

MINISTRY OF HEALTH OF UKRAINE  
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Disaster Medicine and Military Medicine

Academic year 2023-2024

**SYLLABUS OF EDUCATIONAL COMPONENT**

"Military medical training and emergency medicine"

(name of educational component)

Normative educational component

Form of education: Full-time/distance  
(full-time; extramural; distance)

Branch of knowledge: 22 Health  
(code and name of branch of knowledge)

Specialty «223» Nursing  
(code and name of specialty)


Educational and professional program (educational and scientific program) «Nursing»

The first (bachelor's educational and scientific) level of higher education

Course 3 (4 years of study)

Syllabus of educational component  
was approved at the meeting of the  
Department of Disaster Medicine and  
Military Medicine.

Protocol from  
« 31 » August 2021 № 2  
Head of Department

  
(signature) S. G. Demyanik  
(initials, name)

Approved by the methodological  
commission of KhNMU on the  
problems of general training

Protocol from  
« 31 » August 2021 № 1  
Head of commission

  
(signature) Prof. O.Y. Vovk  
(initials, name)

## **SYLLABUS DEVELOPERS**

1. Demyanik S. G., Head of Department of Disaster Medicine and Military Medicine, Associate professor;
2. Aksakov O. F., Senior Teacher of Department of Disaster Medicine and Military Medicine;
3. Lishchuk S. A., Senior Teacher of Department of Disaster Medicine and Military Medicine

## **DATA ON TEACHERS WHO TEACH THE EDUCATIONAL COMPONENT.**

Surname, name, patronymic, position, academic title, academic degree

Aksakov Oleksandr Franzevych, Senior Lecturer.

Professional interests, link to the teacher's profile (on the university website, department, Moodle, etc.

Qualification "Doctor", specialty "Medical and preventive care", "Therapy", "Infectious diseases", "Organization and management of health care".

Contact phone number - (057) 702-11-77

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Surname, name, patronymic, position, academic title, academic degree

Lishchuk Svetlana Anatolyevna Senior Lecturer.

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### **Information about consultations.**

Consultations according to the schedule of the department and the teacher.

**In-person consultations:** according to the teacher's schedule, in the classrooms of the Department of Disaster Medicine and Military Medicine.

**Online consultations:** Google Meet, KhNMU remote platform Moodle, ZOOM according to the schedule; <https://distance.knmu.edu.ua/course/view.php?id=19>

**Location:** classes are held at the Department of Disaster Medicine and Military Medicine of KhNMU, at the address: 12 Trinkler St., Kharkiv.

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## INTRODUCTION

The silhouette of the educational component "Military Medical Training and Emergency Medicine" is compiled in accordance with the educational and professional program (hereinafter - EPP) "Nursing" and the Standard of Higher Education of Ukraine (hereinafter - Standard), first (bachelor's) level, field of knowledge 22 "Health Care", specialty 223 "Nursing".

### **Description of the educational component (abstract)**

The Silabus is intended for teaching students (citizens) at the departments of disaster medicine and military medicine of higher education institutions of the Ministry of Health of Ukraine.

During the war, as well as during emergencies in peacetime and wartime, an important role in the timely and high-quality provision of medical care to the wounded and sick belongs to specialists with medical education, so the study of the discipline "Military Medical Training and Emergency Medicine" by medical students is of great importance. The more timely, correct and accurate medical and pre-hospital (nursing, paramedic) care is provided, the better the chances of saving lives and successful treatment of the wounded and sick at the subsequent stages of medical evacuation. The relevance of studying the subject is also due to the changes that are taking place as a result of the reorganization of the Armed Forces of Ukraine, and the accumulation of materials on the experience of the military medical service and the generalization of combat tactics. The Medical Service of the Armed Forces of Ukraine and the Ukrainian Military Medical Academy have developed and adopted a number of STANDARDS of medical care for the wounded at the pre-hospital stage. The main ones are: The Standard of Training of a Soldier in Tactical Medicine and the Standard of Professional Training of a Company (Battery) Sanitary Instructor. These standards have changed the technology of medical care, equipment for servicemen and all medical professionals, and requirements for their professional training. The general principles, requirements, and provisions of the standards for tactical medicine are taken into account in this program and provide for the development and professional training of specialists.

**The subject of the discipline** is the reorganization and development of the Armed Forces of Ukraine, changing views on the conduct of hostilities, the use of modern weapons, the accumulation of experience of the military medical service during the war, the provision of first aid in emergency situations in peacetime and wartime.

**Interdisciplinary connections:** The study of the educational component "Military Medical Training and Emergency Medicine" is carried out in the 5th semester of the 3rd year of study and is based on the knowledge of the main natural science educational components: medical biology, medical and biological physics, medical, biological and bioorganic chemistry, human anatomy, histology, Latin, history of medicine, a foreign language with a professional orientation, philosophy and is integrated with these educational components. It lays the foundations for the formation of knowledge, skills and abilities determined by the final goals of the program, which are necessary in the following professional activity.

**Prerequisites.** The curriculum provides in-depth training in the study of educational components of the humanitarian, socio-economic and natural science training blocks,

subjects of professional training and integrates with these disciplines.

**Post-qualifications.** The program stipulates that all issues of military medical training and emergency medicine are studied taking into account the knowledge and practical skills acquired by students in other disciplines, primarily human anatomy and physiology, surgery, and therapy. The study of all oriented modules, namely: Nursing in Surgery, Nursing in Infectious Diseases, Anesthesiology and Resuscitation, Life Safety and Basics of Bioethics, Clinical Pharmacology with Toxicology, involves the development of skills to apply the acquired knowledge in the organization of medical care at the pre-hospital stage and in professional activities.

**Link to the page of the educational component in MOODLE.**

<https://distance.knmu.edu.ua/course/view.php?id=19>

## **1. AIM AND OBJECTIVES OF THE EDUCATIONAL COMPONENT.**

**1.1. The purpose of studying the educational component** is theoretical and practical training of students to develop the skills and competencies of future professionals to form readiness to defend the homeland during the war, to provide first aid during hostilities, in emergency situations in peacetime and wartime. The study of the discipline involves the realization that timely and professional first aid increases the chance of saving the life of the wounded, and the success and quality of treatment of the wounded and sick depends on the solution of issues of property and equipment in modern warfare. The discipline "Military Medical Training and Emergency Medicine" lays the foundation for knowledge and skills that can be used in wartime and emergency situations.

### **1.2. The main tasks of studying the educational component are:**

- formation of knowledge and skills on the basic principles of medical support of troops;
- formation of knowledge and skills on the organization and conduct of medical evacuation measures at the stages of medical evacuation;
- formation of knowledge and skills on the organization and conduct of sanitary and hygienic and anti-epidemic measures of troops in combat conditions;
- to consolidate the theoretical knowledge of students on the provision of first aid;
- to teach students the algorithm of examination of the wounded and sick.
- mastering the ability to plan measures to eliminate the supply of the population in emergency situations;
- development of skills in assessing the medical and sanitary situation in peacetime and wartime emergencies;
- familiarization with the means of collective, individual and medical protection;
- mastering the existing system of organizing medical care in emergency situations;
- mastering the scope of medical care depending on the scope of medical care.

**1.3. Competencies and learning** outcomes contributed to by the discipline (relationship with the normative content of higher education training formulated in terms of learning outcomes in the EPP and the Standard).

**1.3.1 The study of a discipline (educational component) ensures that students acquire competencies:**

**integral:**

The bachelor of nursing is able to solve practical problems and tasks in the field of health care using the provisions, theories and methods of basic, medical and clinical sciences in conditions of complexity and uncertainty.

**general:**

- the ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine;
- the ability to preserve and enhance moral, cultural, scientific values and achievements of society based on an understanding of the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, technology and technology, to use various types and forms of physical activity for active recreation and healthy lifestyle;
- ability to think abstractly, analyze and synthesize;
- ability to apply knowledge in practical situations;
- knowledge and understanding of the subject area and understanding of professional activities;
- skills in the use of information and communication technologies;
- determination and perseverance in relation to the tasks and responsibilities;
- ability to make informed decisions;
- ability to work in a team;
- interpersonal skills.

**special (professional, subject) competencies:**

- The ability to meet the needs of the patient/client during different periods of the whole life (including the dying process) by planning, assisting and performing nursing interventions, evaluating and adjusting individual care plans created in collaboration with the patient/client, caregivers, family members and other health and social workers.
- The ability to effectively apply a combination of nursing skills, medications, interventions and actions to provide care based on a holistic approach, taking into account the satisfaction of the patient's needs for comfort, nutrition, personal hygiene and the person's ability to meet their daily needs.
- Preserving the health of the professional while providing care, performing manipulations and procedures, moving and transporting the patient/client.
- Preventive activities of the nurse aimed at maintaining and improving health, preventing diseases and informing and educating the patient and his/her family members.
- Ability to organize, implement and monitor the nursing process in palliative and hospice care.
- Ability to organize the provision of medical care on the principle of family medicine.
- Ability to conduct medical and social rehabilitation to restore public health.
- Ability to organize and provide emergency care in various public emergencies.
- Ability to organize and provide emergency assistance in emergency situations in peacetime and wartime.

**1.3.2.** The study of the educational component ensures that students acquire the following **program learning outcomes:**

PLO 1. Conduct nursing subjective and objective examination of various organs and systems of the patient and evaluate the data obtained. In health care facilities (HCF) and at home, by communicating with patients of different ages, their relatives or relatives of a sick child and his/her parents, be able to collect complaints, medical history, anamnesis, allergic history, epidemiological history, evaluate anamnestic data.

PLO 2. Conduct nursing diagnostics: identify and assess patient's problems. In the conditions of health care facilities (HCF), at home, predictable circumstances, be able to identify real patient problems, assess their priority and establish a nursing diagnosis.

PLO 3. Plan nursing interventions. In health care facilities (HCF), at home and in unforeseen circumstances, be able to plan nursing interventions to address real and concomitant problems of patients of all ages.

PLO 4. To monitor the work of nursing staff and the state of inventory. In the conditions health care facilities (HCF) in accordance with the official duties, in order to comply with the sanitary and anti-epidemic regime, to be able to

- train junior medical staff on the performance of functional duties and occupational safety;
- monitor compliance with safety rules by junior medical staff;
- monitor the work of junior medical staff;
- Monitor compliance with internal regulations by staff and patients;
- monitor compliance with sanitary and hygienic measures in wards and medical offices.

PLO 5. To carry out nursing administration. In the conditions of health care facilities (HCF), in order to implement organizational and managerial competencies, to be able to:

- make managerial decisions,
- ensure their implementation through the use of nursing leadership models;
- ensure the implementation of orders and regulations on health care issues;
- master the functional responsibilities of the head of nursing services;
- to know the procedure for licensing and accreditation of medical and preventive care facilities, laboratories of various profiles, etc.

PLO 6. To ensure a healthy microclimate in the team.

- Using the principles of nursing ethics and deontology, rules of interpersonal communication in order to create a favorable psychological climate, be able to
- communicate with the patient and members of his/her family or close environment, medical staff;
- solve ethical and deontological problems in the process of working with patients and their family members;
- review and analyze professional errors in the team;
- conduct training for junior and technical staff.

PLO 7. Participate in the provision of observation of healthy and over-sick population, rehabilitation and dispensary supervision. In the conditions of health care facilities (HCF), at home and in the community, using the current orders of the Ministry of Health of Ukraine, in order to form, maintain and improve the health status of the adult and pediatric population, be able to:

- - keep records of dispensary groups of the population;
- - to calculate and analyze statistical indicators of dispensary efficiency;
- - conduct explanatory work among patients of different dispensary groups;
- - keep records of health groups;
- - calculate and evaluate individual indicators and indicators of the complex effect of microclimate on the human body;
- - determine the stages of medical and social rehabilitation of the patient, tasks for each stage;
- - to develop a set of rehabilitation measures depending on the profile, course, period of the disease or injury;
- - conduct a census of the child population.

PLO 8. Perform medical manipulations to ensure sanitary and anti-epidemic regime.

PLO 12. Properly perform medical procedures to take measures to stabilize the functional state of the body.

PLO 14. To be able to prepare a patient, to collect and send biological material for laboratory and instrumental research.

PLO 15. Provide emergency pre-hospital medical care based on the diagnosis of an emergency.

PLO 16. Ability to perform interdependent nursing functions with accuracy.

PLO 20. Properly maintain appropriate medical records.

**1.3.3.** The study of the educational component ensures that students acquire the following **Soft skills**:

- stress tolerance, ability to adapt to the situation, sociability, teamwork, desire to learn, critical thinking, ability to plan.

## 2. INFORMATION VOLUME OF THE EDUCATIONAL COMPONENT.

Name of indicators	Field of knowledge, specialty, educational degree, EPP	Characteristics of the educational component
		<b>Full-time education</b>
Number of credits <b>3</b>	Field of knowledge <b>22 "Healthcare"</b>	<b>Normative</b>
Total number of hour <b>90</b>	Speciality <b>223 "Nursing".</b>	Year of preparation (course): <b>3</b>
		Semester: <b>5</b>
		Lecture: <b>16 hours.</b>
Hours for full-time student's independent work - <b>50</b>	Educational degree: <b>First (bachelor's) educational and scientific level of higher education</b>  <b>EPP «Nursing»</b>	Practical: <b>24 hours.</b>
		Laboratory: <b>0 hours.</b>
		Independent work: <b>50 hours.</b>
		Individual tasks: <b>0 hours.</b>
		Type of final control: <b>Test</b>

### 2.1. Description of the educational component.



### 2.1.1. Lectures.

№	Theme Name	Number of hours
1	THEME 1. Tasks, organization and Themeal issues of the medical service of the Armed Forces of Ukraine in wartime.	2
2	THEME 2. Modern types of weapons and their impact on the size and structure of sanitary losses.	2
3	THEME 3. Modern system of medical and evacuation support of troops	2
4	THEME 4. Fundamentals of the organization of sanitary and epidemiological support of troops.	2
5	THEME 5. Fundamentals of organization of medical main.	2
6	THEME 6. Medical service of the mechanized battalion.	2
7	THEME 7. Natural and man-made emergencies.	2
8	THEME 8. Protection of the population in emergency situations.	2
	Total hours:	<b>16</b>

### 2.1.2. Seminars.

Seminars are not provided by the program.

### 2.1.3. Practical lessons.

№	Theme Name	Number of hours	Teaching Method	Form Control.
1	THEME 2. Modern types of weapons and their impact on the magnitude and structure of sanitary losses.	2	Narration - explanations, presentations.	Current control: oral questioning; written questioning; test control; essays.
2	THEME 3. A modern system of medical and evacuation support for troops.	4	Narration - explanations, presentations.	Current control: oral questioning; written questioning; test control; essays.
3	THEME 4. Fundamentals of the organization of sanitary-epidemiological security for the future.	2	Narration - explanations, presentations.	Current control: oral questioning; written questioning; test control; essays.
4	THEME 6. Medical service of a mechanized battalion.	4	Narration - explanations, presentations.	Current control: oral questioning; written questioning; test control; essays.

5	THEME 7. Natural, man-made and social emergencies, their medical and tactical characteristics. Pre-medical care in emergency situations.	2	Situational tasks, storytelling, explanations, presentations, videos, modeling of processes and situations.	Current control: oral questioning; written questioning; test control; essays.
6	THEME 8. Protection of the population in emergency situations.	4	Situational tasks, storytelling, explanations, presentations, videos, modeling of processes and situations.	Current control: oral questioning; written questioning; test control; essays.
7	THEME 9. Types of injuries in combat and non-combat conditions. First aid.	4	Situational tasks, storytelling, explanations, presentations, videos, modeling of processes and situations.	Current control: oral questioning; written questioning; test control; essays.
8	THEME 10. Behavior of people in emergency situations and combat conditions. Combat stress: signs, prevention, first aid.	2	Situational tasks, storytelling, explanations, presentations, videos, modeling of processes and situations.	Current control: oral questioning; written questioning; test control; essays.
	Total Hours	<b>24</b>		

#### 2.1.4. Laboratory classes.

Laboratory classes are not provided by the program.

#### 2.1.5. Independent work

№	Theme Name	Number of hours	Teaching Methods	Form Control.
1.	THEME 1. Tasks, organization and thematic issues of the medical service of the Armed Forces of Ukraine in wartime.	2	Independent work.	Written questionnaire; test control at a practical lesson.

2.	THEME 2. Modern weapons and their impact on the magnitude and structure of sanitary losses.	4	Independent work.	Written questionnaire; test control at a practical lesson.
3.	THEME 3. Modern system of medical and evacuation support of troops	8	Independent work.	Written questionnaire; test control at a practical lesson.
4.	THEME 4. Basics of organization of sanitary and epidemiological support of troops.	4	Independent work.	Written questionnaire; test control at a practical lesson.
5.	THEME 5. Basics of organization of provision of medical property.	4	Independent work.	Written questionnaire; test control at a practical lesson.
6.	THEME 6. Medical service of a mechanized battalion.	6	Independent work.	Written questionnaire; test control at a practical lesson.
7.	THEME 7. Natural, man-made and social emergencies, their medical and tactical characteristics. Premedical care in emergency situations.	6	Independent work.	Written questionnaire; test control at a practical lesson.
8.	THEME 8. Protection of the population in emergency situations.	4	Independent work.	Written questionnaire; test control at a practical lesson.
9.	THEME 9. Types of injuries in combat and non-combat conditions. Premedical care.	6	Independent work.	Written questionnaire; test control at a practical lesson.
4.	THEME 10. Behavior of people in emergency situations and combat conditions. Combat stress: signs, prevention, first aid.	6	Independent work.	Written questionnaire; test control at a practical lesson.
	Total hours:	<b>50</b>		

### Teaching methods.

- verbal (lecture, conversation);
- visual (illustration, presentation material, video material);
- practical (independent work, case method, work in pairs, work in groups).

### Control methods.

1. Oral control of theoretical material (questioning, discussion).
2. Written control (answers to questions, problem solving, test control).
3. Control of practical skills and abilities (solving situational tasks, solving problem situations, providing practical recommendations). In the study of the educational component, current and final semester control is applied.

Also, there is a mandatory control of mastering the educational material of the educational component assigned to independent work.

**Current control (mastery of individual Themes):** is carried out in the form of oral questioning, testing, student conversations on pre-determined issues, in the form of speeches by higher education applicants with reports when discussing educational issues in practical classes.

To evaluate the independent work of students, an alternative option is offered (optional): traditional types of tasks: writing a test, essay or creative types: preparation of a multimedia presentation, study of educational literature (annotation, review, citation, abstracts of primary sources).

**Final control of the educational component** is a mandatory form of control over the academic achievements of higher education students. It is conducted orally. The timing of the final semester control is set by the schedule of the educational process, and the amount of educational material submitted for the final semester control is determined by the program of the educational component.

The total number of rating points for the study of the educational component for the semester is calculated as the sum of the points obtained as a result of the current control and the points obtained as a result of the final semester control. The maximum amount of points per semester is 200 points, the minimum is 120 points.

Evaluation of students' academic performance according to the ECTS of the organization of the educational process (CEA, credit, differential credit, exam) is carried out on the basis of the "Instruction for assessing the educational activities of higher education students at Kharkiv National Medical University", approved by the order of KhNMU dated 21.08.2021 № 181. The form of final control of learning progress in the educational component is a **Credit**.

### 3. EVALUATION CRITERIA.

**3.1.** Evaluation of the progress of higher education students is carried out on the basis of the current "Instruction on the evaluation of educational activities in the European credit transfer system of the educational process".

The **current educational activity** (CEA) of higher education students is controlled by the teacher of the academic group, after they have mastered each Theme of the educational component and are graded using a 4-point (national) system. For part-time higher education students, the current grades also include a grade for an individual assignment. At the end of the semester, the average grade (to the nearest hundredth) for the current learning activity is automatically received by the teacher using the electronic journal of the ACS system..

**Evaluation of the educational component** is a final control, which is carried out after the student has mastered the educational material of the educational component<sup>12</sup>

on the basis of performing certain types of work in practical classes, performing individual tasks and independent work. The form of final control of the educational component is a test conducted by the teacher of the academic group at the last lesson of the educational component. The final grade for the educational component is defined as the arithmetic mean of traditional grades for each lesson (current learning activity) and the grade for the final lesson, rounded to 2 decimal places and converted to a multi-point scale. The recalculation of the average grade for the CEA for the educational components that end with a test is carried out in accordance with the table.

**Recalculating the average grade for the current activity into a multi-point scale (for educational components that end in a Credit).**

4-point scale	200- point scale	4-point scale	200- point scale	4-point scale	200- point scale
5	200	4.22-4,23	169	3.45-3,46	138
4.97-4,99	199	4.19-4,21	168	3.42-3,44	137
4.95-4,96	198	4.17-4,18	167	3.4-3,41	136
4.92-4,94	197	4.14-4,16	166	3.37-3,39	135
4.9-4,91	196	4.12-4,13	165	3.35-3,36	134
4.87-4,89	195	4.09-4,11	164	3.32-3,34	133
4.85-4,86	194	4.07-4,08	163	3.3-3,31	132
4.82-4,84	193	4.04-4,06	162	3.27-3,29	131
4.8-4,81	192	4.02-4,03	161	3.25-3,26	130
4.77-4,79	191	3.99-4,01	160	3.22-3,24	129
4.75-4,76	190	3.97-3,98	159	3.2-3,21	128
4.72-4,74	189	3.94-3,96	158	3.17-3,19	127
4.7-4,71	188	3.92-3,93	157	3.15-3,16	126
4.67-4,69	187	3.89-3,91	156	3.12-3,14	125
4.65-4,66	186	3.87-3,88	155	3.1-3,11	124
4.62-4,64	185	3.84-3,86	154	3.07-3,09	123
4.6-4,61	184	3.82-3,83	153	3.05-3,06	122
4.57-4,59	183	3.79-3,81	152	3.02-3,04	121
4.54-4,56	182	3.77-3,78	151	3-3,01	120
4.52-4,53	181	3.74-3,76	150	Less 3	Not enough
4.5-4,51	180	3.72-3,73	149		
4.47-4,49	179	3.7-3,71	148		
4.45-4,46	178	3.67-3,69	147		
4.42-4,44	177	3.65-3,66	146		
4.4-4,41	176	3.62-3,64	145		
4.37-4,39	175	3.6-3,61	144		
4.35-4,36	174	3.57-3,59	143		
4.32-4,34	173	3.55-3,56	142		
4.3-4,31	172	3.52-3,54	141		
4,27-4,29	171	3.5-3,51	140		
4.24-4,26	170	3.47-3,49	139		

A Credit is a process that checks the following: the level of theoretical knowledge; development of creative thinking; independent work skills; competencies (the ability to synthesize the knowledge gained and apply it in solving practical problems).

## Correspondence of grades on a 200-point scale, a four-point (national) scale and an ECTS scale

Score on a 200-point scale	ECTS score	Score on a four-point (national) scale
180–200	A	Excellent
160–179	B	Good
150–159	C	Good
130–149	D	Satisfactory
120–129	E	Satisfactory
Less 120	F, Fx	Unsatisfactory

**Current control** is carried out by academic staff at each classroom session. The main task of the current control is to check the level of training of students to perform a specific job.

**The main purpose of the current control** is to provide feedback between research and teaching staff and students in the learning process and to ensure the management of their learning motivation. The information obtained during the current control is used both by academic staff to adjust teaching methods and tools and by students to plan their independent work.

**Based on the results of mastering each Theme of the class, a grade is assigned using a 4-point system: "excellent", "good", "satisfactory" or "unsatisfactory".** Students' knowledge is assessed in all types of classes according to the following **criteria:**

- 1) **"Excellent"** - corresponds to a high (creative) level of competence:
  - the applicant shows special creative abilities, is able to acquire knowledge independently, without the help of the teacher finds and processes the necessary information, is able to use the acquired knowledge and skills for decision-making in unusual situations, convincingly argues answers, independently reveals own talents and inclinations;
- 2) **"Good"** – is obtained by the student at two levels of assessment depending on the number of points scored and corresponds to a sufficient (constructive and variable) level of competence:
  - The student is fluent in the studied material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects mistakes, the number of which is insignificant;
  - The student is able to compare, summarize, systematize information under the guidance of a teacher; in general, independently apply it in practice; control their own activities; correct errors, including significant ones, select arguments to support their opinions;
- 3) **"Satisfactory"** - is obtained by the student at two levels of assessment depending on the number of points scored and corresponds to the average (reproductive) level of competence:

- The student reproduces a significant part of the theoretical material, shows knowledge and understanding of the main provisions; with the help of the teacher, he/she can analyze the educational material, correct errors, including a significant number of significant ones;

- The student has knowledge of the educational material at a level higher than the initial level, reproduces a significant part of it at the reproductive level.

4) "**Unsatisfactory**" - corresponds to a low (receptive and productive) level of competence:

- The student has not mastered the educational material of the educational component, does not know scientific facts, definitions, is almost not oriented in primary sources and recommended literature, lacks scientific thinking, and has not formed practical skills.

**The final lesson - (FL)** is a lesson at which the acquired competencies are assessed after the logically completed part of the educational component, consisting of a set of educational elements of the educational component program.

The final lesson is conducted at one of the practical classes and is taken by the teacher of the academic group. The final lesson should include control of all types of training (theoretical, practical, independent and other) provided by the program of the educational component. A grade is assigned for the final lesson, which is one of the final lesson grades. If there are unsatisfactory grades for practical classes within the final lesson, the teacher is obliged to provide the student with the opportunity to answer additional questions on the Theme of these classes with the subsequent assignment of a grade in the " Journal of accounting for the work of the academic group" and ACS.

**Independent work of the student (IW).** The educational material of the educational component, provided for mastering by the student in the process of independent work, is submitted for final control together with the educational material studied during classroom training sessions.

**Evaluation of the educational component** is a final control that is carried out after the student has mastered the educational material of the educational component on the basis of performing certain types of work in practical classes, performing individual tasks and independent work. The form of final control of the educational component is a test conducted by the teacher of the academic group at the last lesson of the educational component. The final grade for the educational component is defined as the arithmetic mean of traditional grades for each lesson (current learning activity) and the grade for the final lesson, rounded to 2 decimal places and converted to a multi-point scale.

### **3.2. Questions for the test:**

1. Sanitary losses. Definition and classification.
2. The structure of sanitary losses, their dependence on the weapons used by the enemy.
3. Medical evacuation measures, concept and content.

4. Modern system of medical evacuation measures, its essence and basic principles.
5. Stage of medical evacuation, definition of the concept, tasks.
6. The stage of medical evacuation, the basic scheme of deployment.
7. The stage of medical evacuation, requirements for its deployment.
8. Types and scope of medical care, definitions of concepts.
9. First aid, content of measures.
10. Pre-hospital (paramedic) care, content of measures.
11. Medical triage, definition, purpose and types.
12. Medical triage of the wounded and sick at the stage of medical evacuation, definition of the concept, principles and requirements for its implementation.
13. Medical evacuation, definition, purpose and types.
14. Sanitary transport vehicles used for evacuation of the wounded and sick, their evacuation and transport characteristics.
15. Features of the organization and conduct of medical and evacuation measures in the elimination of the consequences of the use of weapons of mass destruction by the enemy.
16. Medical equipment, its classification. A set of medical equipment, definition and types.
17. Means for first aid, their medical and tactical characteristics.
18. Means for providing pre-hospital care, their medical and tactical characteristics.
19. Modern system of medical evacuation measures, its essence and basic principles.
20. Features of the organization and conduct of medical and evacuation measures in the aftermath of an accident at a nuclear power plant.
21. Characterization of radioactive contamination zones in case of single and multiple releases.
22. Radiation safety standards.
23. Permissible levels of gamma radiation dose rates of various environmental objects.
24. Assessment of the severity of acute radiation sickness (ARS).
25. Prevention of thyroid damage in the event of nuclear power plant accidents.
26. Principles of prevention of radiation damage.
27. Classification of means of protection of the population.
28. Personal respiratory protection equipment:
29. Data for assessing the sanitary and hygienic condition of the population and areas of its location.
30. Assessment of the sanitary and hygienic conditions in the disaster area.
31. Data for assessing the sanitary and epidemiological situation in the disaster area.
32. Assessment of the sanitary and epidemiological situation in the disaster area.
33. Quarantine and observation, their organization in a disaster.
34. Activities carried out during quarantine and observation.
35. Scheme of general emergency prophylaxis for an unknown pathogen.
36. Causes and signs of soft tissue wounds.
37. Features of combat wounds.
38. Causes and signs of penetrating and non-penetrating chest wounds.
39. Pneumothorax: types, signs, medical care.
40. Causes and signs of penetrating and non-penetrating abdominal wounds.
41. Features of dressing for penetrating abdominal wounds.



42. Dressing in the presence of a foreign body in the wound.
43. Causes and signs of head, spine and pelvic injuries.
44. Technique of bandaging injuries of the skull, eyes, ears, and lower jaw.
45. Types of limb injuries (fractures: open and closed, sprains, dislocations), causes and signs.
46. Absolute signs of fractures.
47. Transfer of the wounded (injured) to a stable position.
48. Causes and signs of external bleeding.
49. The concept of critical external bleeding.
50. Techniques for stopping external bleeding: pressure on the wound, wound tamponade, davit dressing (Israeli bandage), lifting the limb.
51. Hemostatic agents on a gauze basis, technique of application.
52. Indications and techniques for applying various types of tourniquets and improvised tourniquets.
53. Indications and rules for the use of chemical agents to stop bleeding.
54. Causes and signs of internal bleeding.
55. Medical care for internal bleeding.
56. The concept of collapse and shock, causes of their occurrence, recognition and provision of medical care.
57. Causes of airway obstruction.
58. Signs of complete and partial airway obstruction.
59. Techniques to ensure airway patency (head tilt; lower jaw advancement, airway insertion).
60. Devices for artificial lung ventilation. Technique of artificial lung ventilation (mouth to mouth, mouth to nose, mouth to face mask).
61. Features of psychopathological disorders in extreme situations.
62. Psychogenic disorders observed during and after a disaster, classification and main clinical manifestations.
63. The main factors contributing to the onset and development of psychogenic disorders.
64. First aid and pre-hospital care measures for victims with psychogenic disorders.
65. Criteria for syndromic triage of victims.
66. Groups of victims with psychogenic disorders that are distinguished in medical triage.

### **1. 3.3 Control questions.**

1. Military medicine, its content.
2. The main tasks of the medical service of the Armed Forces of Ukraine, their content and significance.
3. Sanitary losses. Definition and classification.
4. The amount of sanitary losses, factors that affect their size.
5. The structure of sanitary losses, their dependence on the weapons used by the enemy.
6. Medical evacuation measures, concept and content.
7. The modern system of medical and evacuation measures, its essence and basic principles.

8. The stage of medical evacuation, definition of the concept, tasks, basic scheme of deployment.
9. Types and scope of medical care, definitions of concepts.
10. First aid, content of activities.
11. Pre-medical (paramedic) care, content of activities.
12. Medical triage, definition, purpose and types.
13. Medical triage of the wounded and sick at the stage of medical evacuation, definition of the concept, principles and requirements for its implementation.
14. Medical evacuation, definition, purpose and types.
15. Sanitary transport vehicles used for evacuation of the wounded and sick, their evacuation and transport characteristics.
16. Features of the organization and conduct of medical and evacuation measures in the elimination of the consequences of the use of weapons of mass destruction by the enemy.
17. The importance and place of sanitary and hygienic and anti-epidemic measures carried out in military units.
18. Sanitary supervision of accommodation, food, water supply, special equipment, bath and laundry services, working conditions.
19. Medical property, its classification. A set of medical equipment, definition of the concept and types.
20. Means for first aid, their medical and tactical characteristics.
21. Means for providing premedical care, their medical and tactical characteristics.
22. Assessment of the situation by elements. The procedure for assessing the enemy and their troops.
23. General conclusions from the assessment of the situation, their content.
24. Basic concepts and definitions: emergency situation; emergency situation in the interests of health; accident; catastrophe; natural disaster; massive losses among the population; epidemic; epizootic; epiphytotic;
25. Classification of emergencies by: origin; number of people affected; scale of spread.
26. Classification of transport disasters by: number of victims; sanitary and hygienic and environmental consequences;
27. Medical and tactical characterization of earthquakes: characterization of sanitary losses in earthquakes;
28. Medical and tactical characterization of fires: the main damaging factors of fires; characterization of sanitary losses during fires;
29. Medical and tactical characteristics of floods: primary and secondary consequences of floods.
30. Characterization of flood zones.
31. Characterization of sanitary losses during floods.
32. Units of measurement of ionizing radiation.
33. Classification of accidents at nuclear power plants:
34. Features of environmental contamination by radionuclides in the event of an accident at a nuclear power plant.
35. Characteristics of radioactive contamination zones in case of single and multiple releases.
36. Radiation safety standards.

37. Permissible levels of gamma radiation dose rates of various environmental objects.
38. Assessment of the severity of acute radiation sickness (ARS).
39. Principles of prevention of radiation damage.
40. Classification of means of protection of the population.
41. Personal respiratory protection equipment: the simplest means of respiratory protection; respirators; filtering gas masks; insulating gas masks, their purpose;
42. Purpose and use of the hopkalite cartridge.
43. The effect of filtering and insulating gas masks on the body.
44. Personal skin protection equipment: the simplest skin protection equipment; filtering skin protection equipment; insulating skin protection equipment, their purpose, time of protection against toxic substances;
45. Permissible periods of work in protective clothing of insulating type;
46. The effect of insulating protective clothing on the body.
47. Special treatment: decontamination; degassing; disinfection.
48. Full and partial sanitization, their characteristics.
49. Sanitation in case of contamination with radioactive substances and the procedure for its implementation.
50. Sanitation in case of contamination with toxic substances and the procedure for its implementation.
51. The main factors influencing the emergence and spread of infectious diseases in the disaster area.
52. Data for assessing the sanitary and hygienic condition of the population and areas of its location.
53. Assessment of sanitary and hygienic conditions in the disaster area.
54. Data to assess the sanitary and epidemiological situation in the disaster area.
55. Assessment of the sanitary and epidemiological situation in the disaster area.
56. Quarantine and observation, their organization in a disaster.
57. Measures taken during quarantine and observation.
58. Scheme of general emergency prophylaxis for unknown pathogen.
59. Causes and signs of soft tissue wounds.
60. Features of combat wounds.
61. Causes and signs of penetrating and non-penetrating chest wounds.
62. Pneumothorax: types, signs, medical care.
63. Causes and signs of penetrating and non-penetrating abdominal wounds.
64. Features of dressings for penetrating abdominal wounds.
65. Dressing in the presence of a foreign body in the wound.
66. Causes and signs of head, spine and pelvic injuries.
67. Technique of bandaging in case of injuries of the skull, eyes, ears, lower jaw.
68. Types of limb injuries (fractures: open and closed, sprains, dislocations), causes and signs.
69. Absolute signs of fractures.
70. Transfer of the wounded (injured) to a stable position.
71. Causes and signs of external bleeding.
72. The concept of critical external bleeding.
73. Techniques for stopping external bleeding: pressure on the wound, tamponade, pressure dressing (Israeli bandage), lifting the limb.

74. Hemostatic agents on the basis of gauze, technique of application.
75. Indications and techniques for applying various types of tourniquets and improvised tourniquets.
76. Indications and rules for the use of chemicals to stop bleeding.
77. Causes of airway obstruction.
78. Signs of complete and partial airway obstruction.
79. Techniques for ensuring airway patency (head tilt; lower jaw withdrawal, introduction of airways).
80. Removal of a foreign body from the airway of a pregnant woman, obese person, infant.
81. Devices for artificial lung ventilation. Technique of artificial lung ventilation (mouth to mouth, mouth to nose, mouth to face mask).
82. Features of psychopathological disorders in extreme situations.
83. Psychogenic disorders observed during and after a disaster, classification and main clinical manifestations.
84. The main factors contributing to the onset and development of psychogenic disorders.
85. Organization of medical care for psychogenic disorders.
86. Measures of first medical and pre-medical care for patients with psychogenic disorders.
87. Criteria for syndromic triage of victims.
88. Evacuation of victims with mental disorders to medical institutions.

### **3.4. Other incentives.**

For participation in student research conferences, in scientific research, in surveys, a student may receive additional points 1 - 10.

### **3.6. Rules for appealing the grade**

Appealing the grade is carried out in accordance with the regulation "On Appealing the Results of the Final Control of Students of Kharkiv National Medical University", order of 30.09.2020 №252.

### **3.5. Individual tasks** - not stipulated by the curriculum.

## **4. EDUCATIONAL COMPONENT POLICY.**

Students are expected to attend all lectures and practical classes. If they miss a class, they must make it up (according to the schedule on the department's information stand).

Written assignments must be completed in full and on time; if students have any questions, they can contact the teacher in person or by e-mail, which the teacher provides at the first practical lesson.

It is absolutely normal to ask questions to the lecturer during a lecture session. Active participation in classroom discussions is encouraged, and students should be prepared to understand the material in detail, ask questions, express their opinions, and discuss. Creativity in its various manifestations is encouraged. Students are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject area.

To successfully complete the relevant course, **you must:**

- regularly attend practical classes;
- have theoretical preparation for practical classes in accordance with the Theme;
- not to be late or miss classes;
- complete all the necessary tasks and work during each class;
- be able to work as part of a group;
- address the course curators on various issues related to the subject matter of the classes and receive an answer when you need it.

Students may discuss various assignments, but they are to be completed individually. Cheating, use of various software tools, hints, use of a cell phone, tablet or other electronic gadgets during class for purposes unrelated to the educational process are not allowed. Students are not allowed to be late for practical classes.

**Policy on persons with special educational needs.** The organization of inclusive education in higher education institutions is carried out in accordance with the order of KhNMU № 203 of 22.06.2018 "On approval of the procedure for accompanying (providing assistance) persons with disabilities, elderly people, and other low-mobility groups during their stay on the territory (in the premises) of KhNMU.

Students with special needs can meet with the teacher or warn him before the start of classes, at the request of the student, this can be done by the group leader. If the student has any questions, please contact the teacher.

All students of KhNMU are protected by the Regulations on prevention, prevention and settlement of cases related to sexual harassment and discrimination at Kharkiv National Medical University, which was developed to determine an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. This Regulation has been developed on the basis of the following legal acts of Ukraine: The Constitution of Ukraine; the Law of Ukraine "On Education"; the Law of Ukraine "On Higher Education"; the Law of Ukraine "On Principles of Preventing and Combating Discrimination in Ukraine"; the Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men"; the Convention for the Protection of Human Rights and Fundamental Freedoms; the Convention against Discrimination in Education; the Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation No. 25 to Article 4, paragraph 1, of the Convention on the Elimination of All Forms of Discrimination against Women; General Comment No. 16 (2005) on the Equal Right of Men and Women to the Enjoyment of Economic, Social and Cultural Rights (Article 3 of the International Covenant on Economic, Social and Cultural Rights; UN Committee on Economic, Social and Cultural Rights); Recommendations concerning Education for International Understanding, Cooperation and Peace and Education relating to Human Rights and Fundamental Freedoms (UNESCO); The concept of the State Social Program for Ensuring Equal Rights and Opportunities for Women and Men until 2021. Kharkiv National Medical University provides education and work free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (employees of the deans' offices, faculties, institutes and the Center for Gender Education, members of the educational self-government and ethics committee, Vice-Rector for Scientific and Pedagogical Work) shall keep confidentiality

of persons who report or are accused of discrimination or sexual harassment (except when the law requires disclosure of information and/or when disclosure by the University is necessary to protect the safety of others).

KhNMU creates a space of equal opportunities, free from discrimination on the basis of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender identity, or marital status. All rights, privileges, programs and activities provided to students or employees of the University are extended to all without exception, subject to proper qualifications. The anti-discrimination and anti-sexual harassment policy of KhNMU is confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

It is important for students to follow the rules of proper behavior at the university. These rules are common to everyone, they also apply to all faculty and staff, and do not fundamentally differ from generally accepted norms.

**During class, you are allowed to:**

- leave the classroom for a short time if necessary and with the permission of the of the teacher;
- drink soft drinks;
- take pictures of presentation slides;
- take an active part in the class.

**It is forbidden to:**

- Eat (except for persons whose special medical condition requires otherwise - in this case, medical confirmation is required);
- smoke, drink alcoholic and even low-alcohol beverages or drugs;
- use obscene language or words that offend the honor and dignity of colleagues and faculty;
- play gambling games;
- cause damage to the material and technical base of the University (damage inventory, equipment, furniture, walls, floors, litter the premises and territories);
- make noise, shout or listen to loud music in classrooms and even in the corridors during classes.

## **5. ACADEMIC INTEGRITY**

The Department of Disaster Medicine and Military Medicine maintain zero tolerance for plagiarism. Students are expected to constantly raise their awareness of academic writing. The first lessons will provide information on what to consider plagiarism and how to properly conduct research and scientific research

### **RECOMMENDED READING**

#### **Basic**

1. Standard of training I-ST -3 (edition 2): Training of military personnel in tactical medicine. - K.: MP Lesya, 2015. -148 p.
2. Training Standard: Professional training of a company (battery) sanitary instructor (edition 1) - K.: MP Lesya, 2015. 416 p.
3. Rumyantsev Y.V. Psychiatry of a special period: Textbook / 2nd ed.

4. Training Standard I - ST - 4: Individual training of servicemen in psychological training. 2015. -29 p.
5. M.A. Andreychyn, O.D. Krushelnytskyi, V.S. Kopcha, I.V. Ogorodnychuk Military epidemiology with epidemiology of emergencies textbook edited by Corresponding Member of the National Academy of Medical Sciences of Ukraine, Honored Worker of Science and Technology of Ukraine, Professor M.A. Andreychyn - Ternopil TSMU.
6. "Ukrmedkniga" 2015. 320 p.
7. Military medical training: a textbook for students of higher medical (pharmaceutical) educational institutions of Ukraine of I-IV accreditation levels / M. I. Badiuk [et al. - 2nd ed. - Kyiv: MP Lesya, 2016. - 481 p.

### **Auxiliary.**

1. Law of Ukraine "On Civil Defense of Ukraine", 1999.
2. Law of Ukraine "On the Civil Defense Troops of Ukraine".
3. Law of Ukraine "On Emergency Rescue Services", 1999.
4. The Law of Ukraine "On Protection of the Population and Territories from Technogenic and Natural Emergencies", 2000.
5. Law of Ukraine "On the State Material Reserve", 1997.
6. Law of Ukraine "On the Zone of Environmental Emergency".
7. Decree of the President of Ukraine of 02.09.1997. No. 937/97 "On Measures to Introduce a Unified System of Emergency Search and Rescue in Ukraine".
8. Decree of the President of Ukraine of 26.03.199. No. 284/99 "On the Concept of Protection of the Population and Territories in the Event of Threat and Emergency Situations".
9. Fundamentals of the organization of medical care for the population in emergency situations / Edited by V.V. Durdynets and V.O. Voloshyn - Kyiv: Medekol, 1999. 202 p.
10. Medical forces and institutions of the state service of disaster medicine. Methodical recommendations / Edited by V.O. Voloshyn. - Kyiv, 1998. - 39 p.
11. Medical supply of formations and institutions of the State Service of Disaster Medicine. Methodical recommendations. - Kyiv, 1999. - 162 p.
12. Planning of medical and sanitary support of the population of the administrative territory in case of emergencies. Methodical recommendations / Edited by V.O. Voloshyn. - Kyiv, 2000. - 102 p.
13. Moskalenko V.F., Voloshyn V.O., Rohach I.M. Organization of medical, preventive and sanitary-anti-epidemic measures in the elimination of flood consequences. - Uzhhorod, 2001. - 92 p.
14. TACTICAL MEDICINE. Study guide. Sumy. LLC "VPP "Fabryka Druku". 2016. - 175 p.
15. Military toxicology. Radiology and medical protection. YU. Skaletskyi. I.R. My-sula. Ternopil. "Ukrmedkniga 2003. 361 p.
16. Military field therapy. Textbook. A.V. Verba. Kyiv 2017. 615 p.

### **7. INFORMATION RESOURCES.**

1. Link to the page of the educational component in MOODLE  
<https://distance.knmu.edu.ua/course/view.php?id=779>

2. Official website of the President of Ukraine <http://www.president.gov.ua/>.
3. Verkhovna Rada of Ukraine <http://www.rada.gov.ua/>.
4. Cabinet of Ministers of Ukraine <http://www.kmu.gov.ua/>.
5. Ministry of Education and Science of Ukraine <http://www.mon.gov.ua/>.
6. Ministry of Ecology and Natural Resources of Ukraine <http://www.menr.gov.ua/>.
7. State Emergency Service of Ukraine <http://www.dsns.gov.ua/>.
8. National Security and Defense Council of Ukraine <http://www.rnbo.gov.ua/>.
9. Permanent Mission of Ukraine to the UN <http://ukraineun.org/>.
10. North Atlantic Alliance (NATO) <http://www.nato.int/>.
11. World Health Organization <http://www.who.int/en/>.
12. <http://www.bioethics.net>
13. <http://www.bioethics.as.nyu.edu>
14. <http://www.bioethics.ca>
15. <http://www.bioethics.ua>