

MINISTRY OF HEALTH OF UKRAINE
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Emergency and Urgent Health Care, Orthopedics and Traumatology
Academic year 2022-2023

SYLLABUS OF EDUCATIONAL DISCIPLINE

Training of reserve officers "**EXTREME MEDICINE**"
(name of the educational component)

Normative or selective educational component is selective

The form of education is full-time

Field of knowledge 22 "Health"

Specialty (specialization) 222 "Medicine"

Educational-professional program (educational-scientific program) SP 1.11

Educational-professional program (educational-scientific program) **The second**
(master's) level of higher education

Course 6

The syllabus of the discipline was considered at a meeting of the Department of Emergency and Urgent Health Care, Orthopedics and Traumatology

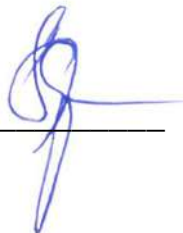
Protocol № 17 from 28.08.2019
Signature of the head of the department

Approved by the methodical commission of KhNMU on the problems of professional training of surgical profile

Protocol № 17 from
30.08.2019poky № 1
signature of the head of the methodical commission



Berezhka M.I.



Sypliv V. O.

Developers:

Assistant of the Department of Emergency and Urgent Health care, Orthopedics and Traumatology, Ph.D.
D.V. Lapshyn

Associate Professor of the Department of Emergency and Urgent Health care, Orthopedics and
Traumatology, Ph.D. Hryhoruk Viktoriia Volodymyrivna

Information about teachers

Hryhoruk Viktoriia Volodymyrivna - Associate Professor of the department of emergency and urgent health care, orthopedics and traumatology, Ph.D., specialization in orthopedics and traumatology, emergency medicine, yv.hryhoruk@knmu.edu.ua, 0997709972

Bitchuk Mykola Denysovych - Associate Professor of the department of emergency and urgent health care, orthopedics and traumatology, Ph.D., specialization in anesthesiology, emergency medicine, md.bitchuk@knmu.edu.ua 0673677219

Vlasenko Dmytro Vyacheslavovych - Assistant of the department of emergency and urgent health care, orthopedics and traumatology, Ph.D., specialization in orthopedics and traumatology, dv.vlasenko@knmu.edu.ua, 0633633332

Lapshyn Dmytro Vyacheslavovych - Assistant of the department of emergency and urgent health care, orthopedics and traumatology, Ph.D., specialization in orthopedics and traumatology, dv.lapshyn@knmu.edu.ua 0506815424

Litovchenko Andriy Viktorovych - Assistant of the department of emergency and urgent health care, orthopedics and traumatology, Ph.D., specialization in orthopedics and traumatology, av.litovchenko@knmu.edu.ua, 0509098141

Rami Al Masri A. F. - Assistant of the department of emergency and urgent health care, orthopedics and traumatology, Ph.D., specialization in orthopedics and traumatology, emergency medicine, am.rami@knmu.edu.ua 0638233917

Grishnyaeva Olena Volodymyrivna - Assistant of the department of emergency and urgent health care, orthopedics and traumatology, specialization psychiatrist, psychotherapist, psychologist, emergency medicine, ov.hrishniaieva@knmu.edu.ua 0501017966

Phone and e-mail of the department : tel. +380683931688 ,
kaf.nnipo.nevidkladnoimed+unsubscribe@knmu.edu.ua.

Full-time consultations: schedule and venue according to the schedule of the department.

Online consultations : schedule and venue by prior arrangement with the teacher.

Location: classes are held in the Kharkiv Regional clinical hospital 7, 8, 9 floors according to the schedule and on the basis of the stimulation center 4 on top of the ULK building.

INTRODUCTION

The syllabus of the discipline "**Extreme Medicine**" is compiled in accordance with the educational-professional program (hereinafter - OPP) "Medicine" and the Standard of Higher Education of Ukraine (hereinafter - Standard), the second (master's) level, areas of knowledge 22 "health", specialty "Medicine".

Description of the discipline (abstract).

Extreme medicine is a clinical discipline.

She studies ways to treat wounds, burns and closed injuries, as well as the organization and methods of treating the wounded at the stages of medical evacuation.

The feature of working in extreme conditions is the simultaneous arrival of a significant number of injured and / or injured at the stages of medical evacuation and a large amount of surgical work that must be performed in a short time. In these circumstances, it is not enough to know how to perform surgery, apply bandages, splints and transfuse blood. The main importance is the organization of work.

The success of treatment is largely determined by ensuring continuity and consistency at all stages.

The subject of study of the discipline is the organization of medical care for the injured and injured at the stages of medical evacuation, diagnosis and treatment of injuries of different localization and their complications.

The subject of the discipline is the organization of medical care for the injured and injured at the stages of medical evacuation, diagnosis and treatment of injuries of various localizations, poisoning, electric shock, reptile bites, insects, drowning and their complications.

Discipline status - selective discipline in a mixed **format** (accompanied by Moodle, teaching the discipline involves a combination of traditional forms of classroom learning with elements of e-learning, which uses special information, interactive technologies, online counseling, etc.

Interdisciplinary links:

Prerequisites and additional requirements for this discipline: The study of extreme medicine is based on the knowledge of students in the field of medical and biological physics, biological and bioorganic chemistry, physiology, pathomorphological disciplines, topographic anatomy and topographic surgery, general surgery and disintegration, surgery and surgery.

Post-requisites. The main provisions of the disciplines should be applied when studying related disciplines during 6 year of study in higher education programs in programs of the third educational and scientific levels of higher education.

Link to the discipline page in MOODLE <http://distance.knmu.edu.ua>

1. PURPOSE AND TASKS OF THE COURSE

1.1. **The purpose of studying the discipline** is to train a general practitioner who is able to provide medical care in extreme situations. Students must master the basics of medical care of wartime and emergencies, master the knowledge of the discipline and learn and practice practical skills and individual medical manipulations.

1.2 The tasks of studying the discipline are as follows:

- to determine the basic principles of organization and provision of medical care in extreme conditions in Ukraine;
- to master the skills of diagnosing emergencies at the scene as part of the emergency medical team (leader, participant) and the emergency department of a multidisciplinary hospital
- learn to recognize emergencies in the work of a dentist general practice outpatient clinic - family medicine, clinic, hospital department;
- learn to determine the protocol of emergency medicine, which best corresponds to the symptoms of the victim (patient);
- provide emergency medical care in accordance with the established protocol for emergency medicine with adequate manipulations.
- master the organizational principles of emergency medical care and peacetime emergencies;
- to study the sequence of actions of emergency medical teams in case of mass casualties;
- learn to conduct medical sorting of victims .

1.3. Competences and learning outcomes, the formation of which is facilitated by the discipline (relationship with the normative content of training of higher education, formulated in terms of learning outcomes in the OPP and Standard).

1.3.1. The study of the discipline provides students' mastery of competencies:

integral: the ability to solve complex problems and problems in extreme situations during the study of the discipline - this is an understanding of the algorithm of actions of emergency crews in providing emergency and urgent medical care at the scene, during transportation to a medical institution and in the emergency department.

Program competencies
<p>General Competences (GC):</p> <p>GC 1 - Ability to abstract thinking, analysis and synthesis, the ability to learn and be modernly trained.</p> <p>GC 2 - Ability to apply knowledge in practical situations.</p> <p>GC 3 - Knowledge and understanding of the subject area and understanding of professional activity.</p> <p>GC 4 - Ability to adapt and act in a new situation.</p> <p>GC 5 - Ability to make an informed decision; work in a team; interpersonal skills.</p> <p>GC 6 - Ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language.</p> <p>GC 7 - Skills in the use of information and communication technologies.</p> <p>GC 8 - Definiteness and persistence in terms of tasks and responsibilities.</p> <p>GC 9 - Ability to act socially responsibly and consciously.</p> <p>GC 10 - The desire to preserve the environment.</p>
<p>Professional competencies (PC):</p> <p>PC 1 - Survey skills</p> <p>PC 2 - Ability to determine the required list of laboratory and instrumental studies and evaluate their results</p> <p>PC 3 - Ability to establish a preliminary and clinical diagnosis of the disease</p> <p>PC 5 - Ability to determine the principles and nature of treatment of diseases</p> <p>PC 6 - Ability to diagnose emergencies</p> <p>PC 7 - Ability to determine tactics and skills of emergency medical care</p> <p>PC 8 - Ability to carry out medical and evacuation measures</p> <p>PC 9 - Skills to perform medical manipulations</p> <p>PC 14 - Ability to keep medical records</p>

Correspondence matrix of the program with competence to the components of the curriculum "EXTREME MEDICINE"

GC 1	GC 2	GC 3	GC 4	GC 5	GC 6	GC 7	GC 8	GC 9	GC 10	PC 1	PC 2	PC 3	PC 4	PC 5	PC 6	PC 7	PC 8	PC 9	PC 10	PC 11	PC 12	PC 13	PC 14	PC 15	PC 16	PC 17	PC 18	
Components																												
	+	+	+	+	+	+	+	+	+	+	+	+		+	+	+	+	+						+				

Detailing of competencies according to descriptors in the form of "Matrix of competencies".

1.3.2. The study of the discipline provides students with the acquisition of the following program learning outcomes:

Program learning outcomes (PLO)
<p>Knowledge and understanding:</p> <p>PLO 1 - acquisition by a person of general and special fundamental and professionally-oriented knowledge, skills, abilities, competencies necessary to perform typical professional tasks related to his / her activity in the medical field in the relevant position</p> <p>PLO 2 - knowledge of psychophysiological features of the person, human health, support of health, prevention of diseases, treatment of the person, health of the population</p> <p>Application of knowledge and understanding:</p> <p>PLO 3 - the ability to apply the acquired knowledge, skills and understanding to solve typical problems of the doctor, the scope of which is provided by lists of syndromes and symptoms, diseases, emergencies, laboratory and instrumental research, medical manipulations</p> <p>PLO 4 - collection of patient information</p>

PLO 5 - evaluation of survey results, physical examination, laboratory and instrumental research data

PLO 6 - establishing a preliminary clinical diagnosis of the disease

PLO 7 - determining the nature, principles of treatment of diseases

PLO 10 - diagnosing emergencies, determining the tactics of emergency medical care

PLO 13 - carrying out medical and evacuation measures

PLO 15 - performance of medical manipulations

PLO 17 - maintaining medical records, processing of state, social and medical information

Formation of judgments:

PLO 18 - the ability to assess the state of human health and provide its support taking into account the impact of the environment and other health factors

PLO 20 - the ability to apply the acquired knowledge of the existing health care system to optimize their own professional activities and participate in solving practical problems of the industry

PLO 21 - the formation of a specialist with appropriate personal qualities, who adheres to the code of ethics of the doctor

The matrix of providing program learning outcomes (PLO) with the relevant components of the educational program Extreme Medicine

SC 1,11	PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10	PLO 11	PLO 12	PLO 13	PLO 14	PLO 15	PLO 16	PLO 17	PLO 18	PLO 19	PLO 20	PLO 21
	Selective components																				
	+	+	+	+		+				+		+	+		+	+	+	+	+	+	+

1.3.3. The study of the discipline provides students with the following social skills (Softskills):

- communication skills;
- situational awareness;
- adaptability;
- be diplomatic and tactful.

2. INFORMATION SCOPE OF THE COURSE

Name of indicators	Field of knowledge, direction of training, educational and qualification level	Characteristics of the discipline
		full-time education
Number of credits - 4	Field of knowledge 22 "Health"	Normative
The total number of hours - 120	Specialty: 222 "Medicine"	Year of training:
		6 th
		Semester
		On 11-12
Hours for day (or evening) form of study: classroom lessons - 20 individual work of the student - 100	Education level: The second (master's) level	Lectures
		Practical
		20 h
		Laboratory
		0 h
		Individual work
		100 h
Individual tasks:		
Type of control: credit		

2.1 The content of the discipline

2.2.1 Lectures

№	Topics	Hours	Types of lectures
Total hours of lecture classes		0	

2.2.2 Seminars

№	Topics	Hours	Methods teaching	Forms control
Total hours		0		

2.2.3 Practical classes

№	Topics	Hours	Methods teaching	Forms control
1	Topic 1 “Organization of medical care for victims of emergencies and emergency medical care in Ukraine. Topic 2 The procedure for providing emergency medical care to victims at the pre-hospital stage.	5	story-explanation, presentation, videos, videos, discussion, business, role-playing, simulation game, modeling of processes and situations, project method, use of high-level mannequins	Current control: oral examination (individual and frontal); written survey; test control
2	Topic 3 Modern means of ensuring airway patency and ventilation (ventilation). Topic 4 Cardiopulmonary resuscitation.	5		
3	Topic 5 Emergencies of exogenous nature.	5		
4	Topic 5. Emergency care for traumatic injuries.	3		
	Credit	2		
Total hours		20		Final control: credit

2.2.4. Laboratory classes

№	Topics	Hours	Methods teaching	Forms control
Total hours		0		

2.2.5. Individual work

№	Topics	Hours	Methods teaching	Forms control
1	Topic 1 “ Organization of medical care for victims of emergencies and emergency medical care in Ukraine	5	project method, demonstration, presentation	Current control: self-control; report; declamation; abstracts; creative tasks
2	Topic 2 The procedure for providing emergency medical care to victims at the pre-hospital stage	5		
3	Topic 3 Modern means of ensuring airway patency and ventilation (ALV).	15		
4	Topic 4 Cardiopulmonary resuscitation.	10		
5	Topic 5 Emergencies of exogenous nature. Emergency care for traumatic injuries.	65		
Total hours		100		

3. EVALUATION POLICY

3.1. Evaluation of the success of education of students is carried out on the basis of the current "Instructions for evaluating the educational activities of students of KhNMU"

Current control is carried out at each practical lesson in accordance with the specific objectives of the topic. It is recommended to use types of objective (standardized) control of theoretical and practical training of students.

The maximum grade is 5.

Assessment of current learning activities is carried out in the classroom using standard methods of control; when mastering each topic for the current educational activities of the student, grades are set on a four-point traditional scale, which are then converted into points.

Based on the results of mastering each practical lesson, a grade is given using a 4-point system. The average score is calculated, which is translated into points on a scale

Table 1

Recalculation of the average score for current activities in a multi-point scale (for disciplines ending with 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 than 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		

Correspondence of scores on the 200-point scale, four-point (national) scale and the ECTS scale

Rating on a 200-point scale	Rating on a ECTS	Score for four-point (national) scale
180–200	A	Відмінно
160–179	B	Добре
150–159	C	Добре
130–149	D	Задовільно
120–129	E	Задовільно
Less than 120	F, Fx	Незадовільно

3.2. Test questions:

1. Emergency. Definition, classification by causes and levels of response.
2. Medical sorting. Types and tasks.
3. Sorting team. Composition and procedure. Sorting features.
4. The purpose and order of actions of emergency brigades (EB) in the center of mass destruction. Interaction with rescue services. Communication with the database.
5. Organization of a medical sorting zone, a medical care zone (medical point) and a transport zone (evacuation).
6. Primary medical sorting according to the START system for adults and the Jump system for START children.
7. Secondary medical sorting in the medical point (on the scales of GLASGO, blood pressure and respiratory rate).
8. Features of emergency care for victims of mass casualties.
9. Features of the organization of medical care for victims in the centers of chemical, radiation and biological damage.
10. The role of Centers for Emergency Medicine and Disaster Medicine in providing medical care to victims of emergencies.
11. The role of emergency care departments ("Emergency Department") to optimize hospitals provide medical care to victims of mass destruction.
12. Organizational structure, main tasks and functions of the station, substation and ambulance department.
13. The main tasks, functions, rights and responsibilities of EB.
14. The main tasks, functions, rights and responsibilities of the doctor, paramedic (nurse) of the station (department) of ambulance.
15. The main tasks, functions, rights and responsibilities of the senior medical officer on duty and the senior doctor of the ambulance station.
16. The concept of the hospitalization department, advisory and information service, replenishment point of outreach teams and advisory telemetry center of the ambulance station.
17. Table of uniforms of employees of the ambulance station and the point (department) of emergency medical care.
18. Equipment of EB.
19. The concept of the point (department) of emergency medical care for the adult population, for children.
20. The main tasks, functions, rights and responsibilities of the doctor of the visiting team of the point (department) of emergency medical care for the adult population.
21. The main tasks, functions, rights and responsibilities of the pediatrician of the visiting team of the point (department) of emergency medical care for children.
22. Equipping the point (department) of emergency medical care for adults and children.
23. Equipping the team of the point (department) of emergency medical care for adults and children.
24. Purpose, ethical, deontological and legal aspects of providing emergency medical care at the prehospital stage.
25. Inspection of the scene, ensuring the personal safety and security of the victim, approaching the victim.
26. The work of members of the resuscitation team in a team.
27. Initial examination of the victim according to the algorithm DRCABDE.

28. Secondary examination of the victim.
29. Communication of the team with the main base, report on the clinical situation.
30. Pre-access, ECG monitoring, pulse oximetry, blood pressure measurement, glucometer, assessment of the victim's pupil response to light.
31. Assessment of consciousness of patients and victims on the GLASGO scale.
32. Features of transportation of patients and victims.
33. The order of actions of the visiting ambulance crew at the scene.
34. Pathogenesis, clinic, diagnosis and treatment of airway obstruction.
35. Ensuring airway patency of the victim.
36. Revision and cleaning of the oral cavity by manual and hardware methods. Use of an oropharyngeal tube, ventilation of lungs of the patient through a mask with use of the manual device for artificial lung ventilation (Ambu), supply of oxygen.
37. Use of the nasopharyngeal tube.
38. Indications and technique of intubation of the patient.
39. Application of alternative methods to ensure airway patency with a laryngeal mask, laryngeal tube, Combitube.
40. Heimlich's maneuver.
41. Indications and technique of conic puncture.
42. Artificial lung ventilation using hardware methods.
43. Diagnosis of sudden death.
44. Technology of cardiopulmonary resuscitation in ventricular fibrillation, ventricular tachycardia, pulseless electrical activity, asystole.
45. Diagnosis of causes of cardiac arrest that can be eliminated.
46. Technique of express ECG registration during resuscitation.
47. Defibrillation technique.
48. Indirect heart massage technique.
49. Indications and technique of direct heart massage.
50. Medical correction of possible causes of cardiac arrest.
51. Post-resuscitation support.
52. Emergency care for drowning.
53. Emergency care for heat stroke.
54. Emergency care for thermal and chemical burns.
55. Emergency care for respiratory burns.
56. Emergency care for hypothermia and frostbite.
57. Emergency care for electric shock.
58. Emergency care for snake bites.
59. Emergency care for allergic reactions.
60. Emergency care for anaphylactic shock.
61. Emergency care for traumatic brain injury.
62. Diagnosis and therapeutic management of spinal injuries.
63. Diagnosis and medical management of injuries of the chest and the chest cavity.
64. Diagnosis and therapeutic management of pneumothorax and hemothorax.
65. Emergency care for cardiac tamponade.
66. Emergency care for pulmonary hemorrhage.
67. Diagnosis and medical management of injuries of the abdomen.
68. Diagnosis and medical management of injuries of the pelvis and pelvic organs.
69. Diagnosis and therapeutic management of skeletal trauma.
70. Diagnosis and therapeutic management of multiple trauma.
71. Diagnosis and treatment tactics syndrome lasting compression and crushing.
72. Emergency care for external and internal bleeding.
73. Diagnosis and therapeutic management of traumatic shock.
74. Diagnosis and therapeutic management of hemorrhagic shock.
75. Algorithm of actions of the ambulance crew in case of a traffic accident.

3.3. control questions

1. Thermal cold injury.

2. Diagnosis and treatment at the stages of medical evacuation.
3. Medical sorting.
4. Primary medical sorting according to the START system for adults and the Jump system for START children.
5. Procedure of emergency brigades in the center of mass destruction. Interaction with rescue services. Communication with the database.
6. Secondary medical sorting in the medical point (on the scales of GLASGO, blood pressure and respiratory rate).
7. Inspection of the scene, ensuring the personal safety and security of the victim, approaching the victim.
8. Initial examination of the victim according to the algorithm DRCABDE.
9. Secondary examination of the victim.
10. ECG monitoring.
11. Pulse oximetry.
12. Measurement blood pressure.
13. Measurement blood glucose.
14. Assessment of the reaction of the victim's pupils to light.
15. Assessment of consciousness of patients and victims on the GLASGO scale.
16. Features of transportation of patients and victims.
17. The order of actions of the visiting ambulance crew at the scene.
18. Ensuring airway patency of the victim.
19. Revision and cleaning of the oral cavity by manual and hardware methods. Use of an oropharyngeal tube, ventilation of lungs of the patient through a mask with use of the manual device for artificial lung ventilation (Ambu), supply of oxygen.
20. Use of the nasopharyngeal tube.
21. Indications and technique of intubation of the patient.
22. Application of alternative methods to ensure airway patency with a laryngeal mask, laryngeal tube, Combitube.
23. Heimlich's maneuver.
24. Artificial lung ventilation using apparat methods.
25. Technology of cardiopulmonary resuscitation in ventricular fibrillation, ventricular tachycardia, pulseless electrical activity, asystole.
26. Indirect heart massage technique.
27. Indications and technique of direct heart massage.
28. Emergency care for drowning.
29. Emergency care for heat stroke.
30. Emergency care for thermal and chemical burns.
31. Emergency care for respiratory burns.
32. Emergency care for hypothermia and frostbite.
33. Emergency care for electric shock.
34. Emergency care for snake bites.
35. Emergency care for allergic reactions.
36. Emergency care for anaphylactic shock.
37. Emergency care for traumatic brain injury.
38. Diagnosis and therapeutic management of spinal injuries.
39. Diagnosis and medical management of injuries of the chest and the chest cavity.
40. Diagnosis and therapeutic management of pneumothorax and hemothorax.
41. Emergency care for cardiac tamponade.
42. Emergency care for pulmonary hemorrhage.
43. Diagnosis and medical management of injuries of the abdomen.
44. Diagnosis and medical management of injuries of the pelvis and pelvic organs.
45. Diagnosis and therapeutic management of skeletal trauma.
46. Diagnosis and therapeutic management of multiple trauma.
47. Diagnosis and treatment tactics syndrome lasting compression and crushing.
48. Emergency care for external and internal bleeding.

49. Diagnosis and therapeutic management of traumatic shock.
50. Diagnosis and therapeutic management of hemorrhagic shock.
51. Algorithm of actions of the ambulance crew in case of a traffic accident.

3.4. Individual tasks (the list approved at the meeting of the department with the determination of the number of points for their performance, which can be added as incentives):

1. Medical sorting.
2. Primary medical sorting according to the START system for adults and the Jump system for START children.
3. Secondary medical sorting in the medical point (on the scales of GLASGO, blood pressure and respiratory rate).
4. Indications and technique of conic puncture.
5. Artificial lung ventilation using hardware methods.
6. Medical correction of possible causes of cardiac arrest.
7. Post-resuscitation support.
8. Emergency care for drowning.
9. Emergency care for heat stroke.
10. Emergency care for thermal and chemical burns.
11. Emergency care for respiratory burns.
12. Emergency care for hypothermia and frostbite.
13. Emergency care for electric shock.
14. Emergency care for snake bites.
15. Emergency care for allergic reactions.
16. Emergency care for anaphylactic shock.
17. Emergency care for traumatic brain injury.
18. Diagnosis and therapeutic management of spinal injuries.
19. Diagnosis and medical management of injuries of the chest and the chest cavity.
20. Diagnosis and therapeutic management of pneumothorax and hemothorax.
21. Emergency care for cardiac tamponade.
22. Emergency care for pulmonary hemorrhage.
23. Diagnosis and medical management of injuries of the abdomen.
24. Diagnosis and medical management of injuries of the pelvis and pelvic organs.
25. Diagnosis and therapeutic management of skeletal trauma.
26. Diagnosis and therapeutic management of multiple trauma.
27. Diagnosis and treatment tactics syndrome lasting compression and crushing.
28. Emergency care for external and internal bleeding.
29. Diagnosis and therapeutic management of traumatic shock.
30. Diagnosis and therapeutic management of hemorrhagic shock.
31. Algorithm of actions of the ambulance crew in case of a traffic accident.

3.5. Rules for appealing the assessment

Rules for appealing the assessment: if the student does not agree with the assessment, he or she may reschedule the discipline of the commission. If a student is unable to answer the commission's questions, his or her grade may be reduced.

Discipline policy and values.

In order to successfully complete the relevant course, it is necessary to regularly attend practical classes; to have theoretical preparation for practical classes according to the subject; not to be late and not to miss classes; perform all necessary tasks and work in each lesson; be able to work with a partner or in a group; contact the curators of the course on various issues on the subject of classes and receive it when you need it.

Students can discuss different tasks, but their performance is strictly individual. You are not allowed to write off, use various software, tips, use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the educational process. Students are not allowed to be late for practical classes.

Visiting patients during curation is possible if students have appropriate clothing, a health book with a diphtheria vaccination note, the results of a measles immunity test (or a vaccination mark), or other infectious diseases according to the current epidemic situation.

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

Students are encouraged to participate in research and conferences on this topic. The student can earn additional points for participation in writing abstracts or preparing an abstract and its defense in class (2 points), active participation in the discussion of topics (1 point per topic). In total, no more than 10 points per discipline.

All students of KNMU are protected by the Regulations on Prevention, Prevention and Settlement of Cases Related to Sexual Harassment and Discrimination at Kharkiv National Medical University, designed to determine an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. on the basis of the following normative legal acts of Ukraine: the Constitution of Ukraine; Law of Ukraine "On Education"; Law of Ukraine "On Higher Education"; Law of Ukraine "On Principles of Prevention and Counteraction of Discrimination in Ukraine"; Law of Ukraine "On Ensuring Equal Rights and Opportunities for Women and Men"; Convention for the Protection of Human Rights and Fundamental Freedoms; Convention for the Suppression of Discrimination in Education; Convention on the Elimination of All Forms of Discrimination against Women; General Recommendation № 25 to Article 4, paragraph 1, of the Convention on the Elimination of All Forms of Discrimination against Women, General Comment № 16 (2005) "Equal rights for men and women to enjoy economic, social and cultural rights" (Article 3 of the International Covenant on Economic, Social and Cultural Rights) Cultural Rights; UN Committee on Economic, Social and Cultural Rights); Recommendations on Education for International Understanding, Cooperation and Peace and Education for Human Rights and Fundamental Freedoms (UNESCO); Concept of the State Social Program for Equal Rights and Opportunities for Women and men for the period up to 2021. Kharkiv National Medical University provides education and work that is free from discrimination, sexual harassment, intimidation or exploitation. The University recognizes the importance of confidentiality. All persons responsible for the implementation of this policy (staff of deans, faculties, institutes and the Center for Gender Education, members of the student government and ethics committee, vice-rector for research and teaching) are confidential about those who report or accuse of discrimination. or sexual harassment (except where the law requires disclosure of information and / or when disclosure by the University is necessary to protect the safety of others).

KNMU creates a space of equal opportunities free from discrimination of any national, racial or ethnic origin, sex, age, disability, religion, sexual orientation, gender, or marital status. All rights, privileges, programs and activities granted to students or staff of the University apply to all without exception, provided they are properly qualified. The anti-discrimination policy and the policy of counteracting sexual harassment of KNMU are confirmed by the Code of Corporate Ethics and the Charter of KNMU.

Safety precautions. Classes under quarantine will be conducted remotely. Elimination of academic debts allowed with the permission of the university administration in compliance with the mask regime, social distance, the presence of gloves.

5. ACADEMIC INTEGRITY

The Department of Emergency and Urgent Health care, Orthopedics and Traumatology maintains 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.

Individual tasks

If necessary, improve the assessment by preparing a report and abstracts on the topic of the lesson. The list of individual tasks (participation with reports in student conferences, profile Olympiads, preparation of analytical reviews with presentations with plagiarism testing) with the definition of the number of points for their performance, which can be added as incentives (not more than 10).

Points for individual tasks are awarded to the student only once as a commission (commission - head of the department, head teacher, group teacher) only if they are successfully completed and defended (not more than 10). In no case may the total amount of points exceed 120 points.

Elimination of academic debt (practice) in the presence of not more than 2 passes the student can work them to his or the next teacher. Lectures are practiced by the lecturer (at the time appointed by the lecturer in the form of defense of the abstract on the topic of the lecture). If the debt exceeds 2 classes, or the student did not have time to work before the end of the discipline, then an individual work schedule is developed, but not more than 1 topic per work.

6. Recommended books

1. Emergency and emergency medical care in questions and answers: a textbook / M. I. Shved [etc.]; ed. M. I. Swede. - Ternopil: Ukrmedkn., 2018. - 311 p. : табл. - Bibliogr. : p. 306-311. -NNMBU code: B-9762.
2. Home care in extreme situations and medical protection of the population in emergencies: Textbook for training specialists of the first (educational and professional) level, field of knowledge 22 "Health", specialty 227 "Physical therapy, occupational therapy" (1 course) (for general editorship of Volyansky P. B. and Grinzovsky A. M.) / Grinzovsky A. M., Volyansky P. B., Kalashchenko S. I. etc.]. - Kyiv: IDUTS, 2018. - 216 p.
3. Home care in emergencies: (Practical guide) Volyansky P. B., Guriev S. O., Dolgy M. L., Drozdenko N. V., Iskra N. I., Makarenko A. M., Stryuk M. P., Terentieva A. V. Kh. : Panov A. M., Kyiv - 2016. - 151 p.
4. Military epidemiology with the epidemiology of emergencies: a textbook, ed. M. A. Andreychin. - Ternopil: TSMU, 2015. - 320 p.
5. Order of the Director of the Military Medical Department of the Ministry of Defense of Ukraine dated 24.02.2017 №3 "On approval of the Temporary Procedure for the organization of emergency (emergency) medical care in the Armed Forces of Ukraine."

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7. INFORMATION RESOURCES

1. http://moz.gov.ua/ua/portal/dn_20160223_0121.html.
2. http://5ka.at.ua/load/medicina_ta_zdorov_39_ja/persha_domedichna_dopomoga_vum_ovakh_nadzvichajnikh_situacijakh_pri_opikakh_obmorozhenni_udushenni_refer_at/37-1-0-20950
3. www.mil-surgery.com/lections.php

8. OTHER

Topic 1 " **Organization of medical care for victims of emergencies in Ukraine.**"

The concept of peacetime emergencies. Medico-tactical characteristics of natural and technogenic emergencies.

Interaction with rescue services. Organization of a medical sorting zone, a medical care zone (medical point) and a transport zone (evacuation). Primary medical sorting according to the START system for adults and the Jump START system for children. Features of the organization of medical care in the centers of chemical, radiation and biological damage. The concept of specialized brigades of constant readiness of the second turn, mobile field brigades, their formation and tasks.

Organizational structure, main tasks and functions of the station, substation and ambulance department. The main tasks, functions, rights and responsibilities of the ambulance crew, doctor, paramedic (nurse) of the station (department) of ambulance, senior duty officer and senior doctor of the ambulance station. The concept of the hospitalization department, advisory and information service, replenishment point of field teams and advisory telemetry center of ambulance station. Table of uniforms of employees of the

ambulance station and the point (department) of emergency medical care. Equipping the field ambulance crew.

Topic 2 The procedure for providing emergency medical care to victims at the pre-hospital stage.

Purpose, ethical, deontological and legal aspects of emergency medical care for victims in the prehospital stage. Inspection of the place of emergency, ensuring the personal safety of medical staff and the safety of the victim, approaching the victim. The work of members of the resuscitation team in a team. Initial examination of the victim (DRABCDE - determination of airway patency with immobilization of the head and cervical spine, assessment of respiration, blood circulation, control of profuse bleeding , oxygen inhalation). Decision-making on the need for secondary examination of the victim, his fast loading and transportation (" Load and Go "), local examination. Categories of victims that are subject to secondary inspection, rapid loading and transportation and local examination. Secondary examination (examination of the victim "from head to toe", history taking, complaints, allergic reactions, medication, illness, last meal, immunization against tetanus, alcohol consumption, clarification of the circumstances in which the lesion occurred). Communication of the team with the main base, report on the clinical situation. Pre-access, ECG monitoring, pulse oximetry, blood pressure measurement, glucometer, evaluation of the pupil's response to light in the victim. Assessment of consciousness on the Glasgow scale. Features of transportation of patients and victims (laying on a board, soft stretchers, stretcher-chair, wearing of a neck collar, an immobilization vest). Mandatory actions of the on-site ambulance crew at the scene.

Topic 3 Modern means of ensuring airway patency and ventilation (ALV).

Pathogenesis, clinic, diagnosis and treatment of airway obstruction. Ensuring airway patency by tilting the head back or pushing the lower jaw forward. Revision and cleaning of the oral cavity by manual and hardware methods. Use of an oropharyngeal tube, ventilation of lungs of the victim through a mask with use of the manual device for artificial lung ventilation (Ambu), supply of oxygen. Use of the nasopharyngeal tube. Indications and technique of intubation of the victim. The use of alternative methods to ensure airway patency with a laryngeal mask, laryngeal tube, Combitube. Heimlich's maneuver. Indications and technique of conic puncture. Artificial lung ventilation using hardware methods.

Topic 4 Cardiopulmonary resuscitation.

Diagnosis of sudden death. Classification and assessment of heart rate. Technology of cardiopulmonary resuscitation in ventricular fibrillation, ventricular tachycardia, pulseless electrical activity, asystole. Diagnosis of the causes of cardiac arrest that can be eliminated - four "H": hypoxia, hypovolemia, hyper / hypokalemia, hypomagnesemia, acidosis, hypothermia; four "T" : tension pneumothorax, cardiac tamponade, thromboembolism, toxic overdose. Technique of express ECG registration during resuscitation. Defibrillation technique. Indirect heart massage technique. Indications and technique of direct heart massage. Medical correction of possible causes of cardiac arrest. Post-resuscitation support.

Topic 5 Emergencies of exogenous nature. Emergency care for traumatic injuries.

Drowning. Heatstroke. Thermal and chemical burns. Respiratory burns. Hypothermia. Freezing. Electrotrauma. Snake bites. Emergency care for allergic reactions. Anaphylactic shock.

Traumatic brain injury. Spinal cord injury. Chest and organ injury. Pneumo- and hemothorax. Cardiac tamponade. Pulmonary hemorrhage. Injury of the abdominal cavity.

Damage to the pelvis and pelvic organs. Skeletal trauma. Polytrauma. Long-term compression and crush syndrome. External and internal bleeding. Traumatic shock. Hemorrhagic shock. Algorithm of actions of the ambulance crew in case of a traffic accident