# FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION OF HIGHER EDUCATION "ROSTOV STATE MEDICAL UNIVERSITY" MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

Faculty of Education of foreign students, residents and postgraduates

CONFIRM

Supervisor

educational program

(signature) (FULL NAME.)

THE NAME.

# DISCIPLINE WORKING PROGRAM

Life safety

Speciality 31.05.01 General medicine

Form of education <u>full-time</u>

### I. GOALS AND OBJECTIVES OF MASTERING THE DISCIPLINE

**Distinctive**A special feature of this program is the use of e-learning and distance learning technologies, the main elements of which are used in the work: online educational platforms; digital educational resources posted on educational websites; video lectures; email, etc.

It is possible to conduct individual lessons using e-learning and distance learning technologies for students who missed classes for a valid reason.

**Goals**mastering the discipline: developing a culture of safety, readiness and ability to act as intended in various types of emergency situations (ES) in peacetime and war.

Realization of goals is achieved by solving the following main tasks: a) understanding:

- -problems, threats and risks associated with human life in everyday conditions;
- -risks, conditional influence damaging factors various speciesemergency situations;
- -risks associated with the use of modern means of armed warfare;
- the role and importance of health care professionals in eliminating the health consequences of emergency situations;
- features of the supply of medical and sanitary equipment to formations and institutions operating in centers of mass destruction in peacetime and wartime;
- -the need to understand the fundamentals of scientific analysis in the field of safety in general and medical safety in particular.

### b) acquisitions:

-knowledge about the essence and development of major accidents and disasters, the subsequent formation of emergencies in a particular territory (object), about the creation and functioning of the Unified State System for the Prevention and Elimination of Emergency Situations (RSChS); -knowledge on organizing the functioning and improvement of the system of medical and

-knowledge on organizing the functioning and improvement of the system of medical and sanitary provision of the population in emergencies, organizing the provision of first aid and premedical care to victims of emergencies in peacetime and war;

### c) formations:

- -culture of professional safety. Ability to identify hazards and assess risks in the field of their professional activities;
- ability and readiness to organize medical and sanitary provision of the population during liquidation of the consequences of emergencies of a natural, man-made and social nature;
- -abilities for competent and reasoned justification of management decisions made from a safety point of view;
- -motivation and ability to independently improve the level of safety culture;
- -elements of IT competencies.

### II. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF EP VO

- 2.1. Academic discipline is basic
- 2.2. To study this academic discipline, knowledge, skills and knowledge are required, formed by the following previous disciplines: microbiology, philosophy, first aid, bioethics, jurisprudence, pathology, general hygiene.
- 2.3. List of subsequent academic disciplines that require knowledge, skills and proficiency formed by this academic discipline: public health and healthcare, healthcare economics, epidemiology, clinical pharmacology, hospital therapy, forensic medicine, anesthesiology, resuscitation, intensive care, hospital (children's) surgery, traumatology and orthopedics, etc.

### III. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

The process of studying the discipline is aimed at developing the following competencies in accordance with the Federal State Educational Standard of Higher Education and the EP of Higher Education in this specialty:

a) general cultural (OK):

OK-4 – ability act V non-standard situations, carrysocial and ethical responsibility for decisions made;

OK-7 – readiness to use first aid techniques and methods of protection in emergency situations;

b) general professional (OPK) c) professional (PC):

- PC-3 ability and readiness to conduct environmental monitoring and organize the protection of the population in areas of hazardous radiation, in case of deterioration of the radiation situation, natural disasters and other emergencies;
- PC-13 readiness to participate in the provision of medical care during emergencies, including participation in medical evacuation

As a result of mastering the discipline, the student must:

### Know:

- causes, signs and consequences of hazards, methods of protection from dangerous situations;
- the basics of organizing medical and evacuation measures during emergencies in peacetime and wartime:
- ways and means of protecting the population, patients, medical personnel and medical property;
- basics of providing various types of medical care during emergencies;
- the basics of organizing and carrying out sanitary and anti-epidemic measures during emergencies;

Organization of medical supplies to formations and institutions during emergencies;

- the procedure for interaction between medical units and institutions during the liquidation of consequences in the affected areas.

### Be able to:

- independently use theoretical sources to expand knowledge about life safety;
- identify signs, causes and conditions for the occurrence of dangerous situations;

- assess the likelihood of a potential hazard and take measures to eliminate it;
- provide first aid to the affected population during emergencies;
- perform their functional duties when working in formations and institutions of the MK service;
- use medical protective equipment competently;
- carry out SG and PE measures in the affected areas.

### Own:

- professional language in this field;
- analytical skills in identifying and assessing various explosive hazards;
- legislative and regulatory framework to ensure the safety of medical workers and the provision of medical services.

Studentswill have formed elements of IT competencies.

### IV. CONTENT AND STRUCTURE OF DISCIPLINE

### Labor intensity of the discipline in 3 hours 108

### 4.1. Sections of the discipline studied in the 3rd semester

| <b>.</b>            | Section name                           | Number of hours       |    |      |         |          |    |  |
|---------------------|--|-----------------------|----|------|---------|----------|----|--|
| No.<br>section<br>a |  | Contact<br>Total work |    |      | SRO*    |          |    |  |
|                     |  |                       | L  | WITH | ET<br>C | Cop<br>y |    |  |
|                     | Semester 3                             |                       |    |      |         |          |    |  |
| 1                   | Life safety Interim certification form | 108                   | 16 | 48   |         |          | 44 |  |
| Total:              |  | 108                   | 16 | 48   |         |          | 44 |  |

### 4.2. Contact work

### Lectures

| Sectio<br>n<br>number  | Lectur<br>e no.  | Lecture topics  | Numbe<br>r of<br>hours |  |  |
|------------------------|------------------|---|------------------------|--|--|
|                        | Semester 3       |   |                        |  |  |
| I Subject No. 1 Method |                  | Methodological and legal foundations of human life safety | 2 hours                |  |  |
|                        | Subject<br>No. 2 | National security of Russia.                              | 2 hours                |  |  |

| Subjec<br>No. 3 | Modern wars and armed conflicts. Means of armed struggle.  Damaging factors of modern types of weapons             | 2 hours |
|-----------------|--|---------|
| Subjec<br>No. 4 | Emergency situations, classification, medical and health consequences  | 2 hours |
| Subjec<br>No. 5 | Objectives and organizational structure of RSChS   | 2 hours |
| Subjec<br>No. 6 | Basic principles and legal framework for protecting the population. Civil defense system of the Russian Federation | 2 hours |
| Subjec<br>No. 7 | Basics of organizing population protection during emergencies  | 2 hours |
| Subjec<br>No. 8 | Medical occupational safety  | 2 hours |

## Seminars

|                       |                          | Schillars  |                        |                           |
|-----------------------|--------------------------|--|------------------------|---------------------------|
| Sectio<br>n<br>number | No.<br>seminara<br>nd PR | Seminar topics   | Num<br>ber of<br>hours | Forms of current control  |
|                       |                          | Semester 3   |                        |                           |
| I                     | 1                        | Human habitat. Risk factors. Human adaptation  | C-2                    | Oral survey               |
|                       | 2                        | Types, directions, approaches, methods, methods and means of ensuring security                       | C-2                    | Test                      |
|                       | 3                        | Legal basis for ensuring safety and security. Culture life safety                                    | C-2                    | Test tasks                |
|                       | 4                        | National security of Russia. System of national interests  | C-2                    | Oral survey               |
|                       | 5                        | Basics mobilization training And mobilization  | C-2                    | Test                      |
|                       | 6                        | Modern wars and armed conflicts.  Damaging factors of modern types of weapons                        | C-2                    | Test tasks                |
|                       | 7                        | Basic concepts, definitions, classification, medical and health consequences of emergency situations | C-2                    | Test                      |
|                       | 8                        | Phases development And strikingemergency factors   | C – 2                  | Test tasks                |
|                       | 9                        | Methodology for assessing the medical situation when lesions occur during emergencies situations     | C – 6                  | Oral questioning,<br>test |

| Sectio No. n seminara number nd PR |        | Seminar topics  | Num<br>ber of<br>hours | Forms of current control  |
|------------------------------------|--------|---|------------------------|---------------------------|
|                                    | 10     | Basic principles and legal framework for protecting the population during                         | C – 4                  | Test                      |
|                                    | eleven | Technical facilitiesi ndividual and collective protection   | C-4                    | Oral questioning, test    |
|                                    | 12     | Personal medical protective equipment   | C-6                    | Oral questioning,<br>test |
|                                    | 13     | Sanitation and special treatment  | C – 2                  | Test tasks                |
|                                    | 14     | Organization providing first assistance to emergency victims                                      | C – 4                  | Test                      |
|                                    | 15     | Organization of medical and psychological assistance to the population, medical workers and       | C-2                    | test tasks                |
|                                    | 16     | Medical occupational safety. Characteristics of threats to the life and health of medical workers | C-6                    | Oral questioning, test    |
|                                    | 17     | Safety requirements when working in structural units of medical organizations                     | C-6                    | Oral questioning,<br>test |
|                                    | 18     | Safety of medical services. Characteristics of threats to the life and health of patients         | C-6                    | Test tasks                |

# **4.3. Independent work of students**

| No.<br>section<br>a | Type of independent work of students | Num ber of hour s per | Forms of current control |
|---------------------|--------------------------------------|-----------------------|--------------------------|
|                     | Semester 3                           |                       |                          |

| No.<br>section<br>a | Type of independent work of students  | Num<br>ber<br>of<br>hour<br>s per | Forms of<br>current<br>control |
|---------------------|---|-----------------------------------|--------------------------------|
| I                   | Reading the textbook text. Preparing messages for presentation at the seminar. Drawing up a plan and abstract of the answer. Answers to theoretical questions. Completing practical tasks in the workbook. Reviewing the main sections of the course to prepare for testing | 44                                | Oral survey<br>testing         |

# 4.4. List of educational and methodological support for independent work of students

- 1. Barachevsky Yu.E. Fundamentals of mobilization training in healthcare: textbook. allowance for medical students universities, / Yu.E. Barachevsky, S.M. Groshilin, Arkhangelsk. 2011. 95 p.
- 2. Belov S.V. Life safety: a textbook for universities / S.V. Belov, V.A. Devisilov, A.V. Ilnitskaya, etc. Under the general editorship of S.V. Belova, 8th edition, stereotypical M.: Higher School. 2009. 616 p.: ill.
- 3. Sidorov P.I. Disaster Medicine: textbook. allowance for students medical universities, / P.I. Sidorov, I.G. Mosyagin, A.S. Sarychev M.: Publishing house. Center "Academy", 2010. 320 p.
- 4. Akimov V.A. Life safety. Safety in emergency situations of natural and man-made nature: textbook. allowance / V.A. Akimov, Yu.L. Vorobyov, M.I. Faleev et al. M.: Higher School, 2007. 592 p.
- 5. Levchuk I.P. Emergency Medicine. Course of lectures: textbook. allowance for medical universities/ I.P. Levchuk, N.V. Tretyakov M.,: GEOTAR Media, 2011. -238 p.
- 6. Mikhailov Yu.M. Collection of instructions on labor protection for medical and pharmaceutical workers / Yu.M. Mikhailov. M.: Alfa-Press Publishing House, 2010 208 p.
- 7. Mobilization preparation of health care. Textbook allowance / Ed. member corr. RAMS, prof. I.M.Chizha. M: GVKG im. N.N. Burdenko, 2011.
- 8. Mosyagin I.G. Organization of medical supply to formations and institutions intended for medical and sanitary provision of the population in emergency situations: textbook. manual Arkhangelsk: Publishing house of SSMU. 2007. 100 p.
- 9. Safronov G.A., Alexandrov M.V., Golovko A.I. and others. Extreme toxicology: textbook / Ed. G.A. Safronova, M.V. Alexandrova St. Petersburg: ELBI-SPb, 2012. 256 p.
- 10. Travkin A.K. Fire safety in medical institutions. M., Infra-M, 2007. 438 p.

### V. ASSESSMENT FUND FOR CURRENT CONTROL,

### INTERMEDIATE CERTIFICATION

The fund of assessment tools for determining the level of development of competencies as a result of mastering the discipline is an appendix to the work program.

### VI. EDUCATIONAL AND METHODOLOGICAL SUPPORT OF DISCIPLINE

### 6.1. Main literature.

- 1. Sakhno I.I. Disaster Medicine: a textbook for medical students/ I.I. Sakhno, V.I. Sakhno M.: GOU VUN MC MH RF, 2002 560 p.
- 2. Sakhno V.I. Organization of medical care to the population in emergency situations: textbook / V.I. Sakhno, G.I. Zakharov, N.E. Karlin, N.M. Pilnik St. Petersburg: FOLIANT, 2003 248 p.

### **6.2.** Additional literature.

- 1. Levchuk I.P. Disaster Medicine: Course of lectures: textbook / I.P. Levchuk, N.V. Tretyakov M.: GEOTAR-Media, 2011 238 p.
- 2. Barachevsky Yu.E. Fundamentals of mobilization training in healthcare: textbook / Yu.E. Barachevsky, S.M. Groshilin Arkhangelsk, 2011 95 p.
- 3. Shelepov A.M. Organization and tactics of medical service: textbook / A.M. Shelepov, L.M. Kostenko, O.V. Babenko O.V. St. Petersburg: FOLIAN, 2005 504 p.
- 4. The website of the All-Russian Central Medical Center "Zashchita", the websites of the Ministry of Emergency Situations in the constituent entities of the Russian Federation, the websites of the Ministry of Health and Rospotrebnadzor. Digital librarywww.elibrary.ru, www.medline.ru
- 5. Order of the Ministry of Education and Science of Russia dated August 23, 2017. No. 816 On approval of the procedure for the use of e-learning and distance learning technologies by organizations engaged in educational activities in the implementation of educational programs.

### **6.3. Periodicals**

- 1. Military medical journal
- 2. Emergency Medicine

### **6.4.** Internet resources

|    |   | ELECTRO                   | ONIC                  |          | Access         |
|----|---|---------------------------|-----------------------|----------|----------------|
|    | EDUCATIONAL RESOURCES                             |                           |                       |          |                |
|    |   |                           |                       |          | resource       |
| 1. | Electronic  | educational               | library               | RostSMU  | Unlimited      |
|    | [Electronic http://80.80.101                      | resource].                | - Mode                | access:  | access         |
|    | Student Advisor[Electronic resource]: EBS M.: LLC |                           |                       |          |                |
| 2. | "IPUZ" Acces                                      | s mode: <u>http://www</u> | <u>w.studmedlib.r</u> | <u>u</u> | is not limited |

|    | Consultant doctor Electronic medicallibrary  | Unlimited |
|----|--|-----------|
| 3. | [Electronic resource]: EBS M.: LLC GK "GEOTAR" Access mode: http://www.rosmedlib.ru          | access    |
|    |  |           |
|    | Single window of access to information   | Open      |
| 4. | <b>resources</b> [Electronic resource] Access  | access    |
|    | mode: http://window.edu.ru/ [12.02.2018].  |           |
|    | Russian education.   | Open      |
| 5. | Federaleducational portal[Electronic   | access    |
|    | resource] Access mode: <a href="http://www.edu.ru/index.php">http://www.edu.ru/index.php</a> |           |
|    | [02/22/2018].  |           |
|    | OtherOpen resources can be found at: http://rostgmu.ru                                       | Open      |
|    | →Library→Electroniccatalog→  | access    |
|    | Open Internet resources→further by key   | 223000    |
|    | word   |           |

6.6. Guidelines for students on mastering the discipline using e-learning and distance learning technologies.

The educational process will be carried out through:

- Moodle platforms
- Email
- Skype software
- social network VKontakte.

In the process of distance learning, all relationships "teacher-student" and "student-student", within the framework of the implementation of educational programs, are carried out indirectly via the Internet.

Each student must ensure that they have an Internet browser and an Internet connection using a personal computer, laptop, tablet, mobile phone or any other convenient device.

The educational process is carried out remotely according to the schedule. All students attend training sessions online in accordance with the schedule.

The teacher will contact the leaders of student groups according to the schedule, notifying them of the start of the lesson. Group leaders inform the teacher about the group's readiness for distance learning, respectively, having previously surveyed all students in the group.

Having received assignments from the teacher, students independently and timely study the educational material provided for in the work program, strictly follow the instructions received, observing the time deadlines. Students provide the teacher with completed assignments in accordance with the established deadlines in order to receive timely comments, remarks and grades.

Lectures are given in streams on-line after registration of those present and presentations are shown. Students undergo ongoing monitoring in the form of completing test tasks on each topic covered. Interim certification in accordance with the curriculum. Monitoring of class attendance according to the schedule is maintained.

Students studying on the Moodle platform receive an email with a login and password and a link to the course. A reminder about working with the course is placed in each of the electronic training courses that the student masters. The student is not

who has provided information about his email to the head of the student group, contacts the teacher independently, having previously created an email and provided information about it.

### Course structure of the academic discipline

When teaching students using distance learning technologies, the loaded training course includes the following blocks:

- Theoretical block: lecture notes, illustrated materials and presentations, multimedia elements, training test and self-control, orientation slide lectures, etc.
- Competency building block: tasks for filling out workbooks, solving situational problems and completing tests.
- Control and measuring unit: database of test tasks and questions for self-control.
- Methodological block: work program, manual forstudent on the study of the discipline, a guide for teachers on teaching the discipline.
- Reference block: glossary. bibliography. annotated list of Internet resources. Regulatory and other documents.
- Information block: annotations of the discipline. information about the authors of the training course.

After creating a course, the teacher must sign students up for the course. who will study it. In their personal account, each student will see courses and test assignments in the schedule.

#### **Current control**

It is necessary to ensure that students have the opportunity to undergo ongoing monitoring for the entire semester at the LMS. To achieve this task, Moodle has extensive capabilities:

- The course element "Test" consists of 20 tasks with four possible answers, of which one is correct; time to solve is 20 minutes; two attempts.

  Moreover, a second attempt is possible after re-studying the lecture materials and watching the presentation. Each attempt is scored automatically and the score is recorded in the grade book.
- The "Assignment" learning element allows the teacher to collect student work, grade it and provide feedback. The final grade is recorded in the grade book.

### Interim certification

Passing the intermediate certification in the form of a test is awarded based on the results of the current control. To do this, you are given the opportunity to pass the current control using the LMS before a certain date, which is posted on the course notice board.

Passing intermediate certification in the form of an exam is carried out based on the results of final testing in the SDO. In this case, the final semester grade is assigned based on current academic performance and the results of the final test as the arithmetic average plus 1 point at the discretion of the teacher as an incentive.

### Methodological recommendations for writing an essay

**Essay**— a brief record of ideas contained in one or more sources, which requires the ability to compare and analyze different points of view.

An abstract is one of the forms of interpretation of the source text or several sources. Therefore, the abstract, unlike the synopsis, is a new, original text. Novelty in this case implies a new presentation, systematization of the material, a special author's position when comparing different points of view.

Abstracting assumes presentation any question on basiscl assification, generalization, analysis and synthesis of one or more sources.

Abstract specifics:

- does not contain detailed evidence, comparisons, reasoning, assessments,
- gives an answer to the question of what is new and significant contained in the text.

### **Abstract structure:**

- 1) title page;
- 2) work plan indicating the pages of each question, sub-question (item);
- 3) introduction;
- 4) textual presentation of the material, divided into questions and sub-questions (points, sub-points) with the necessary links to sources used by the author;
  - 5) conclusion;
  - 6) list of used literature;
- 7) applications that consist of tables, diagrams, graphs, drawings, diagrams (optional part of the abstract).

Applications are arranged sequentially, according to headings that reflect their content. Requirements for the preparation of an abstract.

The volume of the abstract ranges from 10-15 printed pages. The work is done on one side of a standard size sheet. On both sides of the sheet, margins of 35 mm on the left and 15 mm on the right are left, font size 14 is recommended, spacing is 1.5. All pages of the abstract must be numbered. Each question in the text must have a title in exact accordance with the name in the table of contents.

The abstract is assessed by the supervisor based on the indicators and criteria for assessing the abstract established by the department.

### VII. MATERIAL AND TECHNICAL SUPPORT OF DISCIPLINE

| No . | Disciplines (modules):          | Address (location) of classrooms, names of equipped classrooms, facilities for practical and laboratory classes, physical education and sports facilities with a list of main equipment | Equipment of the classroom (technical means, sets of demonstration equipment, laboratory equipment, etc.)  |
|------|---------------------------------|---|--|
| 1    | 2                               | 3   | 4  |
|      | Life safety.Emergency Medicine. | 9th floor. ULK RostGMU, No. 902 (lecture hall) 24 student desks, 1 teacher's chair, 1 tribune, 1 student's wall board, 3 leather chairs.  | Multimediaequipment. Screen. Demonstration equipment, stands: unified state system for emergency prevention and response; basics of civil engineering; NASF them organization, application and capabilities; organization of civil society in cities and regions; actions of the population in response to civil defense warning signals; modern means of destruction; terrorism is a threat to society; organizational foundations and protection of the population in emergencies; classification of natural and man-made emergencies; actions of the population in case of accidents and disasters. |
|      |                                 | 9th floor. ULK RostGMU, No. 903 14 teaching tables, 1 teacher's table, 1 blackboard student wall-mounted, 29 chairs, 1 teacher chair  | Demoequipment, screen, stands: medical personal protective equipment; organization of the All-Russian Service for Disaster Medicine at the federal and regional levels; organization of the All-Russian Disaster Medicine Service at the territorial, local and facility levels; protection of the population in emergencies; respiratory protection equipment; actions of the population during natural disasters; actions  |

| 9th floor. ULK RostSMU, No. 907 12 study tables, 25 chairs, 1 student wall board, 1 chair teacher, 1 teacher table | population in case of accidents and disasters; classification of emergency situations.  Demoequipment, screen, stands: dosimetric instruments: stand No. 1 (IMD-21, DP-64); layout-DP-64 diagram; layout diagram of DP-5A; dosimetric devices stand No. 2 (DP-22V, DKP-50, ID-1, ID-eleven); respiratory protection equipment (gas masks: GP-5, GP-7, GP-7V, GP-7 VM; respirators: FG-310, "petal", R-2); stand with dummies "Damages of skin and eyes due to cytotoxicants" (mustard gas, lewisite); chemical reconnaissance simulator with elements for assessing the chemical situation; training stand - a simulator for the dynamics of the radiation situation, radiation reconnaissance and testing of radiometric |
|--|---|
| 9th floor. ULK RostSMU, No. 908 13 study tables, 26 chairs, 1 student wall board, 1 chair teacher, 1 teacher table | Demoequipment, screen, stands: purpose and tasks of civil defense; Unified State System for Prevention and Elimination of Emergency Situations (RSChS); personal protective equipment in emergencies; actions of the population in man-made emergencies; actions of the population during natural disasters; hospital base; protective structures.  |
| 9th floor. ULK RostSMU, No. 909 13 study tables, 34 chairs, 1  | Environmental correction means Evacuation measures  |

| teacher's chair, 1 teacher's table, 1 student's wall board. | population from hazardous areas Means for indicating pathogenic factors Means for increasing the body's resistance Means of warning about danger. |
|---|---|
|---|---|