literature:

1. Information management and communication in emergencies and disasters: manual for disaster response teams. Washington, D.C.: PAHO, 2009
2. Oxford American handbook of disaster medicine / edited by Robert A. Partridge [et al.]. 2012, 818 p.
3. Hospital and health facility emergency exercises: guidance materials. Geneva, Switzerland: World Health Organization, 2010.
4. ICRC, Ambulance and pre-hospital services in risk situations, ICRC, Geneva, 2013.
5. ICRC, Chemical, Biological, Radiological and Nuclear response - introductory guidance, ICRC, Geneva, 2014.
6. ICRC, The fundamental principles of the international red cross and red crescent movement - ethics and tools for humanitarian action, ICRC, Geneva, 2015.

#### 8. Financial and technical support of the course.

Serial No	Location of study room(s), premises for practical studies, sports facilities	room No	Room area (m <sup>2</sup> )	Location of equipped study rooms, premises for practical studies, sports facilities, with a list of major equipment
<i>1</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>
1.	1 Abrikisovsky lane., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Disaster medicine lecture room (Life Safety)	113	300.0	Room with 160 seats. Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Screen. Multimedia projector.
2.	1 Abrikisovsky per., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky, Educational laboratory building, Disaster medicine lecture room (Disaster Medicine)	215	300.0	Room with 180 seats. Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Screen. Multimedia projector.
3.	1 Abrikisovsky per., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 110	110	90.6	Screen. Projection TV set. Student's desk - 25 pcs Student's chair - 50 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
4.	1 Abrikisovsky lane., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 133	133	29.6	Screen. Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
5.	1 Abrikisovsky lane., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 140	140	29.6	Screen. Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
6.	1 Abrikisovsky lane., bldg. 1, Moscow,	206	26.5	Screen.

	Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 206			Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
7.	1 Abrikisovsky lane., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 207	207	26.6	Screen. Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
8.	1 Abrikisovsky lane., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 208	208	27.3	Screen. Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
9.	1 Abrikisovsky lane., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 210	210	27.5	Screen. Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
10.	1 Abrikisovsky lane., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 211	211	29.6	Screen. Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece
11.	1 Abrikisovsky per., bldg. 1, Moscow, Administrative and utility building in Abrikisovsky lane, Educational laboratory building, Study room No 212	212	29.6	Screen. Student's desk - 14 pcs Student's chair - 28 pcs Worktable - 1 piece Semi-soft stool with 4 legs - 1 piece Educational board - 1 piece

*\*specially equipped premises (auditoriums, study rooms, laboratories, etc) designed for lectures, seminars, practical and clinical studies when mastering disciplines, including:  
dissecting room, anatomical museum, corpse storage room;  
auditoriums with simulation equipment;  
offices for working with patients receiving medical aid.*

*\*laboratory, instrumental equipment (specify), multimedia set (laptop, projector, screen), TV set, video camera, slide projector, VCR, PC, video- and DVD players, monitors, slide sets, charts/multimedia graphic materials on various sections of the discipline, videos, boards, etc.*

9. Interactive educational techniques used in the process of teaching the discipline\*:

- role-playing and business games;
- problem-based lectures;
- discussions.

*\*imitation techniques: role-playing and business games, imitation projections, computer simulation, cases, etc.; non-imitation techniques: lecture (problem-based, visualization, etc.), discussion (with and without brainstorming), apprenticeship, programmed education, etc.*

Total 25% interactive studies in the volume of auditorium work.

### 9.1 Examples of interactive educational techniques:

When conducting practical study *Organization of medical care for people affected in emergency situations of transport, explosion and fire origin*, it is provided that the residents will independently perform methods and techniques aimed at life sustaining of the injured.

The class is divided into 2-3 groups (each having 1 experimentator). According to the established order, the students, being under the teacher's supervision, independently practice methods and techniques aimed at life sustaining of the injured in the form of a role-playing and business game:

- establishing preliminary diagnosis;
- determining the volume of first aid and health care.
- evaluation of the outcome for patients with mechanical polytraumas.

### 9.2 Digital educational resources used in the process of teaching the discipline:

Serial No	Name and brief description of digital educational and information resources (digital publications and information databases)	Number of copies, access points
<i>1</i>	<i>3</i>	<i>4</i>
	Unified educational portal of I.M. Sechenov First Moscow State Medical University (Methodical guidelines for teachers and residents for preparing and conducting practical studies and discussion sessions are placed, as well as test control tasks in all subjects of <i>Disaster Medicine</i> course)	Remote access