#### MINISTRY OF EDUCATION AND SCIENCE OF UKRAINE

Petro Mohyla Black Sea National University Medical Institute

Department of Hygiene, Social Medicine and Public Health



## **CURRICULUM WORKING PROGRAM**

# Fundamentals of medical care for the population and troops

field of knowledge 22 «Health care» in the specialty 222 «Medicine»

Developer

Head of the Department of Developer

Guarantor of the educational program

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#### 1. Description of the discipline

Characteristic	Characteristic Characteristics of the discipline	
Name of discipline	Fundamentals of medical care for the	
	population and troops	
Branch of knowledge	22 "Health care"	
Specialty	222 "Medicine"	
Specialization (if any)		
Educational program	Medicine	
Level of higher education	Master	
Discipline status	Normative	
Curriculum	IV - V, 8th - 9th semester	S
Academic year	2021–2022	
Total number of ECTS credits / hours	7 credits (3/4) / 210 hours	(90/120)
Course structure:	Full-time	Correspondence
- lectures		form
- practical training	- 20/20	
- hours of independent work of students	- 50/50 hours	
	- 20/50 hours	
Percentage of classroom load	52%	
Language of instruction	Ukrainian	
Form of intermediate control (if any)	Credit - 8th semester	
Form of final control	Differentiated credit - 9th semester	

#### 2. Purpose, tasks and planned learning outcomes

The purpose of studying the discipline "Fundamentals of medical care of the population and troops" is to acquire the necessary knowledge, skills and competencies to use the basic principles of medical care of the population and troops, aimed at saving and preserving human life in an emergency and minimizing the impact of such conditions on health.

**Learning objectives:** acquisition by students of competencies, knowledge, skills and abilities for the implementation of specialized activities in the specialty:

- definition of "Fundamentals of medical support of the population and troops" as scientific and practical medicine;
- be able to provide medical care to victims in peacetime emergencies and in combat;
- to take measures to organize medical care in a state of emergency;
- to plan measures for organizing and managing the activities of a military doctor;
- to determine the basic principles of assessing the condition of the victim in emergencies of man-made and natural nature and in combat conditions;
- to master the skills of providing medical care to victims and wounded in major emergencies;
- to master the basics of the organization of medical support of the population and troops as a component of the system of providing the population of the state;
- to master the organization and procedure of medical and evacuation measures among the civilian population and troops depending on the scale and nature of sanitary losses in the troops and among the population.

**Prerequisites for studying the discipline (interdisciplinary links).** "Fundamentals of medical support of the population and troops" as a discipline:

- a) is based on students' understanding of the basic principles of knowledge in the training of reserve officers in the field of knowledge "Health", epidemiology and principles of evidence-based medicine, hygiene and ecology, microbiology, biochemistry, social medicine and public health, life safety, basics of environmental safety, virology, surgery internal medicine, neurology and integrated with other disciplines;
- b) creates a theoretical basis for students to master preventive and curative measures, patterns of organization of medical casualties in peacetime emergencies and combat conditions, which involves the integration of teaching with the basics of preventive and clinical disciplines, the ability to use this knowledge in further study and in professional activity of a doctor;
- c) lays the foundations of theoretical knowledge and preventive skills in the organization and conduct of medical evacuation, sanitary and anti-epidemic measures, including the organization of medical care in emergencies of natural and dark nature and combat conditions.

#### **Expected learning outcomes.** As a result of studying the discipline, students have:

- ability to solve typical and complex specialized problems and practical problems in professional activity in the field of health care;
- the ability of the individual to organize an integrated humanitarian educational space, the formation of a single image of culture or a holistic picture of the world;
- ability to apply knowledge in practical situations;
- ability to exercise self-regulation, lead a healthy lifestyle;
- ability to adapt and act in a new situation;
- ability to choose a strategy of self-medication;
- ability to work in a team;
- interpersonal skills;
- ability to abstract thinking, analysis and synthesis;
- ability to learn and be modernly trained;
- certainty and persistence in relation to the tasks and responsibilities;
- ability to carry out medical and evacuation measures;
- ability to determine the tactics of emergency medical care;
- emergency medical skills;
- skills of performing medical manipulations.

# According to the requirements of the educational-professional program, students must

- o know:
- professional and legal standards in everyday medical practice;
- signs of health and its changes, illness or disability (assessment, diagnosis);
- problems of patients with various diseases and conditions;
- professional skills, medical means, interventions and actions in assessing the functional state of disorders;
- assessment of the condition of victims in emergencies of man-made and natural nature and in combat conditions;
- organization of medical care for victims and wounded in major emergencies;
- basic principles of medical care for the population and troops;
- classification of sanitary losses of troops;
- organization and procedure for medical and evacuation measures among the civilian population and troops.

#### o be able:

- to conduct an initial examination of the victims;
- to stop bleeding;
- to provide medical care for injuries, fractures, dislocations, fractures;
- to carry out medical care at thermal and chemical defeats;

- provide assistance in the most common emergencies;
- to carry out medical care at mass defeats;
- to carry out medical sorting in case of mass sanitary losses;
- be able to organize and carry out the evacuation of the wounded;
- to carry out preventive and medical care in case of combat stress;
- to carry out medical, biological and psychological protection of the population;
- to conduct civil protection of medical and pharmaceutical measures;

#### o have competencies

- on the application of knowledge on the basics of medical care of the population and troops to promote the preservation of human life and rescue in an emergency, as well as the use of basic principles to minimize the consequences of these conditions;
- about the basic perspective directions of development of bases of medical maintenance of the population and armies.

The developed program corresponds to the educational-professional program (OPP) and is focused on the formation of competencies:

#### o general (LC) - LC1 OPP:

**ZK1.** Ability to abstract thinking, analysis and synthesis, the ability to learn and master modern knowledge.

### o professional (FC) - FC10, FC14, FC17, FC22 OPP:

FC10. Ability to carry out medical and evacuation measures.

**FC14.** Ability to carry out sanitary and hygienic and preventive measures.

FC17. Ability to conduct a performance examination.

**FC22.** Ability to conduct activities for the organization and integration of medical care and marketing of medical services.

According to the educational-professional program, the expected **program learning outcomes (PRN)** include the skills of **PRN21, PRN26, PRN27 OPP** :

**PRN21.** Organize medical and evacuation measures among the population and servicemen, in emergency situations, including in the field, during the detailed stages of medical evacuation, taking into account the existing system of medical and evacuation support.

**PRN26.** Implement a system of anti-epidemic and preventive measures in the health care institution, its unit on the basis of data on the health of certain contingents of the population and the impact on the environment, using existing methods, within the primary health care, of:

- organization of rational nutrition, water supply;
- mode of activity and rest;
- formation of a favorable production environment;
- primary prevention of diseases and injuries;
- vaccine prophylaxis;
- prevention of bad habits;
- prevention of unwanted pregnancy;
- promoting a healthy lifestyle.

**PRN27.** Implement a system of primary prevention measures, based on data on the state of health of the population served and the presence of the determinants of health, in the health care facility and outside it using existing methods, within the primary care. sanitary assistance to the population:

- sanitary and educational measures to prevent the occurrence of infectious and non-infectious diseases, injuries and the promotion of a healthy lifestyle;
- organization of rational nutrition, safe social and living conditions, water supply;
- mode of activity and rest.

#### 3. The program of the discipline

The educational process is organized according to the European Credit Transfer and Accumulation System (ECTS).

The curriculum consists of 4 blocks.

#### Block 1. Organization of medical care in extreme situations

### Topic 1. Medical sorting in case of mass sanitary losses.

Lesson  $N_2$  1. Organization and carrying out of medical sorting at occurrence of mass sanitary losses.

Lesson № 2. Algorithm of medical sorting. Filling in the CITY report.

### Topic 2. Organizing and conducting the evacuation of the wounded.

Lesson  $N_2$  1. Organization and carrying out of movement (dragging, removal) of the wounded in shelter in combat and non-combat conditions. Methods of moving the wounded from the shelter sector to the place of collection of the wounded (one, two people, using regular and improvised means).

Lesson  $N_2$  2. Behavior of people in emergencies and combat conditions

Preparation of the wounded (injured) for evacuation. Monitoring the condition of the wounded according to the CABCDE protocol. Medical information card: appointment, rules of filling. Evacuation request rules. Loading and unloading the wounded in various evacuation vehicles. Control of vital signs and condition of the wounded during transportation in combat and non-combat conditions.

### Topic 3. Behavior of people in emergencies and combat conditions.

Lesson  $\mathcal{N}_2$  1. Features of people's behavior in emergencies. Typical reactions of medical workers to various traumatic events.

Lesson  $N_2$  2. Mechanisms of stress resistance formation in medical workers. Technologies for the prevention of post-traumatic stress disorders. Debriefing as a method of psychological correction of post-traumatic stress disorders.

# Topic 4. Combat stress and combat fatigue.

Lesson  $N_2$  1. Combat stress: symptoms, prevention and basic principles of medical care in combat.

Lesson № 2. Combat fatigue: signs, prevention and basic principles of medical care in combat.

### Block 2. Fundamentals of medical care for the population and troops

# Topic 1. Regulatory principles of civil protection in Ukraine. Protection of the population and territories from emergencies.

Lesson  $N_2$  1. International humanistic law for the protection of life and health of the affected population. Constitution of Ukraine on protection of life, health and safety of the person. Code of Civil Protection of Ukraine. Law "On emergency medical care".

State policy in the field of security and protection of people about emergencies. The only state system of civil protection of the population and territories from emergencies of technogenic and natural character, structure and modes of its activity.

Lesson  $\mathcal{N}_{2}$  2. Purpose, tasks, principles of civil protection of the population and territories. State Service of Ukraine for Emergencies (SES of Ukraine). Forces and means of civil protection. The concept of emergencies. Classification and main causes of emergencies in Ukraine.

Health consequences of natural disasters and man-made disasters. Socio-political emergencies and its consequences.

#### **Topic 2. Fundamentals of civil protection.**

Lesson ND1. Notification and informing of subjects of providing civil protection. Observation and control: objects, forces and means, tasks in different modes of operation of a single protection system. Characteristics of the focus of radiation, chemical and biological damage.

Classification of dosimetric devices, their purpose and order of use. Devices of radiation and chemical reconnaissance, work with them.

Lesson  $N_2$  2. Means of individual protection of the population, classification. Respiratory protection, classification. Features of respiratory protection in children. Skin protection. Means of collective protection, their purpose and classification. Rules of stay in protective structures.

Lesson  $N_2$  3. The concept of quarantine and observation. Implementation of emergency and specific prevention measures. Anti-epidemic regime. Planning the activities, forces and means of psychological support units.

Lesson  $N_2$  4. Timely use of psychoprophylactic methods. Use of modern technologies of psychological influence for neutralization

negative impact on the population under emergency conditions.

# Topic $N_2$ 3. Medical, biological and psychological protection, ensuring sanitary and epidemic well-being of the population.

Lesson  $N_2$  1. Purpose and objectives of medical and evacuation support in emergencies of natural and man-made nature. Types and amounts of medical care. The use of preventive drugs, the necessary hygienic and other measures.

Basics of planning and application of medical forces and means in case of emergency. Organization of training of the population in the basic rules of protection and skills of first aid. Training and retraining of medical workers to provide emergency medical care.

Lesson  $N_2$  2. Stages of medical evacuation of the disaster medicine service of territorial centers of emergency medical care and disaster medicine (QMS TC EMD and MC), their organization and tasks.

Features of the organization of medical and evacuation support at various types of emergencies.

Features of the organization of medical care for children in emergency situations.

#### Topic 4. Organization of civil protection of medical and pharmaceutical institutions.

Lesson  $N_2$  1. Stability of the medical institution in emergencies, the main elements. Assessment of the sustainability of the medical institution, depending on the characteristics of its location and activities and the main directions and necessary measures to improve it.

Lesson  $N_2$  2. Medical and technical support of sustainable operation of the medical institution in emergencies. Ensuring the stability of the medical institution in emergency situations.

Planning of measures of civil protection of medical and pharmaceutical institutions. Formation of civil defense of medical and pharmaceutical institutions, their purpose, application and action on alert signals.

Lesson  $N_2$  3. Emergency evacuation system. Organization of medical support for non-transportable patients. Organization of evacuation of a medical institution and a pharmaceutical institution.

# Topic 5. Tasks, organization and current issues of the medical service of the Armed Forces of Ukraine in conditions of armed conflict.

Lesson  $N_2$  1. The main tasks of the medical service of the Armed Forces of Ukraine in conditions of armed conflicts, their content and significance. Conditions of medical service activity and their influence on the organization of medical support of troops. Organizational structure of the medical service of the Armed Forces of Ukraine. Categories of medical service personnel.

The role and place of medical service of the Armed Forces of Ukraine in the national system of medical care in armed conflicts.

Lesson  $N_2$  2. The concept of loss of troops. Definition and classification of sanitary losses, their characteristics. The magnitude of sanitary losses, its dependence on the weapons used by the enemy. A brief description of the striking factors of modern weapons.

Influence of the size and structure of sanitary losses on the organization of medical support of troops.

## Topic 6. Modern system of medical and evacuation support of troops.

Lesson  $N_2$  1. The concept and content of medical and evacuation support. The essence of the modern system of medical and evacuation support, its principles.

The concept of the stage of medical evacuation, tasks, schematic diagram and requirements for deployment. Types and amounts of medical care.

Lesson  $N_2$  2. Medical sorting in combat conditions. Definition, brief description. Basic tasks, principles and organization of medical sorting.

Medical evacuation, concept, purpose and procedure. Sanitary vehicles for evacuation of the wounded and sick.

Features of the organization and carrying out of medical and evacuation actions in the conditions of carrying out anti-terrorist operation in the east of Ukraine.

# Block 3. Organization of medical support for surgical and neurological patients in emergencies and combat conditions

# Topic 1. Injuries and diseases of the soft tissues of the extremities in emergencies and combat conditions

Lesson  $N_2$  1. Soft tissue damage. Closed soft tissue injuries. Open soft tissue damage. Nonspecific inflammatory diseases of the soft tissues of the extremities.

*Lesson № 2.* Inflammatory diseases of mucous bags (bursitis)

Acute bursitis. Chronic bursitis (hygroma). Some types of bursitis.

Lesson № 3. Diseases of tendons and tendon vaginas. Hydroadenitis. Ossifying myositis.

# Topic 2. Damage and disease of blood vessels of the extremities in combat.

Lesson  $N_2$  1. Damage to the vessels of the extremities. Injury of large arteries of extremities. Traumatic aneurysms of the vessels of the extremities. Injuries to the veins of the extremities. Closed injuries of the great arteries of the extremities.

Lesson № 2. Diseases of the vessels of the extremities. Acute arteritis and manifestation of arteries. Arterial embolism. Phlebothrombosis. Phlebitis. Thrombophlebitis. Oblate thrombangiosis.

#### Topic 3. Damage to the nerves of the extremities in combat

Lesson № 1. Closed nerve damage. Nerve injuries

Lesson  $\mathcal{N}_2$  2. Damage to individual nerves of the extremities (brachial plexus, radial nerve, median nerve, ulnar nerve, sciatic nerve, tibial nerve, femoral nerve).

## Topic 4. Fractures of the bones of the extremities in combat

Lesson  $N_2$  1. Fractures of the bones of the upper extremities (clavicle, shoulder blade, shoulder, forearm, bone).

Lesson  $N_2$  2. Fractures of the bones of the lower extremities (thigh, patella, shin, foot).

#### Topic 5. Traumatic dislocations of the bones of the extremities in combat

Lesson  $N_2$  1. Traumatic dislocations of the bones of the upper extremities (clavicle, shoulder joint, elbow joint, both forearm bones, forearm bones, bone joints, fingers).

Lesson  $\mathcal{N}_2$  2. Traumatic dislocations of the bones of the lower extremities (hip joint, knee joint, patella, foot joints).

## Topic 6. Damage and disease of the joints of the extremities in combat

Lesson  $N_2$  1. Damage to large joints of the extremities. Closed joint damage. Open damage (injury) to the joints.

Lesson  $N_2$  2. Diseases of the joints of the extremities. Acute inflammatory diseases of the joints. Chronic inflammatory diseases of the joints (arthrosis).

### Topic 7. Ankylosis, contractures, deformity of joints in combat

Lesson  $N_2$  1. Ankylosis, contractures, deformity of the joints of the upper extremities (shoulder joint, elbow joint, hand and fingers).

Lesson  $N_2$  2. Ankylosis, contractures, deformity of the joints of the lower extremities. Marching foot. (hip joint, knee joint, shin-thigh joint, foot joints).

# Block 4. Medical support of therapeutic and toxicological patients in emergencies and combat conditions

### Topic 1. Respiratory diseases in combat

Lesson  $N_2$  1. Chemical pneumonia and bronchitis. Respiratory disorders in acute poisoning. Acute chemical poisoning. Chronic chemical poisoning.

*Lesson*  $\mathcal{N}_{2}$  2. Viral bronchitis and pneumonia. Influenza bronchopneumonia. Acute respiratory viral infections.

### Topic 2. Diseases of the digestive system and liver in combat

Lesson  $N_2$  1. Enteritis and colitis in combat. Acute enterocolitis (nonspecific). Chronic enteritis. Digestive lesions in acute poisoning.

Lesson  $N_2$  2. Acute and chronic hepatitis in combat. Botkin's disease. Chronic hepatitis. Cerosis of the liver. Toxic liver damage in acute poisoning.

### **Topic 3. Kidney disease in combat**

Lesson  $N_2$  1. Acute and chronic nephritis. Toxic kidney damage in acute poisoning.

Lesson  $\mathcal{N}_2$  2. Acute and chronic nephrosis. Acute nephrosis. Chronic nephrosis. Nephrosclerosis.

## Topic 4. Extreme toxicology. Modern "chemical danger"

Lesson  $N_2$  1. Accidents and catastrophes in peacetime. Accident at chemical industry facilities. Theoretical (subversive) acts. Conducting hostilities. The use of chemical weapons. Toxic chemicals (THR). Protection of the population and troops.

Lesson  $\mathcal{N}_2$  2. Combat toxic chemicals. Toxic substances and toxins. Combat phytotoxicants. "Police gases". Diversion agents. Protection of the population and troops. Medical chemical protection.

### **Topic 5. Chemical weapons. General characteristics**

*Lesson № 1.* Combat toxic chemicals (BTCR). Classification of toxic substances.

Lesson  $N_2$  2. The center of chemical damage.

Fundamentals of medical-toxic characteristics of chemical lesions. Protection of the population and troops.

#### The structure of the discipline

		Number of l	nours	
Торіс	total	lectures	practical training	individual work
1	2	3	4	5
Block 1. Organization of medical care	in extreme c	onditions		
<b>Topic 1</b> . Medical sorting in case of mass sanitary losses	8	2	4	2
<b>Topic 2</b> . Organizing and conducting the evacuation of the wounded	8	2	4	2
<b>Topic 3</b> . Behavior of people in emergencies and combat conditions	8	2	4	2
<b>Topic 4.</b> Combat stress and combat fatigue	8	2	4	2
Final block control	6	-	2	4

Together for block 1	38	8	18	12
Block 2. Fundamentals of medical care for	the populat	ion and troo	ps	
<b>Topic 1.</b> Regulatory principles of civil protection in	-	2	4	
Ukraine. Protection of the population and territories from emergencies	6	2	4	0
Topic 2 . Fundamentals of civil protection	12	2	8	2
<b>Topic 3.</b> Medical, biological and psychological protection, ensuring the sanitary and epidemiological well-being of the population	8	2	4	2
<b>Topic 4.</b> Organization of civil protection of medical and pharmaceutical institutions	8	2	6	0
<b>Topic 5</b> . Tasks, organization and topical issues of the medical service of the Armed Forces of Ukraine in the conditions of armed conflicts	8	2	4	2
<b>Topic 6</b> . Modern system of medical and evacuation support of troops	6	2	4	0
Final block control	4	-	2	2
Together for block 2	52	12	32	8
Total hours for blocks 1 and 2	90	20	50	20

		Number o	f hours	
Торіс	total	lectures	practical training	individual work
1	2	3	4	5
Block 3. Organization of medical support for surgical an combat condition	_	ical patients	in emergenci	es and
<b>Topic 1</b> . Injuries and diseases of the soft tissues of the extremities in emergencies and combat conditions	10	2	4	4
<b>Topic 2</b> . Damage and disease of blood vessels of the extremities in combat	10	2	4	4
<b>Topic 3</b> . Damage to the nerves of the extremities in combat	10	2	4	4
<b>Topic 4.</b> Fractures of the bones of the extremities in combat	10	2	4	4
<b>Topic 5.</b> Traumatic dislocations of the bones of the extremities in combat	10	2	4	4
<b>Topic 6.</b> Damage and disease of the joints of the extremities in combat	10	2	4	4
<b>Topic 7.</b> Ankylosis, contractures, deformity of joints in combat	10	2	4	4
Final block control	-	-	2	-
Together for block 3	70	14	30	28

Block 4. Medical support of therapeutic and toxicological patients in emergencies and combat conditions					
<b>Topic 1.</b> Chemical pneumonia and bronchitis 10 1 4 4					
Topic 2 . Digestive and liver diseases in combat	10	1	4	4	
Topic 3. Kidney disease in combat	10	1	4	4	
Topic 4. Extreme toxicology. Modern "chemical danger"	10	1	4	4	
<b>Topic 5</b> . Chemical weapons. General characteristics	10	2	2	6	
Final block control 2 -				-	
Together for block 4 50 6 20				22	
Total hours for blocks 3 and 4	120	20	50	50	

# 4. The content of the discipline

# 4.1. Lecture plan

<b>№</b> n \ n	Торіс	Number of hours
	Block 1. Organization of medical care in extreme con-	ditions
1.	Medical sorting in case of mass sanitary losses	2
2.	Organizing and conducting the evacuation of the wounded	2
3.	Behavior of people in emergencies and combat conditions	2
4.	Combat stress and combat fatigue	2
	Block 2. Fundamentals of medical care for the population	and troops
1.	Normative and legal bases of civil protection in Ukraine. Protection of the population and territories from emergencies	2
2.	Fundamentals of civil protection	2
3.	Medical, biological and psychological protection, ensuring sanitary and epidemic well-being of the population	2
4.	Organization of civil protection of medical and pharmaceutical institutions	2
5.	Tasks, organization and topical issues of the medical service of the Armed Forces of Ukraine in the conditions of armed conflicts	2
6.	Modern system of medical and evacuation support of troops	2
Total	hours for blocks 1 and 2	20

№ n \ n	Topic	Number of hours		
Bloc	Block 3. Organization of medical support for surgical and neurological patients in emergencies and			
	combat conditions			
1.	Injuries and diseases of the soft tissues of the extremities in	2		
1.	emergencies and combat conditions	2		
2.	Damage and disease of blood vessels of the extremities in combat	2		
3.	Damage to the nerves of the extremities in combat	2		
4.	Fractures of the bones of the extremities in combat	2		

5.	Traumatic dislocations of the bones of the extremities in combat		
6.	Damage and disease of the joints of the extremities in combat	2	
7.	Ankylosis, contractures, joint deformity in combat	2	
В	lock 4. Medical support of therapeutic and toxicological patients in en	mergencies and combat	
	conditions		
1.	Chemical pneumonia and bronchitis	2	
2.	Digestive and liver diseases in combat	2	
3.	Kidney disease in combat	2	
4.	Extreme toxicology. Modern "chemical danger"	2	
5.	Chemical weapons. General characteristics	2	
Tota	l hours for blocks 3 and 4	20	

# 4.2. Plan of practical classes

№ n\ n	Topic	Number of hours
	Block 1. Organization of medical care in extreme cond	itions
1.	Medical sorting in case of mass sanitary losses	4
2.	Organizing and conducting the evacuation of the wounded	4
3.	Behavior of people in emergencies and combat conditions	4
4.	Combat stress: symptoms, prevention, medical care	4
5.	Final block control	2
Total l	nours for block 1	18
	Block 2. Fundamentals of medical care for the population a	and troops
6.	Normative and legal bases of civil protection in Ukraine. Protection of the population and territories from emergencies	4
7.	Fundamentals of civil protection	8
8.	Medical, biological and psychological protection, ensuring sanitary and epidemic well-being of the population	4
9.	Organization of civil protection of medical and pharmaceutical institutions	6
10.	Tasks, organization and topical issues of the medical service of the Armed Forces of Ukraine in the conditions of armed conflicts	4
11.	Modern system of medical and evacuation support of troops	4
12.	Final block control	2
Total l	nours for block 2	32
Total l	nours for blocks 1 and 2	50

№ n \n Block	Topic  3. Organization of medical support for surgical and neurological and combat conditions	Number of hours patients in emergencies
1.	Injuries and diseases of the soft tissues of the extremities in emergencies and combat conditions	4
2.	Damage and disease of blood vessels of the extremities in combat	4
3.	Damage to the nerves of the extremities in combat	4
4.	Fractures of the bones of the extremities in combat	4

5.	Traumatic dislocations of the bones of the extremities in combat	4	
6.	Damage and disease of the joints of the extremities in combat	4	
7.	Ankylosis, contractures, joint deformity in combat	4	
8.	Final block control	2	
<b>Total</b>	hours for block 3	30	
Bloc	k 4. Medical support of therapeutic and toxicological patients in er	nergencies and combat	
	conditions		
9.	Chemical pneumonia and bronchitis	4	
10.	Digestive and liver diseases in combat	4	
11.	Kidney disease in combat	4	
12.	Extreme toxicology. Modern "chemical danger"	4	
13.	Chemical weapons. General characteristics	2	
14.	Final block control	2	
Total	hours for block 4	20	
Total	hours for blocks 3 and 4	50	

# 4.3. Tasks for independent work

№ n \n	Topic	Number of hours
	Block 1. Organization of medical care in extreme cond	litions
1.	Medical sorting in case of mass sanitary losses. Organizing and conducting the evacuation of the wounded	4
2.	Behavior of people in emergencies and combat conditions. Combat stress: symptoms, prevention, medical care	6
Total	hours for block 1	10
	Block 2. Fundamentals of medical care for the population	and troops
1.	Normative and legal bases of civil protection in Ukraine. Protection of the population and territories from emergencies	1
2.	Fundamentals of civil protection	1
3.	Medical, biological and psychological protection, ensuring sanitary and epidemic well-being of the population	2
4.	Organization of civil protection of medical and pharmaceutical institutions	2
5.	Tasks, organization and topical issues of the medical service of the Armed Forces of Ukraine in the conditions of armed conflicts	2
6.	Modern system of medical and evacuation support of troops	2
Total	hours for block 2	10
Total	hours for blocks 1 and 2	20

<i>№</i> n \	Topic	Number of hours				
Block	Block 3. Organization of medical support for surgical and neurological patients in emergencies					
and combat conditions						
1.	Injuries and diseases of the soft tissues of the extremities in emergencies and combat conditions	4				
2.	Damage and disease of blood vessels of the extremities in combat	4				
3.	Damage to the nerves of the extremities in combat	4				
4.	Fractures of the bones of the extremities in combat	4				

5.	Traumatic dislocations of the bones of the extremities in combat	4				
6.	Damage and disease of the joints of the extremities in combat	4				
7.	Ankylosis, contractures, joint deformity in combat	4				
Total	hours for block 3	28				
Bloc	Block 4. Medical support of therapeutic and toxicological patients in emergencies and combat					
conditions						
1.	Chemical pneumonia and bronchitis	4				
2.	Digestive and liver diseases in combat	4				
3.	Kidney disease in combat	4				
4.	Extreme toxicology. Modern "chemical danger"	4				
5.	Chemical weapons. General characteristics	6				
Total	hours for block 4	22				
Total	hours for blocks 3 and 4	50				

#### Individual tasks

Selection and review of scientific literature on the subject of the program of medical support of the population and troops of the student's choice with the writing of an abstract and its public defense. Selection and review of scientific literature on the subject of research work of the department with the preparation of a scientific report at a meeting of the SNT or at student conferences. Scientific research on the subject of research work of the department with the publication of results in scientific journals. Assessment of an individual task is carried out in accordance with the criteria and points of a particular practical lesson, ie the maximum score is 7 points.

## 4.4. Ensuring the educational process

- 1. Multimedia projectors, computers, screens for multimedia presentations, lecture presentations.
- 2. Demonstration screens, laptops, files in Power Point and Word with tasks "Step-2" for practical and final classes.
- 3. Credit tickets.

#### 5. Final control

#### List of questions of final control (offset)

- 1. Organization and carrying out of medical sorting at occurrence of mass sanitary losses.
- 2. Algorithm for medical sorting.
- 3. Organizing and conducting the evacuation of the wounded in combat and non-combat conditions.
- 4. Preparation of the wounded (injured) for evacuation.
- 5. Evacuation request rules.
- 6. Features of human behavior in emergencies.
- 7. Typical reaction of medical workers to various traumatic events.
- 8. Mechanisms of stress resistance formation in medical workers.
- 9. Prevention of post-traumatic stress disorders.
- 10. Debriefing as a method of psychological correction of post-traumatic stress disorders.
- 11. Combat stress and combat fatigue: signs, prevention and basic principles of medical care in combat.
- 12. The main tasks of the medical service of the Armed Forces of Ukraine in conditions of armed conflicts, their content and significance.

- 13. Conditions of medical service activity and their influence on the organization of medical support of troops.
- 14. Organizational structure of the medical service of the Armed Forces of Ukraine.
- 15. The concept of loss of troops.
- 16. Definition and classification of sanitary losses, their characteristics.
- 17. Factors influencing the size of sanitary losses.
- 18. The modern structure of sanitary losses, their dependence on the weapons used by the enemy.
- 19. Characteristics of the striking factors of modern weapons.
- 20. Influence of the size and structure of sanitary losses on the organization of medical support of troops.
- 21. The concept of stages of medical evacuation, tasks, schematic diagram and requirements for deployment.
- 22. Medical sorting in combat conditions.
- 23. Basic tasks, principles and organization of medical sorting.
- 24. Medical evacuation, concept, purpose and procedure.
- 25. Sanitary vehicles for evacuation of the wounded and sick.
- 26. Peculiarities of carrying out medical and evacuation measures in the conditions of the joint forces operation in the east of Ukraine.
- 27. Normative and legal bases of civil protection in Ukraine.
- 28. Protection of the population and territory from emergencies.
- 29. Fundamentals of civil protection.
- 30. Medical, biological and psychological protection.
- 31. Provision of sanitary and epidemiological welfare of the population.
- 32. Organization of civil protection of medical and pharmaceutical institutions.
- 33. Organization of medical support for surgical patients in emergencies and combat conditions.
- 34. Organization of medical support for neurological patients in emergencies and combat conditions.
- 35. Damage to blood vessels of the extremities in combat.
- 36. Diseases of blood vessels in combat.
- 37. Damage to the nerves of the extremities in combat.
- 38. Fractures of the bones of the extremities in combat.
- 39. Traumatic dislocations of the bones of the extremities in combat.
- 40. Damage to the joints of the extremities in combat.
- 41. Diseases of the joints of the extremities in combat.
- 42. Ankylosis, contractures, joint deformity in combat.
- 43. Medical support of therapeutic patients in emergencies and combat conditions
- 44. Medical support of toxicological patients in emergencies and combat conditions
- 45. Respiratory diseases in combat.
- 46. Digestive and liver diseases in combat.
- 47. Liver disease in combat.
- 48. Kidney disease in combat.
- 49. Extreme toxicology.
- 50. Modern "chemical danger".
- 51. Accidents and catastrophes in peacetime.
- 52. Combat toxic chemicals.
- 53. Chemical weapons.
- 54. Combat toxic chemicals.
- 55. The center of chemical damage.
- 56. Classification of toxic substances.
- 57. The main medical and toxic characteristics of the foci of chemical damage.
- 58. Protection of the population and troops from toxic substances.
- 59. Protection of the population and troops from chemical damage.
- 60. Medical chemical protection.

#### "0" version of the test ticket

Black Sea National University
named after Peter the Great
Educational qualification level - master
Field of knowledge: 22 "Health care"
Specialty 222 "Medicine"
Academic discipline

#### "Fundamentals of medical care for the population and troops"

#### Option № 0

- 1. Rules of protection for evacuation. (Maximum number of points 20).
- 2. Characteristics of weapons factors. (Maximum number of points 20).
- 3. The concept of loss of troops. (Maximum number of points 20).
- 4. Algorithm for medical sorting. (Maximum number of points 20).

Approved at a meeting of the Health. Protocol № dated	Department 2020	of Hygiene,	Social M	1edicine	and	Public
Head of Departmen	Professor Zyuzin VO					
Examiner	Ph.D. Frenkel Yu.D.					

#### **Example of tests and situational tasks**

- 1. During the first stage of medical sorting, the following basic amount of care is determined:
  - a) check for breathing;
  - b) restore airway patency;
  - c) determine the capillary pulse;
  - d) determine the state of consciousness.
- 2. During the second stage of medical sorting, the following basic amount of care is determined:
  - a) manual cleaning of the mouth and larynx;
  - b) cleaning of the oropharynx with an aspirator;
  - c) introduction of an air duct;
  - d) endotracheal intubation;
  - e) puncture of the cricothyroid ligament.

#### 3. Basic volume of medical examination:

- a) determination of blood pressure;
- b) determination of pulse in the central and peripheral arteries;
- c) determination of respiratory rate;
- d) determination of capillary pulse;
- e) monitoring of vital signs;
- f) blood saturation.

#### 4. On the evacuation routes it is necessary:

- a) carry out all orders of managers;
- b) act on alert signals;
- c) not to leave their seats in transport;
- d) not to leave the vehicle without permission;
- e) register at the final evacuation point;

f) occupy the designated premises.

### 5. Civil defense forces include:

- a) operative-rescue service of civil protection;
- b) emergency rescue service;
- c) formation of civil defense;
- d) specialized civil protection services;
- e) fire and rescue units (parts);
- f) voluntary formations of civil defense.

#### Problem № 1

The mode of daily functioning is created according to the normal industrial, rational and chemical situation. Activities carried out in this mode.

#### Problem № 2

Medical protection is a measure that aims to prevent or reduce the degree of damage to people through the timely use of drugs. The content of these measures.

#### 6. Evaluation criteria and tools for diagnosing learning outcomes

#### **Control methods**

- Survey (testing of theoretical knowledge and practical skills)
- Test control
- Writing a review of scientific literature (abstracts), performing individual tasks, their defense

**Current control.** Testing in practical classes of theoretical knowledge and acquisition of practical skills, as well as the results of independent work of students. Supervised by teachers of the department in accordance with the specific purpose of the curriculum. Assessment of the level of student training is carried out by: interviewing students, solving and analyzing situational tasks and test tasks, interpreting the results of experimental and clinical research, monitoring the acquisition of practical skills.

**Intermediate control.** Checking the possibility of using students for medical and social analysis of theoretical knowledge and practical skills on all topics studied, as well as the results of independent work of students. Carried out in the last lesson on the topic by passing practical skills, solving situational problems and testing.

The final control work (RCC) is carried out upon completion of the study of all topics of the block at the last control session of the block.

In order to assess the results of training in the basics of medical care of the population and troops, the **final control** is also carried out **in the form of credit in the 8th semester and differentiated credit in the 9th semester.** 

Students who have attended all the classes provided by the curriculum and program, have completed their independent work in full and scored at least 40 points per semester during the semester are admitted to the test . The maximum number of points for current educational activities (PND) is 80 points.

#### Distribution of points received by students

In the 8th semester, where there are 10 topics, a positive assessment in each practical session can be **from 4 to 8 points.** A score below 4 points means "unsatisfactory", the lesson is not credited and is subject to practice in the prescribed manner.

On PKR on blocks 1 and 2 the student can receive a maximum of 20 points. PKR is considered credited if the student received at least 15 points.

On the test, a student can get a maximum of **80 points.** The test is considered passed if the student scored **at least 50 points.** 

In the 9th semester, where there are 12 topics, a positive assessment in each practical session can be **from 3.3 to 6.7 points.** A score below 3.3 points means "unsatisfactory", the lesson is not credited and is subject to practice in the prescribed manner.

On PKR on blocks 3 and 4 the student can receive a maximum of 20 points. PKR is considered credited if the student received at least 15 points.

In a differentiated test, a student can get a maximum of **80 points.** The test is considered passed if the student scored **at least 50 points.** 

### **Assessment of student performance**

Type of activity (task)	Maximum number of points				
8th semester					
Topics of practical classes from the 1st to the 10th	8 points for each of the topics				
Together for 10 topics	80				
Final control work (for block 1)	20				
Final control work (according to block 2)	20				
Together for blocks 1 and 2	120				
Test	80				
Together for blocks 1 and 2 and credit	200				
9th semester					
Topics of practical classes from the 1st to the 12th	6.7 points for each of the topics				
Together for 12 topics	80				
Final control work (according to block 3)	20				
Final control work (for block 4)	20				
Together for blocks 3 and 4	120				
Differentiated credit	80				
Together for blocks 3 and 4 and diff. offset	200				

### Criteria for assessing knowledge

A student's answer is evaluated with a score of 8 points per topic in the 8th semester, 6.7 points in the 9th semester, 19-20 points in the RCC and 71-80 points in the test (A on the ECTS scale and 5 on the national scale), if it demonstrates a deep knowledge of all theoretical principles and the ability to apply theoretical material for practical analysis and there are no inaccuracies.

A grade of 6 points per topic in the 8th semester, 5 points in the 9th semester, 17-18 points in the PKR and 61-70 points in the test (B and C on the ECTS scale and 4 on the national scale) the answer is evaluated if it shows knowledge of all theoretical provisions, the ability to apply them in practice, but some fundamental inaccuracies are allowed.

The student's answer is evaluated with a score of 4 points per topic in the 8th semester, 3.3 points in the 9th semester, 15-16 points in the RCC and 50-60 points in the test (D and E on the ECTS scale and 3 on the national scale). provided that he knows the main theoretical principles and can use them in practice.

#### 7. Recommended sources of information

#### **7.1.** Basic

- 1. Emergency medical care for the injured at the hospital stage: a textbook / [V.O. Kryliuk, C.O. Huriev, A.A. Hudyma and others] Kyiv. 2016. 400 p.
- 2. Emergency medical care (selected aspects): textbook / All-Ukrainian public organization "All-Ukrainian Council of Resuscitation (Resuscitation) and Emergency Medical Care". Donetsk: Лондок: XXI, 2014. 320 с.
- 3. Emergency medical care (to hospital protocols): manual // ed. Professor OV Bogomolets, Professor GG Roshchin. Kyiv. Yustan 2016. 212 p.
- 4. Organization of medical support of troops: Textbook. for students. higher honey. lock Education of Ukraine III IV levels of accreditation / edited by Professor Badyuk MI K :: «MP Lesia», 2014. 430 c.

#### 7.2. Auxiliary

- 1. Vasiychuk VO Fundamentals of civil protection: textbook. way. Lviv, 2010. 384 p.
- 2. Military medical training / Edited by Professor MI Badyuk K .: « MP Lesia », 2007.- 482 c.
- 3. Disaster medicine. Textbook / Ed. prof. I.B. Cochin. K .: "Health". 2001. 290 p.
- 4. Basics of survival: measures to ensure life in an autonomous existence in emergencies. Tutorial. UCZU, UNPCEMD and MI of the Ministry of Health of Ukraine, National Medical Academy of Postgraduate Education named after P.L. Shchupyka [Gurev SO, Myronets SM, Roshchin GN etc.] K .: 2009. 209 p.
- 5. Occupational safety and health of the population in emergencies: Textbook / ed. prof. I.B. Cochin. K .: Health, 2005. 250 c.
- 6. Rusalovsky AV Civil protection: textbook. way. / for science. ed. Zaporozhets OI K .: AMY, 2008. 250 c.

#### 7.3. Information resources on the Internet

- 1. Website of the Verkhovna Rada of Ukraine: Access mode: http://zakon.rada.gov.ua/.
- 2. Website of the State Emergency Service of Ukraine. Access mode: http://www.dsns.gov.ua/.
- 3. Website of the Ministry of Health of Ukraine: Access mode: http://www.moz.gov.ua/.
- 4. Information and legal portal "Laws of Ukraine": Access mode: http://nazakon.com.
- 5. On approval of the rules of the Model staffing standards of the center of primary health care: Order of the Ministry of Health of Ukraine dated 23.02.2012 №129 Access mode: http://www.moz.gov.ua/na/portal/hsccekomlaw/.
- 6. European Health for All Database, Copenhagen: WHO / Europe. // Access mode: http://www.euro.who.inf.
- 7. Resolution of the Cabinet of Ministers of Ukraine "On approval of the Regulations on the organization of notification and communication in emergency situations" // Access mode: http://zakon2.rada.gov.ua/laws/show/192-99-%DO%BF.