MINISTRY OF HEALTH OF UKRAINE KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Disaster Medicine and Military Medicine

Academic year 2021-2022

SYLLABUS OF EDUCATIONAL COMPONENT

« Life Safety and fundamentals of bioethics. » «Life Safety.»

(name of educational component)

Normative educational componer

Form of education:	Full-time	/distance	
	· · · · · · · · · · · · · · · · · · ·	extramural; distance)	
Branch of knowledge:	22 He	alth	
<u> </u>		e of branch of knowledge)	
Specialty		_ Nursing	
1 2		name of specialty)	
•		cational and scientific program) «Nurs	sing»
		me to ver or memor education	
Course 1 (4 years of study)			
Syllabus of educational cor	-	Approved by the methodological	

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

Protocol from

«<u>31</u>» <u>August</u> 2021 № <u>2</u>

Head of Department

S. G. Demyanik

(signature) (initials, name)

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

Protocol from «<u>31</u>» <u>August</u> 2021 № 1 Head of comission

Prof. O.Y.Vovk

(signature) (initials, name)

SYLLABUS DEVELOPERS

- 1. Demyanik S. G., Head of Department of Disaster Medicine and Military Medicine; 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.

INFORMATION ABOUT TEACHERS OF THE EDUCATIONAL COMPONENT

Name, initials of the teacher	Position, academic title, scientific	Professional interests	Link to teacher profile
of the teacher	degree		
Aksakov	Senior teacher of	Qualification "Doctor";	E-mail: of.aksa-
Alexander	Department of	Specialty "Medicine";	kov@knmu.edu.ua
Frantsevich	Disaster Medicine	Specialization "Ther-	Phone: +38 095 883 53 49
	and Military Med-	apy", "Infectious dis-	
	icine	eases"; "Organization	
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	and Military Med-	apy"; "Organization	
	icine	and manage-ment of	
		Health Care".	

Consultations: <u>according to the teacher's schedule</u>; <u>classes of the Department of Disaster Medicine and Military Medicine.</u>

Online consultations: Google Meet, KhNMU distance platform_Moodle, ZOOM according to the schedule; https://distance.knmu.edu.ua/course/view.php?id=779_

Location: <u>classes are held at the Department of Disaster Medicine and of military medicine of KhNMU</u>, at the address: <u>Kharkiv</u>, str. <u>Trinkler</u>, <u>12</u>.

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INTRODUCTION

Syllabus of the educational component "Life safety and fundamentals of bioethics" is compiled in accordance with the Educational and Professional Program (hereinafter - EPP) "Nursing" and the Standard of Higher Education of Ukraine (hereinafter - Standard), the first (bachelor's) educational and scientific level of higher education, field of knowledge 22 "Health Care", specialty 223 "Nursing".

Description of the academic discipline (abstract)

The program of studying the discipline "Life safety and fundamentals of bioethics" is intended for higher education institutions of the Ministry of Health of Ukraine in accordance with the requirements of the ECTS credit-transfer system for the organization of the educational process, based on a combination of learning technologies by sections and credit assessment credits - units of measurement of the student's educational load necessary for mastering a discipline or its section.

The subject of the educational component is life safety and the basics of bioethics. Relationships between educational components:

The study of the educational component "Life safety and basics of bioethics" is carried out in the I or II semester's of the first 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, foreign language with a professional orientation, philosophy and is integrated with these educational components. It creates the basis for further study of clinical and hygienic educational components. It lays the foundation 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 of students of all specialties (medical care, pediatrics, dentistry, medical preventive care, medical psychology and pharmacy) for work in the health care system. According to the curriculum, the educational component "Life safety and basics of bioethics" is studied by first-year students and is based on the knowledge of the main natural science educational components: medical biology, human anatomy, normal physiology, basics of ecology and is integrated with the relevant programs.

Post-requisites. The main provisions of the educational component should be applied in the study of related disciplines throughout the entire period of study, and are also the basis for preparing for the USQE licensing exam, preparation for study in higher education institutions in programs of the third educational and scientific level of higher education.

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

1. PURPOSE AND OBJECTIVES OF THE EDUCATIONAL DISCIPLINE

- **1.1**. The purpose of studying the educational component is the theoretical and practical training of students in "Life Safety and fundamentals of bioethics", which includes:
- acquisition of knowledge, skills and competencies to preserve human health and life in modern living conditions;
- acquisition of knowledge, skills and competencies to protect against hazards of manmade, anthropogenic, natural origin and create comfortable conditions for human life;
- formation of knowledge on legal and organizational aspects of occupational health and safety of medical workers;

- formation of the basics of a healthy lifestyle and prevention of dangerous situations in the professional activity of a future doctor;
- formation of knowledge about legislative documents that protect the individual, society and humanity as a whole from undesirable and harmful consequences of the introduction of new medical and biological technologies into practice, fostering a deep conviction in the need to strictly observe ethical and moral norms, rules and principles in their practical activities;
- forming the ability to assess the latest achievements of biology and medicine in terms of determining the degree of their danger to humans and society today and in the future.

1.2. The main objectives of the educational component are:

- analysis and assessment of hazardous situations;
- •independent decision-making on the development and use of means of protection against hazards in the event of extreme situations;
- •use of the regulatory framework for the protection of people and the environment;
- •development of measures and means of protection against the effects of dangerous and harmful factors;
- •forecasting and preventing emergencies, and in case of their occurrence, taking decisive measures aimed at their elimination;
- •use in their future practical activities of legal, technical, environmental, preventive, educational and upbringing measures aimed at ensuring healthy and safe conditions for human existence in modern conditions;
- •knowledge of legal and organizational aspects of occupational health and safety of healthcare workers.
- **1.3.** Competencies and learning outcomes contributed to by the educational component (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 master **competencies:**

integral:

Ability to solve typical and complex specialized tasks and solve practical problems in professional activities in the field of health care, or in the process of study, which involves research and/or innovation and is characterized by complexity and uncertainty of conditions and requirements.

General:

Ability to realize 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.

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.

Ability to communicate in the state language both orally and in writing.

Ability to communicate in a foreign language.

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.

Ability to act on the basis of ethical considerations.

Professional competencies:

Ability to apply professional and legal standards in everyday professional practice.

Ability to recognize and interpret signs of health and its changes, illness or disability (assessment/diagnosis), limitations of the possibility of valuable life and identify patients' problems with various diseases and conditions.

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 individualized care plans created in collaboration with the patient / client, caregivers, family members and other health and social workers.

Application of professional skills (abilities), medical means, interventions and actions to ensure the patient/client's dignity, privacy (intimacy), confidentiality, protection of their rights, physical, psychological and spiritual needs on the basis of transcultural nursing, tolerant and non-sane behavior.

Ability to effectively apply a set of nursing skills (abilities), medical means, 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.

Ability to effectively apply a set of professional skills (abilities), medical means, interventions and actions in assessing the functional state of patients/clients, preparing them for diagnostic studies and collecting biological material for laboratory research.

Preservation of the professional's own health when providing care, performing manipulations and procedures, moving and transporting a 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 and manage the relevant structural unit (leadership and management).

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

PLO 4 - Monitor the work of nursing staff and the state of inventory.

In the conditions of health care facilities (HCF), in accordance with job responsibilities, in order to comply with the sanitary and epidemiological regime, to be able to

- train junior medical staff on the performance of functional duties and occupational safety; monitor compliance with safety regulations by junior medical staff;
- supervise 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 order to implement organizational and managerial competencies in the health care

facilities, to be able to:

- make management decisions, ensure their implementation based on the application of nursing management 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 institutions, laboratories of various profiles, etc.
 - PLO 6 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 microclimate, 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 mistakes in the team; conduct training for junior and technical staff.
- PLO 7 Participate in the provision of observation of healthy and ill population, rehabilitation and dispensary supervision.

In health care facilities, 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 adults and children, 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.
- **1.3.3** The study of the educational component ensures that students acquire the following social skills (**Soft skills**):
- communication skills (realized through: the method of working in pairs and groups, brainstorming, self-presentation method),
- teamwork (realized through: project method, openwork tiles),
- conflict management (implemented through: dramatization method, game methods),
- time management (realized through: project method, group work, trainings),
- leadership skills (realized through: group work, project method, method of
- self-presentation),
- sports development and effective recreation (realized through: various types and forms of physical activity for active recreation and healthy lifestyle),
- empathy (realized through: respect for the opinions and ethical considerations, appearance and behavior of other people),
- stress resistance (realized through: working in a group with representatives of other professional groups of different levels and ages in unforeseen circumstances and situations).

2. INFORMATION VOLUME OF THE EDUCATIONAL DISCIPLINE

Names of indices	Branch of knowledge, spe-	Characteristic	es of the academic
	cialty, educational degree, EPP	dis	cipline
		Full-tim	e education
Number of credits – 1,5	Educational program of training of specialists of the first (bachelor's) level of higher education in the following specialties 22 «Health Care»	<u>Noi</u>	<u>rmative</u>
	Specialty	Year o	f training:
Total number of hours – 45	223 "Nursing"	<u>First</u>	
		Sei	nester
		First - Second	
		Le	ctures
Hours for full-time (or even-	Educational degree:	10 hours	
ing) study:	First (bachelor's) level of	Practical, s	eminar
classroom – 20 independent work of the stu-	higher education	10 hours	
dents – 25		Labo	ratory
dents 20	EPP:	0 hours	
	"Nursing"	Independ	lent work
	_	25 hours	
		Individ	lual tasks:
		0 hours	
		Kind of final	control: Credit

2.1 Description of the discipline.

2.1.1. Lectures.

No	Name of the topic	Number of hours	Kinds of lec- tures
1.	Theoretical foundations of life safety.	2	Auditorium/ distance
2.	Ensuring the safety of human life.	2	Auditorium/ distance
3.	Natural hazards, the nature of their manifestations and impact on people and objects of the economy. Protection of the population from harmful and dangerous factors.	2	Auditorium/ distance
4.	Man-made hazards and consequences of their action. Typology of accidents at potentially hazardous objects. Protection of the population from harmful and dangerous factors.	2	Auditorium/ distance
5.	Socio-political dangers, their types and features. Social and psychological risk factors. Algorithm of protective behavioral reactions.	2	Auditorium/ distance
	Total hours	10	

2.2.2 Seminar lessons.

Nº	Topic name	Number of hours	Methods of teaching	Forms of control
1.	Man in the system "Man - external environment". The value of the external environment in the system "Man - external environment".	2	Story - explana- tion, presentations	Current control: oral survey, test con- trol, abstracts, reports
2.	Ensuring the safety of human life	2	Story - explana- tion, presentations	Current control: oral survey, test con- trol, abstracts, reports
3.	Natural hazards, the nature of their manifestations and effects on people and objects of the economy. Protection of the population from harmful and dangerous factors.	2	Story - explana- tion, presentations	Current control: oral survey, test con- trol, abstracts, reports
4.	Man-made hazards and consequences of their action. Typology of accidents at potentially hazardous objects. Protection of the population from harmful and dangerous factors.	2	Story - explanation, presentations	Current control: oral survey, test con- trol, abstracts, reports
5.	Safety of nutrition as a component of safe human life	1	Story - explanation, presentations	Current control: oral survey, test con- trol, abstracts, reports
	Final module controle. Total number of hours	1 10		Test control.
	Total number of nours	10		

- **2.2.3. Practical lessons** Practical classes are not provided by the program.
- **2.2.4.** Laboratory lessons Laboratory classes are not provided by the program.

2.2.5. Independent work.

№	Topic name	Number of hours	Methods of teaching	Forms of control
1.	Theoretical foundations of life safety.	3	Independent work	Survey in writing; test control during practical lesson.
2.	Man in the system "Man - external environment". The value of the external environment in the system "Man - external environment".	3	Independent work	Survey in writing; test control during practical lesson.
3.	Ensuring the safety of human life	3	Independent work	Survey in writing; test control during practical lesson.

	Total hours	25		
	Final controle.	1	Independent work	Survey in writing; test control during practical lesson.
8.	Safety of nutrition as a component of safe human life.	3	Independent work	Survey in writing; test control during practical lesson.
7.	Socio-political dangers, their types and features. Social and psychological risk factors. Algorithm of protective behavioral reactions.		Independent work	Survey in writing; test control during practical lesson.
6.	Protection of the population from harmful and dangerous factors.		Independent work	Survey in writing; test control during practical lesson.
5.	Man-made hazards and their consequences. Typology of accidents at potentially dangerous objects.	3	Independent work	Survey in writing; test control during practical lesson.
4.	Natural hazards, the nature of their manifestations and effects on people and objects of the economy.	3	Independent work	Survey in writing; test control during practical lesson.

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 mastering 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 topics): conducted in the form of oral questioning, testing, student discussions on predetermined issues, in the form of speeches by higher education students during the discussion of 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).

The 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 established 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 educational process (CEA, credit, differential credit, exam) is carried out on the basis of the "Instruction for evaluating 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 for the evaluation of educational activities in the European credit transfer system of organization of the educational process" (order of the rector of KhNMU N_2 181 of 21.08.2021).

The current educational activity (CEA) of higher education students is controlled by the teacher of the academic group, after they have mastered each topic of the educational component and are graded using a 4-point (national) system. For part-time 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 teaching activity is automatically received by the teacher using the electronic journal of the ACS system.

Evaluation of the educational component is a final control carried out after the student has mastered the educational material of the educational component on the basis of certain types of work in practical classes, 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 educational components that end with a test is carried out in accordance with the table.

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

	200- point	4- point	200- point	4- point	200- point
4-point scale	scale	scale	scale	scale	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
4.67-4,69	187	3.89-3,91	156
4.65-4,66	186	3.87-3,88	155
4.62-4,64	185	3.84-3,86	154
4.6-4,61	184	3.82-3,83	153
4.57-4,59	183	3.79-3,81	152
4.54-4,56	182	3.77-3,78	151
4.52-4,53	181	3.74-3,76	150
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

3-3.01 Under 3	120 Insufficient
3.02-3.04	121
3.05-3.06	122
3.07-3.09	123
3.1-3,11	124
3.12-3,14	125
3.15-3,16	126

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	В	Good
150–159	С	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 topic 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 topic 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 to the credit.

- 1. "Life safety", subject, tasks, main tasks.
- 2. Axiom about potential danger.
- 3. Classification of hazards. The concept of risk. Risk management.
- 4. Principles of determining the acceptable level of negative factors in relation to human health.
- 5. Principles and methods of ensuring the safety of human life.
- 6. The value of the external environment in the "man external environment" system.
- 7. Man as a bioenergetic system. Unity of biological systems of the human body.
- 8. Factors that ensure human health.
- 9. Protective functions of the human body.
- 10. The role of receptors and analyzers of the human body in the evaluation of the factors of the "man environment" system.
- 11. Weber-Fechner law.
- 12. Psychological factors determining a person's personal safety.
- 13. The external environment and environment of human life. Classification and characteristics of human life environment.
- 14. Classification and characteristics of negative external factors human environment.
- 15. Social dangers.
- 16. Methods and means of human protection.
- 17. Peculiarities of the state of ecological security of Ukraine. Comprehensive risk assessment of the impact of anthropogenic factors on human safety and health.
- 18. Human health as a medico-biological and social category. Spiritual, mental, physical, social aspects of human health.
- 20. Indicators of individual human health. Factors that provide stability of health. Risk factors and risk groups.
- 21. Concept of lifestyle, its features in modern conditions.
- 22. Traditional and non-traditional health systems, methods of health. Methods of hardening the body.
- 23. The mechanism of harmful effects of alcohol, smoking and drugs on the human body. Danger to personal and public life when using them.
- 24. Methods of combating bad habits.
- 25. Legislative and regulatory framework of Ukraine on life safety.
- 26. Normative acts on life safety. Liability for violation of legislation on life safety.
- 27. Man-made hazards and their influencing factors.
- 28. Industrial accidents, catastrophes and their consequences. Levels of industrial accidents in depending on their scale.
- 29. Dangerous events on transport and accidents on transport communications.
- Requirements for transportation of dangerous substances.
- 30. Fire factors dangerous for humans.
- 31. Explosion. Factors of man-made explosions that lead to injury to people, destruction of

buildings, structures, technical equipment and environmental pollution.

- 32. Legislative framework on fire safety. The basics of fire safety. Liability for violation of fire safety requirements.
- 33. Classification of radiation accidents.
- 34. The mechanism of action of ionizing radiation on the human body.
- 35. Standardization of ionizing radiation. Levels of intervention in the event of a radiation accident.
- 36. Chernobyl disaster: social and medical consequences. Zones of radioactively contaminated territories as a result of the accident at the Chernobyl nuclear power plant.
- 37. Classification of dangerous chemical substances according to the degree of toxicity.
- 38. Features of pollution of the area, water, and food in case of accidents with the release of dangerous chemicals.
- 39. Typology of accidents at chemically hazardous facilities.
- 40. Protection of the population from harmful and dangerous factors of man-made hazards.
- 41. The impact of nutrition on human life.
- 42. Requirements for the quality and safety of food products.
- 43. Food additives as possible pollutants.
- 44. Consequences of contamination of food products with pesticides.
- 45. Growth stimulants and other chemical substances used in agriculture.
- 46. Genetically modified products and their danger to human health.
- 47. Radionuclides in food products. Nutrition in conditions of radiation pollution.
- 48. Toxic substances in food products: permissible background residues, maximum permissible level of residues in food products.
- 49. Methodology for reducing the amount of pollutants in foods.

3.3. Control questions

- 1. "Life safety", subject, purposes, main tasks.
- 2. Axiom of potential danger. Classification of hazards.
- 3. The concept of risk. Risk management. Principles for determining the acceptable level of negative factors related to human health.
- 4. Principles and methods of ensuring the safety of human life.
- 5. Basics of life safety management. System analysis of life safety.
- 6. The value of the external environment in the system "Man External environment".
- 7. Man as a bioenergy system. Unity of biological systems of the human body. Factors that ensure human health.
- 8. Protective functions of the human body.
- 9. The role of receptors and analyzers of the human body in the assessment of factors of the system "Man External environment". Weber-Fechner law.
- 10. Psychological factors that determine a person's personal safety. Psychophysiological state of the organism.
- 11.Dependence of the body on external stimuli. Rational modes of work and rest.
- 12. Classification and characterization of negative factors of the human environment. Physical negative factors. Chemical negative factors. Biological anthropogenic negative factors. Psychophysiological negative factors. Social dangers.
- 13.Methods and means of human protection. Comprehensive risk assessment of the impact of anthropogenic factors on human safety and health.

- 14. Human health as a medical-biological and social category. Spiritual, mental, physical, social aspects of human health. Health and pathology.
- 15. Factors that ensure the stability of health. Risk factors and risk groups.
- 16. The concept of lifestyle, its features in modern conditions.
- 17. Wellness traditional and non-traditional systems, methods of recovery. Ways to harden the body.
- 18. The mechanism of harmful effects on the human body of alcohol, smoking and drugs. Threat to personal and public life in their use. Methods to reduce of the bad habits.
- 19. The impact of nutrition on human life.
- 20. Requirements for food quality and safety.
- 21. Food additives as possible contaminants.
- 22. Consequences of food contamination by pesticides.
- 23. Growth stimulants and other chemicals used in agriculture.
- 24. Genetically modified products and their danger to human health.
- 25. Radionuclides in food. Nutrition in conditions of radiation pollution.
- 26. Toxic substances in food: permissible background residues, the maximum permissible level of residues in food. Methods for reducing the amount of pollutants in food.
- 27. Characteristics of dangerous geological processes and phenomena, the striking factors that form them, the nature of their manifestations and actions.
- 28. Characteristics of dangerous meteorological processes and phenomena, the striking factors that form them, the nature of their manifestations and actions.
- 29. Dangerous hydrological processes and phenomena, the striking factors that form them, the nature of their manifestations and consequences.
- 30. Fires in natural ecosystems affecting the factors of natural fires, the nature of their manifestations and consequences.
- 31.Biological hazards. Impressive factors of biological action. Characteristics of dangerous pathogenic microorganisms. Pandemics, epidemics, mass poisonings.
- 32.Man-made hazards and their impact factors. Industrial accidents, catastrophes and their consequences.
- 33.Levels of industrial accidents depending on their scale. Dangerous events on transport and accidents on transport communications.
- 34. Requirements for transportation of hazardous substances.
- 35. Dangerous to human's fire factors. Explosion. Factors of man-made explosions that lead to human injuries, destruction of buildings, structures, technical equipment and environmental pollution.
- 36.Legislation on fire safety. Fundamentals of fire safety. Liability for violation of fire safety requirements.
- 37. Classification of radiation accidents.
- 38. The mechanism of action of ionizing radiation on the human body. Standardization of ionizing radiation. Intervention levels in the event of a radiation accident.
- 39. The Chernobyl disaster: social and medical consequences. Zones of radioactively contaminated territories as a result of the Chernobyl accident.
- 40. Classification of hazardous chemicals by degree of toxicity.
- 41. Features of pollution of the area, water, food in case of accidents with release of dangerous chemicals.
- 42. Typology of accidents at chemically hazardous facilities. Protection of the population from harmful and dangerous factors of man-caused dangers.

- 43.Global problems of mankind: global biosphere crisis, environmental crisis, resource crisis, peaceful coexistence, cessation of the arms race and prevention of nuclear war, environmental protection, fuel and energy, raw materials, food, demographic, information, elimination of dangerous diseases.
- 44. Socio-political conflicts with the use of conventional weapons and means of mass destruction.
- 45. Types of terrorism, its primary, secondary and cascading impact factors.
- 46. Armed attacks, seizure and maintenance of objects of state importance; installation of an explosive device in a crowded place, institution (organization, enterprise), theft of weapons and dangerous substances.
- 47. Modern information technologies and safety of human life. Features of the impact of the information factor on human health and public safety.
- 48. Social factors that affect human life and health. Corruption and criminalization of society. Manipulation of consciousness. The gap in the level of livelihood between different segments of the population.
- 49.Bad habits, social diseases and their prevention.
- 50. The growth of crime as a risk factor. Types of criminal encroachments on a person.
- 51. The concept and types of crowds. Human behavior in the crowd.
- 52. Factors that increase an individual's likelihood of being exposed to danger.

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.

3.6. Rules for appealling the mark.

The appeal of the assessment is carried out in accordance with the regulation "On the appeal of the results of the final control of students of Kharkiv National Medical University", order of 30.09.2020. №252.

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 topic;
- 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

6. RECOMMENDED LITERATURE

- 1. Life Safety: For Applicants for Education of Higher Educational Institutions of Ukraine of I-IV Levels of Accreditation / E.P. Zhelibo, N.M. Zaverukha, V.V. Zatsarny; Ed. E.P. Zhelibo and W.M. Peachy. K.: "Karavela"; Lviv: "Novyi Svit-2000", 2001. 320 p.
- 2. Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Procedure for Classification of Emergency Situations by Their Levels" No 368 of 24.03.04
- 3. Domaretsky, V. A. Ecology of food products: production and practical edition / V. A. Domaretsky, T. P. Zlatev. Kyiv: Urozhay, 1993. 190 p.
- 4. Smolyar, V. I. Nutrition in the conditions of radionuclide contamination. K.: Health: Ukr. Red Cross, 1991. 32 p.
- 5. Life Safety: Textbook / V.G. Tsapko, D.I. Mazorenko, Yu.S. Skoblo, L.M. Tishchenko; Ed. V.G. Tsapka. Kyiv: Znannia, 2008. 397 p.
- 6. Life Safety: Textbook / V.V. Berezutsky, L.A. Vaskovets, N.P. Vershinina et al.; Ed. V.V. Berezutsky. Kharkiv: Fact, 2005. 384 p.
- 7. Life Safety, Fundamentals of Labor Protection. Helps. / O.P. Yavorovsky, V.M.

- Shevtsova, V.I. Zenkina and others; for the total. edited by O.P. Yavorovsky. Kyiv: VSV "Medicine", 2015. 288 p.
- 8. Life Safety, Fundamentals of Labor Protection: Educational and Methodological Manual: O.P. Yavorovsky, V.M. Shevtsova, G.A. Shkurko and others.- Cherkasy: publisher Chabanenko Y.A., 2012. 232 p.
- 9. Kornienko O.V. Safety of life and maintenance of psychosomatic health of youth: Monograph.-K.: "Kyiv University", 2004.-264 p.

Auxiliary:

- 1. Life safety: a textbook. / [O.I. Zaporozhets, BD Khalmuradov, VI Primenko et al.] K .: "Center for Educational Literature", 2013. 448 p.
- 2. The Constitution of Ukraine. The Basic Law of June 28, 1996.
- 3. Law of Ukraine "On labor protection" of October 14, 1992.
- 4. Law of Ukraine "On Ensuring Sanitary and Epidemic Welfare of the Population" № 4004-XII of 24.02.94.
- 5. Law of Ukraine "On Collective Bargaining Agreements" № 1874 of 24.12.95.
- 6. Law of Ukraine "On insurance tariffs for compulsory state social insurance against accidents at work and occupational diseases that caused disability", 1423 of 13.09.2000.
- 7. Law of Ukraine "On Administrative Violations" № 8074-10 of 07.12.84.
- 8. Fundamentals of the legislation of Ukraine on health care № 2802-XII dated 19.11.92.
- 9. Code of Labor Laws of Ukraine № 322-VIII of 10.12.71.
- 10. Law of Ukraine "On protection of a person from the influence of ionizing radiation" № 15/98-BP of 14.01.1998.
- 11. Code of Civil Protection of Ukraine № 5403-VI dated 02.10.2012.
- 12. Decree of the President of Ukraine № 643/2001 "National Program for Combating Tuberculosis".
- 13. Resolution of the Cabinet of Ministers of Ukraine "Some issues of investigation and accounting of accidents, occupational diseases and accidents at work" № 1232 of 30.12.11.
- 14. DSTU 2272: 2006 "Fire safety. Terms and definitions of basic concepts. K .: 2007. 28 c.
- 15. Order of the State Labor Inspectorate of Ukraine "Standard Regulations on the Procedure for Conducting Training and Testing of Knowledge on Occupational Safety" № 15 of January 26, 2005.
- 16. Order of the State Labor Inspectorate of Ukraine "List of works with increased danger" № 15 dated January 26, 2005.
- 17. Order of the State Labor Inspectorate of Ukraine "Standard Regulations on the Labor Protection Service" № 255 of 15.11.04.
- 18. Order of the Ministry of Education and Science of Ukraine "Regulations on the organization of work on labor protection of participants in the educational process in educational institutions" № 563 dated 01.08.01.
- 19. Order of the Ministry of Labor and Social Policy of Ukraine "On approval of the form of employment contract between employees and individuals and the procedure for registration of employment contracts between employees and individuals" № 260 from 08.06.01.

- 20. Order of the Ministry of Health of Ukraine "Regulations on the labor protection service of the system of the Ministry of Health of Ukraine" № 268 of 30.09.1994.
- 21. Order of the Ministry of Health of Ukraine "On the introduction of operational control over the state of labor protection in institutions, establishments and enterprises of the Ministry of Health of Ukraine" № 444 from 01.11.2001.
- 22. Resolution of the Cabinet of Ministers of Ukraine "On approval of the Procedure for classification of emergencies by their levels" № 368 of 24.03.04
- 23. Radiation safety standards of Ukraine (NRBU-97). Kyiv: Department of Printing of the Ukrainian Center for State Sanitary Supervision of the Ministry of Health of Ukraine, 1998. 125 p.
- 24. Domaretsky, VA Ecology of food products [Text]: production and practical edition / VA Domaretsky, TP Zlatev. К.: Урожай, 1993. 190 с.
- 25. Smolyar V. I. Nutrition in terms of radionuclide contamination. Kyiv: Health: Ukr. red cross, 1991. 32 p.
- 26. Safety of life: Textbook / VG Tsapko, DI Mazorenko, Yu.S. Skoblo, L.M. Tishchenko; for order. K: Знання, 2008. 397 с.
- 27. Safety of life: Textbook / VV Berezutsky, L.A. Vaskovets, NP Vershinina and others; For order. V.V. Berezutsky. X .: Fact, 2005. 384 p.
- 28. Kornienko OV Life safety and maintenance of psychosomatic health of youth: Monograph. K "University of Kiev", 2004.-264 p.
- 29. Dementiy LV, Yusina AL Ensuring the safety of life: Textbook. Kramatorsk: DGMA, 2008. 300 p.

7. INFORMATION RESOURCES

- 1. Official Internet representation of the President of Ukraine http://www.president.gov.ua/.
- 2. Verkhovna Rada of Ukraine http://www.rada.gov.ua/.
- 3. Cabinet of Ministers of Ukraine http://www.kmu.gov.ua/.
- 4. Ministry of Health of Ukraine http://moz.gov.ua/ua/portal/.
- 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 Service of Ukraine for Emergency Situations http://www.dsns.gov.ua/.
- 8. State Service of Ukraine on Labor Issues http://dsp.gov.ua/.
- 9. World Health Organization http://www.who.int/en/.
- 10. International Labor Organization http://www.ilo.org/global/lang--en/index.htm.
- 11. National Security and Defense Council of Ukraine http://www.rnbo.gov.ua/.
- 12. Permanent representation of Ukraine at the UN http://ukraineun.org/.
- 13. North Atlantic Alliance (NATO) http://www.nato.int/.
- 14. http://www.bioethics.net
- 15. http://www.bioethics.as.niyu.edu
- 16. http://www.bioethics.ca

8. OTHERS

Useful links:

- 1. Provisions on the prevention and settlement of cases related to sexual harassment and discrimination at KhNMU http://files.knmu.edu.ua:8181/upload//redakt/doc_uchproc/polog-sex.doc
- 2. Regulations on academic integrity and ethics of academic relationships at Kharkiv National Medical University
- 3. http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_ad_etyka_text.pdf
- 4. The procedure for conducting classes on in-depth study by students of the Kharkiv National Medical University of individual disciplines beyond the scope of the curriculum http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/nak-poriad-pogl-vyv-dysc.docx
- 5. Regulations on the Commission on Academic Integrity, Ethics and Conflict Management of the KhNMU http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_komis_ad_text.pdf
- 6. Regulations on the recognition of the results of non-formal education at the Kharkiv National Medical University http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_neform_osv.pdf
- 7. INCLUSIVE EDUCATION:
- 8. http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=7108%3 http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=7108%3 http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=7108%3 <a href="http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=7108%3 http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.ua/index.php. http://www.knmu.kha
- 9. ACADEMIC INTEGRITY:
- 10. http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=2520% http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.ua/index.php. http://www.knmu.kharkov.
- 11. http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/kodex_AD.docx