

MINISTRY OF HEALTH OF UKRAINE
KHARKIV NATIONAL MEDICAL UNIVERSITY

Department of Hygiene and Ecology No. 2

Academic year 2021–2022

SYLLABUS OF EDUCATIONAL COMPONENT

«OCCUPATIONAL SAFETY IN THE FIELD OF MEDICINE»

(name of educational component)

Normative or elective educational component Normative

Format of educational component Mixed
(full-time, mixed, online)

Branch of knowledge 22 «Health Care»
(code and name of branch of knowledge)

Specialty 222 «Medicine»
(code and name of specialty)


Educational-Professional Program «Medicine»

Second (Master's) level of higher education

Year second, full-time education

Syllabus of educational discipline is approved
at the meeting of Department of Hygiene and
Ecology No. 2

Approved by KhNMU Methodical
Commission on Public Health Issues

Record dated
«30» August 2021 No. 7
Acting Head of Department
 Ass.Prof. Sydorenko M.
O.
(signature) (name and initials)
«30» August 2021

Record dated
«27» August 2021 No. 1
Head
 Prof. Ognev V. A.
(signature) (name and initials)
«27» August 2021

SYLLABUS DEVELOPERS

1. Zavgorodnii I.V., Doct. of Med. Sci., Professor
2. Sydorenko M.O., Cand. of Med. Sci., Associate Professor
3. Korobchanskyi P.O., Cand. of Med. Sci., Associate Professor
4. Pertsev D.P., Cand. of Med. Sci., Associate Professor
5. Filatova N.M., Cand. of Med. Sci., Associate Professor
6. Chekhovska I.M., Sen. Teacher
7. Lalyenko O.S., Cand. of Med. Sci., Assistant
8. Litovchenko O.L., Assistant
9. Bilychenko N.P., Assistant
10. Shevchenko Yu. V., Assistant
11. Baidak S. M., Assistant
12. Mariukha Yu. V., Assistant

Teachers:

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2. Korobchanskyi P.O., Cand. of Med. Sci., Associate Professor
3. Chekhovska I.M., Sen. Teacher
4. Lalymenko O.S., Cand. of Med. Sci., Assistant
5. Litovchenko O.L., Assistant
6. Bilychenko N.P., Assistant
7. Shevchenko Yu. V., Assistant
8. Baidak S. M., Assistant
9. Mariukha Yu. V., Assistant

INFORMATION ON TEACHERS TEACHING THE EDUCATIONAL COMPONENT

Teacher's name	Position, academic title, scientific degree	Professional interests	Link to the teacher's file
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Information about consultations

Intramural consultations: schedule and venue according to the schedule of the training department.

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

Location: lessons are held in the Department of Hygiene and Ecology No. 2, KhNMU

INTRODUCTION

The syllabus of the discipline "Occupational Safety in the Field of Medicine" is compiled in accordance with the educational-professional program 222 "Medicine" and the draft Standard of Higher Education of Ukraine, the second (master's) level, field of knowledge 22 "Health Care", specialty 222 "Medicine"

Description of the discipline (abstract)

The study program of the discipline "Occupational Safety in Industry" is designed for higher medical institutions of Ukraine in accordance with the requirements of the credit transfer system of the ECTS educational process, based on a combination of learning technologies by sections and credit assessment - units of student workload. or its section. The study of the discipline "Occupational Safety" is aimed at acquainting students with the working conditions of medical workers in modern conditions, with harmful and dangerous factors of the production environment in treatment and prevention facilities, their impact on the physiological state of the working person. The work of medical workers is one of the most complex, intense and responsible activities.

Certain professional groups of medical workers in their daily activities have their own specific working conditions that can cause morbidity, including occupational, contribute to fatigue and overfatigue, disability. Recent decades have been characterized by significant advances in medical science and technology.

Medical engineering and biotechnology, various diagnostic systems, mainly computer systems, are being further developed, laser radiation, ultrasound and ionizing radiation are widely introduced into medical practice. Significantly increases the arsenal of drugs, especially antibiotics, as well as detergents and disinfectants. As a result, the content, nature and features of the work of both doctors and paramedics and paramedics are changing quite significantly. Such changes, as a rule, lead to a significant increase in the level of nervous, mental and intellectual stress. These relatively new problems have not pushed to the background such traditional problems of organizing the work of doctors as an unfavorable environment for chemical, physical and biological factors, overcoming nosocomial infections, prevention of allergic reactions, etc..

Thus, the study of the discipline "Occupational Safety in the industry" is relevant for the training of medical personnel, especially in the current context of reforming the higher education system against the background of Ukraine's European integration processes..

The subject of study of the discipline are harmful and dangerous factors of the production environment and the system of measures to protect and preserve the life and health of health workers.

Interdisciplinary links: The study of the discipline "Occupational Safety in the Field of Medicine" in the specialty 222 "Medicine", educational qualification "Master of Medicine", professional qualification "Doctor" is carried out in III - IV semesters of II year of study and is based on knowledge of basic natural sciences: medical biology, medical and biological physics, biological and bioorganic chemistry, human anatomy, histology, cytology and embryology, Latin, history of medicine, life safety, basics of bioethics and biosafety and integrates with these disciplines. Creates the basis for further study of clinical and hygienic disciplines. Lays the foundations for the formation of knowledge, skills and abilities, education of moral and ethical values, which are determined by the ultimate goals of the program, necessary for further professional activity.

Prerequisites. The study of the discipline involves the prior mastering of credits in theory and practice of clinical disciplines in the context of assessing the effect of methods of diagnosis and prevention of diseases and their consequences, optimizing the patient's route, department (MPE), etc.; with epidemiology in the context of measurements of population processes and information collection plans;

Postrequisites. The main provisions of the discipline should be applied in the study of disciplines of health care organization in the context of statistics of non-communicable diseases; social medicine in the context of measurements of population and individual health, features of registration of health-related events; medical informatics and computer technology.

Link to the discipline page in MOODLE

<http://distance.knmu.edu.ua/course/view.php?id=167>

1. PURPOSE AND TASKS OF THE COURSE

1.1. The purpose of studying the discipline «Occupational Safety in the Field of Medicine» is formation of future specialists' knowledge, skills and competencies, as well as education of safety culture to ensure effective management of occupational safety in the field of medicine, creation of favorable working environment and labor safety in accordance with current laws and regulations to implement the principle of priority of life and health of medical workers.

1.2 The main tasks of studying the discipline «Occupational Safety in the Field of Medicine» is to ensure the preservation of life, health and capacity for work of medical workers in industrial conditions through the use of a complex of legislative, organizational, engineering, sanitary, preventive and other measures, education of moral and ethical values aimed at preventing occupational injuries and occurrence occupational and occupationally stipulated diseases.

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

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

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

-general: ability to abstract thinking, analysis and synthesis, ability to learn and be taught; ability to apply knowledge in practical situations; knowledge and understanding of the subject area and understanding of professional activity; ability to adapt and act in a new situation; ability to make an informed decision; work in a team; interpersonal skills; ability to communicate in the state language both orally and in writing; ability to communicate in a foreign language; skills of using information and communication technologies; determination and persistence in terms of tasks and responsibilities; ability to act socially responsibly and consciously; the desire to preserve the environment

-special (professional, subject): ability to determine the necessary list of laboratory and instrumental studies and evaluate their results; ability to determine the principles and nature of disease treatment; ability to plan and carry out sanitary and hygienic, preventive and anti-epidemic measures, including those on infectious diseases; ability to keep medical records; ability to conduct epidemiological and medical-statistical studies of public health; processing of state, social, economic and medical information; ability to assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population

1.3.2. The study of the discipline ensures that students acquire the following **program results of training**:

Knowledge and understanding:

PRT 1 – have general and special fundamental and professionally-oriented knowledge, skills, abilities, competencies necessary to perform typical professional tasks related to activities in the medical field in the relevant position;

PRT 2 – have knowledge of human psychophysiological characteristics, human health, health support, disease prevention, human treatment, public health

Application of knowledge and understanding:

PRT 3 – 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

PRT 4 - to collect information about the patient

PRT 5 – evaluate the results of surveys, physical examinations, laboratory and instrumental research data

PRT 10 – diagnosing emergencies, studying the tactics of emergency medical care

PRT 11 – carrying out sanitary and hygienic and preventive measures

PRT 12 – planning of preventive and anti-epidemic measures for infectious diseases

PRT 16 – assessing the impact of the environment on the health of the population

PRT 17 – be able to keep medical records, process state, social and medical information

Formation of judgments:

PRT 18 – to assess the state of human health and provide its support taking into account the impact of the environment and other health factors

PRT 19 – to assess the sanitary and hygienic condition of the environment in order to determine the sanitary and hygienic and preventive measures

PRT 20 – apply the acquired knowledge about the existing health care system to optimize their own professional activities and participate in solving practical problems of the industry

PRT 21 – adhere to the code of ethics of the doctor, which ensures the formation of a specialist with appropriate personal qualities

1.3.3. 1.3.4. The study of the discipline ensures that students acquire the following **social skills (Soft skills)**:

- communicativeness (realized through: method of work in pairs and groups, brainstorming, method of self-presentation),
- teamwork (implemented through: project method, openwork tiles),
- conflict management (implemented through: dramatization method, game methods),
- time management (implemented through: project method, group work, training),
- leadership skills (implemented through: group work, project method, self-presentation method),
- sports development and effective recreation (implemented through: various types and forms of physical activity for active recreation and a healthy lifestyle),
- empathy (realized through: respect for the opinion and ethical considerations, appearance and behavior of other people),
- stress resistance (implemented through: group work with representatives of other professional groups of different levels and ages in unforeseen circumstances and situations).

2. INFORMATION SCOPE OF THE COURSE

Names of indices	Field of knowledge, specialty, educational degree, EPP	Characteristic of educational discipline
		Full-time education
Number of credits – 3	<u>Field of knowledge</u> 22 «Health Care» <small>(code and name)</small>	Normative
Total number of hours – 90	Specialty: 222 «Medicine» <small>(code and name)</small>	Year of training:
		2-nd
		Semester
		3-4-th
Hours for day (or evening) form of study: classroom – 30 student's independent work – 60	Educational-qualification level: Master of medicine	Lectures
		10 hours
		Practical, seminar
		20 hours
		Laboratory
		-
EPP 222 «Medicine»	Independent work	
	60 hours	
	Individual tasks:	
	-	

Kind of control: credit

2.1 Description of educational discipline

No.	Name of content module and topic	Number of hours			
		Full-time education			
		Total	Including		
Lectures	Practical lessons		Independent work		
Section I.					
General issues of occupational safety					
1.	Legal and organizational fundamentals of occupational safety	7	2	2	3
2.	Organization of occupational safety in medical establishments and higher medical schools	5	-	2	3
3.	Occupational hygiene and physiology, importance for creation of safe labor conditions.	7	2	2	3
Total on section I		19	4	6	9
Section II.					
Features of working conditions in the field of medicine. Measures to reduce the impact of harmful factors. Criteria for assessing the working conditions of medical workers.					
4.	Occupational hazards in execution of functional duties by medical workers.	7	2	2	3
5.	Dangerous infectious diseases in the work of medical specialists	5	-	2	3
6.	Measures to reduce the adverse effects of occupational factors on the body of health professionals. Methods of psychophysical training	5	-	1	3
7.	Basic methods and criteria of sanitary and hygienic assessment of working conditions of medical workers	5	-	1	3
8.	Hygienic requirements for the design and construction of medical-preventive establishments.	4	2	2	2
9.	Hygiene and occupational safety in medical establishments	5	2	1	3
10.	Occupational safety in some structural units of medical-preventive establishments and higher medical schools. Fundamentals of industrial safety of medical workers.	5	-	1	3
11.	Safety requirements during the operation of basic medical equipment.	5	-	1	3
12.	Requirements for personal protective equipment and work clothes of medical workers. Certification of work places.	5	-	1	3
13.	Medical examinations for medical workers.	5	-	1	3

14.	Scientific organization of work in medical-preventive establishments. Hygienic education and health education.	5	-	1	3
Total on section II		56	6	14	32
Section III.					
Procedure for investigation and registration of accidents, occupational diseases and damages at work.					
15.	Accidents and damages in medical-preventive establishments, their investigation and registration.	5	-	2	3
16.	Special investigation of accidents.	5	-	2	3
17.	State social insurance against accidents and occupational diseases at work.	5	-	2	3
Total on section III		15	-	6	9
Total hours on discipline		90	10	20	60

The curriculum of the discipline "Occupational Safety in the Field of Medicine" is structured and represented by three sections of the discipline in accordance with the requirements of curriculum development of disciplines.

Section of discipline 1. General issues of occupational safety

Topic No. 1: Legal and organizational fundamentals of occupational safety.

Mastering the skills of working with regulatory and legal documentation is a necessary element for creating safe working conditions in the professional activities of a doctor.

Topic No. 2: Organization of occupational safety in medical establishments and higher medical schools.

A crucial role in the formation and development of man is played by work, which under certain adverse conditions can significantly affect the health of the person, lead to accidents, accidents, occupational diseases. According to world statistics, 80% of accidents are related to the human factor, so it becomes urgent to organize training in the basics of occupational safety and health, awareness of each employee of the need to ensure safe and secure working conditions, the formation of important priorities for life and health people, compared with the significance of the results of production activities. The quality and efficiency of health care workers largely depend on their working conditions and health.

Topic No. 3: Occupational hygiene and physiology, importance for creation of safe labor conditions.

Occupational health as a science studies the impact on the body of a working person of the labor process and production environment. Occupational physiology is a branch of occupational hygiene that studies the features of the physiological state of the body of a working person in the process of his work. The results of a comprehensive study of the labor process and changes in the physiological state of the body are the basis for the development of preventive measures to further preserve the health of workers and maintain high levels of efficiency.

Section of discipline 2. Features of labor conditions in the field of medicine

Topic No. 4: Occupational hazards in execution of functional duties by medical workers

The current level and structure of morbidity of medical workers are largely due to some characteristics of this occupational group due to physical or biological factors, toxico-chemical, allergic etiology, overexertion of certain organs or systems, nosocomial infections.

Topic No. 5: Hygienic characteristic of labour conditions and state of health of medical workers.

The work of medical workers in modern conditions is one of the most complex, stressful and responsible activities. Certain professional groups of medical workers in their daily activities have their own specific working conditions that can cause morbidity, including occupational, contribute to fatigue and overfatigue, disability. To prevent the adverse effects of working conditions on health and ability to work, health professionals must be aware of the impact of certain factors on health and ability to work, and follow safety rules.

Topic No. 6: Accidents and damages in medical-preventive establishments, their investigation and registration

Intensive development of science and technology, the achievements of which are used in medical practice lead to constant risk for workers and are associated with acute occupational diseases, poisoning, burns, electric shocks, injuries due to accidents, fires, contact with infected blood, sputum, etc. . The future doctor must be able to assess and adjust their own working conditions, and in case of accidents and accidents to provide first aid to victims and inform the heads of departments.

Section of discipline 3. Special issues of occupational safety in the field of medicine

Topic No. 7: Hygiene and occupational safety in medical establishments

Consolidate students' knowledge of hygienic requirements for the location, planning and sanitary and anti-epidemic regime of treatment and prevention facilities on the basis of the study of regulations.

Get acquainted with the main harmful factors of the production environment and occupational injuries and diseases of medical workers, safety requirements during their work.

Get acquainted with the impact of industrial harmful factors on the body of working doctors, their legislative, organizational, anti-epidemic and technical measures of labor protection and prevention of occupational diseases.

Topic No. 8: Fundamentals of industrial safety of medical workers.

Industrial safety of medical workers is the key to maintaining the health of doctors and patients, a necessary condition for the prevention of accidents, incidents and injuries.

Topic No. 9: Dangerous infectious diseases in the work of medical specialists.

Working conditions of medical workers are characterized by the presence of a set of unfavorable production factors. Among medical workers, the prevalence of occupational tuberculosis is high, and in many cases there is resistance of the pathogen of tuberculosis to anti-tuberculosis drugs. When working with blood and its components there is a significant risk of infection of health care workers with such infectious diseases as hepatitis B and C, HIV infection.

Topic No. 10: Occupational safety in some structural units of medical-preventive establishments and higher medical schools

The Ministry of Health of Ukraine, in coordination with the State Committee for Occupational Safety and Health, has developed and approved regulations on occupational safety for the medical sector. To introduce safety and industrial sanitation issues into the legal field of Ukraine, the rules of construction, operation and safety in certain structural subdivisions of medical and preventive institutions apply in the system of health care institutions. Observance of these rules is obligatory for maintenance of appropriate conditions of stay of patients and work of medical staff, prevention of negative influence of adverse factors of the working environment on health of medical workers.

2.2.1 Lectures

No.	Topic name	Number of hours	Kinds of lectures
Section of discipline 1. General issues of occupational safety			
1.	Legal and organizational fundamentals of occupational safety	2	Lecture hall /online
2.	Occupational hygiene and physiology, importance for creation of safe labour conditions	2	Lecture hall /online
Section of discipline 2. Features of labor conditions in the field of medicine			
3.	Occupational hazards in execution of functional duties by medical workers	2	Lecture hall /online
Section of discipline 3. Special issues of occupational safety in the field of medicine			
4.	Hygiene and occupational safety in medical establishments	2	Lecture hall /online
5.	Dangerous infectious diseases in the work of medical	2	Lecture hall

	specialists		/online
	Total hours	10	

2.2.2 Seminar lessons – not provided by the curriculum

2.2.3 Practical lessons

No.	Topic name	Number of hours	Teaching methods	Forms of control
Section of discipline 1. General issues of occupational safety				
1.	Legal and organizational fundamentals of occupational safety	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
2.	Organization of occupational safety in medical establishments and higher medical schools.	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
3.	Occupational hygiene and physiology, importance for creation of safe labour conditions	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
Section of discipline 2. Features of labor conditions in the field of medicine				
4.	Occupational hazards in execution of functional duties by medical workers	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
5.	Hygienic characteristic of labour conditions and state of health of medical workers	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
6.	Accidents and damages in medical-preventive establishments, their investigation and registration	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
Section of discipline 3. Special issues of occupational safety in the field of medicine				
7.	Hygiene and occupational safety in medical establishments	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
8.	Fundamentals of industrial safety of medical workers	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
9.	Dangerous infectious diseases in the work of medical specialists	2	story-explanation, conversation, illustration,	oral examination; test control; essays

			demonstration, presentation	
10.	Occupational safety in some structural units of medical-preventive establishments and higher medical schools	2	story-explanation, conversation, illustration, demonstration, presentation	oral examination; test control; essays
	Total hours	20		

2.2.4. Laboratory lessons – not provided by the curriculum

2.2.5. Independent work

No.	Topic name	Number of hours	Teaching methods	Forms of control
Section of discipline 1. General issues of occupational safety				
1.	Legal and organizational fundamentals of occupational safety	5	Study of textbook material, normative-legal acts of the current sanitary legislation, solution of situational tasks	oral examination; test control; essays
2.	Organization of occupational safety in medical establishments and higher medical schools.	5	Study of textbook material, normative-legal acts of the current sanitary legislation, solution of situational tasks	oral examination; test control; essays
3.	Occupational hygiene and physiology, importance for creation of safe labour conditions	5	Study of textbook material, normative-legal acts of the current sanitary legislation, solution of situational tasks	oral examination; test control; essays
Section of discipline 2. Features of labor conditions in the field of medicine				
4.	Occupational hazards in execution of functional duties by medical workers	5	Study of textbook material, normative-legal acts of the current sanitary legislation, solution of situational tasks	oral examination; test control; essays
5.	Hygienic characteristic of labour conditions and state of health of medical workers	5	Study of textbook material, normative-legal acts of the current sanitary legislation,	oral examination; test control; essays

			solution of situational tasks	
6.	Accidents and damages in medical-preventive establishments, their investigation and registration	5	Study of textbook material, normative-legal acts of the current sanitary legislation, solving of situational tasks	oral examination; test control; essays
Section of discipline 3. Special issues of occupational safety in the field of medicine				
7.	Hygiene and occupational safety in medical establishments	7	Study of textbook material, normative-legal acts of the current sanitary legislation, solving of situational tasks	oral examination; test control; essays
8.	Fundamentals of industrial safety of medical workers	7	Study of textbook material, normative-legal acts of the current sanitary legislation, solving of situational tasks	oral examination; test control; essays
9.	Dangerous infectious diseases in the work of medical specialists	8	Study of textbook material, normative-legal acts of the current sanitary legislation, solving of situational tasks	oral examination; test control; essays
10.	Occupational safety in some structural units of medical-preventive establishments and higher medical schools	8	Study of textbook material, normative-legal acts of the current sanitary legislation, solving of situational tasks	oral examination; test control; essays
	Total hours	60		

Teaching methods:

- Verbal (lecture, conversation);
- Visual (illustration, presentation material, video material);
- Practical (independent work, work in pairs, work in groups).

Methods of control:

1. Oral control of mastering theoretical material (survey, discussion).
2. Written control (answers to questions, problem solving, test control).

3. Control of practical skills (solving situational problems, solving problem situations, providing practical recommendations).

When studying the discipline, the current and final semester control is used. Also, there is a mandatory control of the assimilation of educational material of the discipline, assigned to independent work.

Current control (assimilation of certain topics): conducted in the form of oral interviews, testing, conversations of students on pre-defined issues, in the form of speeches of higher education students with reports when discussing educational issues in practical classes.

In order to assess the independent work of students, an alternative option is offered (*optional*): traditional types of tasks: writing a test, abstract or creative types: preparation of a multimedia presentation, elaboration of educational literature (compilation of annotations, reviews, citations, abstracts)).

Final control in the discipline is a mandatory form of control over the academic achievements of higher education students. It is performed orally. The terms of the final semester control are set by the schedule of the educational process, and the amount of educational material that is submitted for the final semester control is determined by the curriculum of the discipline.

The total number of rating points for the study of the discipline for the semester is calculated as the sum of the points obtained from the results of the current control and the points obtained from the results of the final semester control. The maximum amount of points for the semester is 200 points, the minimum - 120 points.

Assessment of students' success in ECTS organization of the educational process (CEA, test, differential test, exam) is carried out on the basis of "Instruction for assessing the educational activities of higher education at Kharkiv National Medical University", approved by the order of KhNMU dated 21.08.2021 No. 181. The test is a form of final control of academic activity in the discipline.

3. EVALUATION CRITERIA

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 higher education at the Kharkiv National Medical University"

Applicants' knowledge is assessed in all types of training sessions 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**" - receives the applicant on two levels of assessment depending on the number of points scored and corresponds to a sufficient (constructive-variable) level of competence:

- the applicant is fluent in the studied amount of material, applies it in practice, freely solves exercises and problems in standard situations, independently corrects mistakes, the number of which is insignificant;

- the applicant is able to compare, summarize, systematize information under the guidance of a teacher; as a whole to apply it independently in practice; control their own activities; to correct mistakes, among which there are significant ones, to choose arguments to confirm opinions;

3) "**Satisfactory**" - the Student receives two levels of assessment depending on the number of points scored and corresponds to the average (reproductive) level of competence:

- the applicant reproduces a significant part of the theoretical material, shows knowledge and understanding of the basic provisions; with the help of a teacher can analyze educational material, correct mistakes, among which there are a significant number of significant;

- the applicant has the training material at a level higher than the initial, a significant part of it reproduces at the reproductive level

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

- the applicant has not mastered the educational material of the discipline, does not know the scientific facts, definitions, almost does not navigate in the original sources and recommended literature, there is no scientific thinking, practical skills are not formed.

The total number of rating points for the study of the discipline for the semester is calculated as the sum of points obtained from the results of the current control and points obtained from the results of the final semester control. The maximum amount of points for the semester is 200 points, the minimum - 120 points. Assessment of students is carried out in accordance with the "Instructions for assessing the educational activities of students in the European credit transfer system for the organization of the educational process at KhNMU".

The current educational activity of students (hereinafter - CEA) is controlled by the teacher of the academic group, after students master each topic of the discipline and grades are set using a 4-point (national) system. At the end of the semester, the average grade (to the nearest hundredth) for CEA teacher automatically receives using the electronic journal of the ACS.

For the discipline, the study of which is completed in the current semester and the form of its control is a differential test, the average score on CEA by the teacher of the department is converted into a 200-point scale.

Incentives and penalties. For participation in research student conferences, in scientific researches, in interrogations the student can receive additional points 1 - 10.

Assessment of individual tasks of the applicant is carried out by performing the tasks of the teacher:

- report of the abstract at a practical lesson 0 - 2 points;
- report with a presentation at a practical lesson 0 - 3 points,
- report at scientific and practical conferences of the department, university, writing abstracts, articles 0 - 5 points;
- participation in the scientific-practical conference - 5 - 10 points

Elimination of academic debt is carried out by self-study of theoretical material, followed by oral interviews, testing and discussion of the topic of missed classes with the teacher. In the case of a sufficient level of knowledge on the subject, academic debt is considered eliminated. Free practice is carried out within 30 days from the moment of missed class (without permission from the dean's office), if the period from the moment of missed class exceeds 30 days of practice is carried out only in case of permission to liquidate academic debt from the dean's office, taking into account discipline classes of which are carried out on a paid basis.

Evaluation of current educational activities (CEA)

The conversion of the average grade for current activities into a multi-point scale is carried out in accordance with the "Instruction for assessing the educational activities of higher education students at Kharkiv National Medical University" (Table 1, 2).

When assessing the mastery of each subject of the discipline, the student is graded according to the traditional 4-point system: "excellent", "good", "satisfactory" and "unsatisfactory".

The final score for the current educational activity (CEA) is defined as the arithmetic mean of traditional grades for each lesson, rounded to 2 decimal places and is listed on a multi-point scale according to table 2.

Table 2

**Recalculation of the average score for current activities in a multi-point scale
(for disciplines ending with 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	Under 3	Insufficient
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		

Discipline assessment technology (Table 6 of the "Instruction for assessing the educational activities of students...").

Test (in accordance with the "Instruction for assessing the educational activities of students...") is conducted by the teacher of the academic group in the last lesson of the discipline and provides for the consideration of CEA (table) and verification of all topics in the discipline. The score is determined in points from 120 to 200 and marked "passed", "not passed".

3.2. Test questions

Section 1. General issues of occupational safety.

1. Basic terms and definitions in the field of occupational safety: labor protection, working conditions, harmful production factor, dangerous production factor, safe working conditions, workplace, safety, etc.
2. Subjects and objects of occupational safety.
3. The current state of occupational safety in Ukraine and abroad.
4. General issues of occupational safety in medicine.
5. Legal bases of occupational safety (Constitution of Ukraine, Code of Labor Laws, Law of Ukraine "On Labor Protection", etc.).
6. Normative-legal acts on labor protection (NPAOP): definitions, basic requirements and features. The structure of NPAOP. Register of NPAOP.
7. National standards of Ukraine on labor protection. System of labor safety standards (SSB). Sanitary, construction norms, other national documents on labor protection.
8. Acts on labor protection, operating in the organization, their composition and structure. Instructions on labor protection. Development and approval of labor protection acts in force in the organization.

9. Liability of officials and employees for violations of labor protection legislation.
10. Social partnership as a principle of legislative and normative-legal provision of labor protection. Social dialogue in the European Union.
11. International norms of social responsibility. Standard SA 8000 "Social responsibility". International standard ISO 26000 "Guidelines for social responsibility".
12. Legislative basis of the European Union on labor protection. EU directives on labor protection. Framework Directive 89/391 / EC "On the introduction of measures to improve the safety and health of workers".
13. Elements of labor protection management system, international standard OHSAS 18001: 2007.
14. Labor standards of the International Labor Organization. ILO Conventions and Recommendations. The main ILO conventions in the field of labor protection.
15. International cooperation in the field of labor protection. The main areas of cooperation. United Nations. World Health Organization. International Atomic Energy Agency. International Labor Organization. European Union.
16. Occupational safety as an integral part of social responsibility.
17. State management of labor protection, state supervision and public control over labor protection in Ukraine. Bodies of state supervision over labor protection, their main powers and rights. Public control over observance of the legislation on labor protection.
18. State Labor Service of Ukraine, its structure and functions.
19. A risk-based approach in assessing the potential and actual risk of adverse effects of environmental factors on human health.
20. Identification, assessment and reduction of risks of dangerous events, quality management and formation of safety culture.
21. Collective and labor agreements as a reflection of labor protection legislation. Law of Ukraine "On Collective Bargaining Agreements" and its content. Order of the Ministry of Labor and Social Policy of Ukraine "On approval of the form of employment contract between employees and individuals". Concluding an employment agreement according to the specifics of the types of work and the specifics of functional responsibilities. Regulation of labor protection issues in the collective agreement. Hiring under a contract.
22. Responsibility of officials and employees for violations of labor protection legislation.
23. Sectoral programs to improve safety, occupational health and the working environment. Regulations on the organization of labor protection management system in the industry. Order of the Ministry of Health No.268 dated 30.09.94 "On the labor protection service of the system of the Ministry of Health".
24. Structure, main functions and tasks of labor protection management in medical institutions. The labor protection service of the medical-preventive establishments (MPE), its structure, number, main tasks and functions. Rights and responsibilities of labor protection employees.
25. Commission on labor protection in medical institutions, main tasks and rights. Offices of industrial safety and labor protection, main tasks and directions of work.
26. Planning of labor protection measures. Identification, assessment and reduction of risks of dangerous events, quality management and safety culture. Accounting and analysis of labor protection indicators. Plans for localization and elimination of emergencies and accidents.
27. Principles of organization, types of training and testing of knowledge on occupational safety. Occupational safety briefings, their types. Stimulation of occupational safety.
28. Socio-economic effect of occupational safety of medical workers.

29. Order of the Ministry of Education and Science of Ukraine No. 563 dated 01.08.2001 "On approval of the Regulations on the organization of work on labor protection of participants in the educational process in institutions and educational establishments".
30. Occupational hygiene and physiology - definition, purpose, tasks, research methods.
31. Classification of hazardous and harmful production factors.
32. Basic physiological signs of physical and mental work. Physiological changes that occur in the organs and systems of the human body during work.
33. Human capacity for work, dynamics and reasons for its change during the working day.
34. Physiological essence of fatigue, existing theories and modern understanding of the mechanism of its occurrence.
35. Ways to prevent fatigue. Methods of developing rational regimens of work and rest.

Section 2. Features of working conditions in the field of medicine

1. Classification of work of medical workers.
2. Psychophysiological harmful and dangerous factors of the production environment and their impact on the health of health workers.
3. Physical harmful and dangerous factors of the work environment and their impact on the health of healthcare workers.
4. Chemical harmful and dangerous factors of the production environment and their impact on the health of healthcare workers.
5. Biologically harmful and dangerous factors of the production environment and their impact on the health of healthcare workers.
6. Hygienic features of working conditions and health status of doctors of different profiles (surgical, therapeutic, dental, etc.).
7. Features of occupational and industrial morbidity of medical workers.
8. Basic methods and criteria of sanitary and hygienic assessment of working conditions of medical workers. The concept of severity, tension, harmfulness and danger of work.
9. Methodology for evaluating the work of medical workers according to the criteria of "Hygienic classification of labor on the indicators of harmfulness and danger of factors of the production environment, severity and intensity of the labor process", approved by the order of the Ministry of Health of Ukraine 08.04.2014 No. 248.
10. Certification of work places by working conditions. Purpose, main tasks and content of certification. Organization of works and the order of attestation of workplaces. Chart of working conditions.
11. The main content of the Resolutions of the Cabinet of Ministers of Ukraine No. 1232 dated 30.11.2011 "Some issues of investigation and accounting of accidents, occupational diseases and accidents at work", No.270 dated 22.03.01 "On approval of the Procedure for investigation and accounting of non-productive accidents "and No. 1662 dated November 8, 2000" On approval of the list of occupational diseases ".
12. Methods of investigation and registration of accidents at work.
13. Methods of investigation and registration of non-productive accidents.
14. Injuries, acute and chronic occupational diseases and poisonings in medicine, methods of their accounting and investigation.
15. Measures to prevent accidents, injuries and occupational diseases of medical workers.
16. Social Insurance Fund for Accidents at Work and Occupational Diseases. Law of Ukraine "On Compulsory State Social Insurance against Accidents at Work and Occupational Diseases That Caused Disability." Compensation to the victim at work.

Section 3. Special issues of occupational safety in the field of medicine.

1. Hygienic requirements for the design and construction of treatment and prevention facilities.
2. Safety requirements during the operation of basic medical equipment.
3. Measures to reduce physical and mental overload of health workers. Scientific organization of work in the hospital. Rational organization of the workplace and furniture. The main ways to prevent fatigue.
4. Measures to reduce the adverse effects of physical factors on the body of health professionals. Requirements for the microclimate.
5. Measures to reduce the adverse effects of noise, vibration, ultrasound.
6. Requirements for industrial lighting of medical workers' workplaces.
7. Requirements for ultraviolet radiation, electromagnetic fields of radio frequencies and laser radiation in the workplace of medical workers.
8. Requirements for video terminals and personal computers.
9. Requirements for ionizing radiation of medical and pharmaceutical workers.
10. Measures to reduce the adverse effects of chemical factors on the body of health professionals. Ways to prevent air pollution of the working area with harmful chemicals.
11. Measures to prevent the harmful effects of biological factors. Sanitary and anti-epidemic regime of the hospital.
12. Hygienic education and health education.
13. Requirements for personal protective equipment and work clothes of medical workers.
14. Organization of air exchange in the premises of the hospital, ventilation.
15. Occupational safety of medical personnel in separate structural subdivisions of the hospital (operating room, radiodiagnostic subdivisions, physiotherapy rooms, pathology departments and morgues, etc.), the main normative documents regulating these issues.
16. Fundamentals of labor protection of personnel in the pharmaceutical industry.
17. Working hours for employees of health care facilities.
18. Occupational safety in higher medical educational institutions.
19. Guarantees of workers' rights to labor protection, benefits and compensation for difficult and harmful working conditions. Responsibilities of employees to comply with the requirements of regulations on labor protection.
20. Labor protection of women, minors, the elderly and the disabled, the main regulations governing these issues.
21. Medical examinations of medical workers. The main provisions of the Order of the Ministry of Health of Ukraine No.246 dated 21.05.2007 "On approval of the Procedure for medical examinations of certain categories of workers."
22. Prevention of nosocomial infections as a component of labor protection in medicine.
23. The concept of dangerous infectious diseases.
24. HIV and AIDS in the doctor's practice. Possible ways of getting biological material from an HIV-infected medical worker. The concept of "industrial accident" and an emergency appeal to the AIDS Center / Institute of Infectious Diseases.
25. The main provisions of the Law of Ukraine "On Combating the Spread of Diseases Caused by Human Immunodeficiency Virus (HIV) and Legal and Social Protection of People Living with HIV" and the Law of Ukraine On Approval of the National Targeted Social Program to Combat HIV / AIDS for 2014-2018 No. 1708-VII dated 20.10.2014.

26. Main provisions of the Orders of the Ministry of Health of Ukraine № 955 of 05.11.2013 “Procedure for emergency post-exposure prophylaxis of HIV infection in employees in the performance of professional duties”, No.148 dated 17.03.2015 “On approval of the Procedure for confirming the connection between HIV infection and performance an employee of his / her professional duties ”, No. 955 dated 05.11.2013“ On approval of normative-legal acts on protection against HIV infection in the performance of professional duties ”and others.
27. Viral hepatitis, their potential danger to healthcare professionals. Prevention of hepatitis virus infection and immunoprophylaxis in contact with biological materials of a patient with hepatitis.
28. Resolution of the Cabinet of Ministers of Ukraine No. 637 dated April 29, 2013 “On Approval of the State Targeted Social Program for Prevention, Diagnosis and Treatment of Viral Hepatitis for the Period up to 2016”.
29. Tuberculosis and its prevalence in Ukraine and the world. Potential occupational hazards for healthcare professionals.
30. Measures to prevent tuberculosis infection of medical workers. Laws of Ukraine "On Combating Tuberculosis", "On Approval of the National Targeted Social Program to Combat Tuberculosis for 2012-2016".
31. Colors, safety signs and signal markings.
32. General safety requirements for technological equipment and processes in the hospital. Safety during operation of pressure systems and cryogenic equipment.
33. Electrical safety. Classification of premises according to the degree of danger of electric shock.
34. Conditions of electric shock. Safe operation of electrical installations: electrical protective equipment and measures.
35. Fundamentals of fire safety. State fire supervision. Fire prevention during the design and operation of PHC and medical equipment.
36. Indicators of explosive properties of materials and substances. Categories of premises by explosion and fire hazard. Classification of explosive and flammable premises and zones. Fire resistance of building structures and materials.
37. The main means and measures to ensure fire safety of the production facility. Fire alarm. Fire extinguishers.
38. Actions of personnel in case of fire. Ensuring the safe evacuation of personnel. Ensuring and controlling the state of fire safety at production facilities. Training in fire safety rules for employees of hospitals.

Practical questions.

1. Apply the requirements of legislative and regulatory documents for the implementation of methods and means of occupational safety in medical institutions.
2. Apply the basic forms of organization and management of labor protection of medical workers.
3. Identify harmful and dangerous factors of the working environment in the workplace of medical workers and give them a hygienic assessment.
4. Evaluate the organization of the workplace, furniture, medical equipment in the hospital.
5. Predict the possibility of occupational, industrial diseases, accidents, emergencies.
6. Carry out certification of workplaces according to working conditions in terms of severity, intensity, harmfulness and danger of the production process.

7. Substantiate and develop a plan of measures to improve the working conditions of health workers and monitor their effectiveness.
8. To control the observance of the rules of personal hygiene and the use of personal protective equipment of medical workers.
9. To investigate and record accidents, acute and chronic occupational diseases, injuries in the medical field.
10. Organize fire and electrical safety measures.
11. Develop health and safety instructions for healthcare professionals.
12. Conduct training and testing of knowledge on labor protection.

3.3. Control questions.

Section 1. General issues of occupational safety.

36. Basic terms and definitions in the field of occupational safety: labor protection, working conditions, harmful production factor, dangerous production factor, safe working conditions, workplace, safety, etc.
37. Subjects and objects of occupational safety.
38. The current state of occupational safety in Ukraine and abroad.
39. General issues of occupational safety in medicine.
40. Legal bases of labor protection (Constitution of Ukraine, Code of Labor Laws, Law of Ukraine "On Labor Protection", etc.).
41. Normative-legal acts on labor protection (NPAOP): definitions, basic requirements and features. The structure of NPAOP. Register of NPAOP.
42. National standards of Ukraine on labor protection. System of labor safety standards (SSB). Sanitary, construction norms, other national documents on labor protection.
43. Acts on labor protection, operating in the organization, their composition and structure. Instructions on labor protection. Development and approval of labor protection acts in force in the organization.
44. Liability of officials and employees for violations of labor protection legislation.
45. Social partnership as a principle of legislative and normative-legal provision of labor protection. Social dialogue in the European Union.
46. International norms of social responsibility. Standard SA 8000 "Social responsibility". International standard ISO 26000 "Guidelines for social responsibility".
47. Legislative basis of the European Union on labor protection. EU directives on labor protection. Framework Directive 89/391 / EC "On the introduction of measures to improve the safety and health of workers".
48. Elements of labor protection management system, international standard OHSAS 18001: 2007.
49. Labor standards of the International Labor Organization. ILO Conventions and Recommendations. The main ILO conventions in the field of labor protection.
50. International cooperation in the field of labor protection. The main areas of cooperation. United Nations. World Health Organization. International Atomic Energy Agency. International Labor Organization. European Union.
51. Occupational safety as an integral part of social responsibility.
52. State management of labor protection, state supervision and public control over labor protection in Ukraine. Bodies of state supervision over labor protection, their main powers and rights. Public control over observance of the legislation on labor protection.
53. State Labor Service of Ukraine, its structure and functions.

54. A risk-based approach in assessing the potential and actual risk of adverse effects of environmental factors on human health.
55. Identification, assessment and reduction of risks of dangerous events, quality management and formation of safety culture.
56. Collective and labor agreements as a reflection of labor protection legislation. Law of Ukraine “On Collective Bargaining Agreements” and its content. Order of the Ministry of Labor and Social Policy of Ukraine "On approval of the form of employment contract between employees and individuals". Concluding an employment agreement according to the specifics of the types of work and the specifics of functional responsibilities. Regulation of labor protection issues in the collective agreement. Hiring under a contract.
57. Responsibility of officials and employees for violations of labor protection legislation.
58. Sectoral programs to improve safety, occupational health and the working environment. Regulations on the organization of labor protection management system in the industry. Order of the Ministry of Health No.268 dated 30.09.94 "On the labor protection service of the system of the Ministry of Health".
59. Structure, main functions and tasks of labor protection management in medical institutions. The labor protection service of the medical-preventive establishments (MPE), its structure, number, main tasks and functions. Rights and responsibilities of labor protection employees.
60. Commission on labor protection in medical institutions, main tasks and rights. Offices of industrial safety and labor protection, main tasks and directions of work.
61. Planning of labor protection measures. Identification, assessment and reduction of risks of dangerous events, quality management and safety culture. Accounting and analysis of labor protection indicators. Plans for localization and elimination of emergencies and accidents.
62. Principles of organization, types of training and testing of knowledge on occupational safety. Occupational safety briefings, their types. Stimulation of labor protection.
63. Socio-economic effect of labor protection of medical workers.
64. Order of the Ministry of Education and Science of Ukraine No. 563 dated 01.08.2001 “On approval of the Regulations on the organization of work on labor protection of participants in the educational process in institutions and educational establishments”.
65. Occupational hygiene and physiology - definition, purpose, tasks, research methods.
66. Classification of hazardous and harmful production factors.
67. Basic physiological signs of physical and mental work. Physiological changes that occur in the organs and systems of the human body during work.
68. Human performance, dynamics and reasons for its change during the working day.
69. Physiological essence of fatigue, existing theories and modern understanding of the mechanism of its occurrence.
70. Ways to prevent fatigue. Methods of developing rational modes of work and rest.

Section 2. Features of working conditions in the field of medicine

17. Classification of work of medical workers.
18. Psychophysiological harmful and dangerous factors of the production environment and their impact on the health of health workers.
19. Physical hazards and hazards of the work environment and their impact on the health of healthcare workers.
20. Chemical hazards and hazards of the production environment and their impact on the health of healthcare workers.

21. Biologically harmful and dangerous factors of the production environment and their impact on the health of healthcare workers.
22. Hygienic features of working conditions and health status of doctors of different profiles (surgical, therapeutic, dental, etc.).
23. Features of occupational and industrial morbidity of medical workers.
24. Basic methods and criteria of sanitary and hygienic assessment of working conditions of medical workers. The concept of severity, tension, harmfulness and danger of work.
25. Methodology for evaluating the work of medical workers according to the criteria of "Hygienic classification of labor on the indicators of harmfulness and danger of factors of the production environment, severity and intensity of the labor process", approved by the order of the Ministry of Health of Ukraine 08.04.2014 № 248.
26. Certification of jobs under working conditions. Purpose, main tasks and content of certification. Organization of works and the order of attestation of workplaces. Map of working conditions.
27. The main content of the Resolutions of the Cabinet of Ministers of Ukraine № 1232 dated 30.11.2011 "Some issues of investigation and accounting of accidents, occupational diseases and accidents at work", №270 dated 22.03.01 "On approval of the Procedure for investigation and accounting of non-productive accidents" And № 1662 of November 8, 2000 "On approval of the list of occupational diseases".
28. Methods of investigation and accounting of accidents at work.
29. Methods of investigation and accounting of non-productive accidents.
30. Injuries, acute and chronic occupational diseases and poisonings in medicine, methods of their accounting and investigation.
31. Measures to prevent accidents, injuries and occupational diseases of medical workers.
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42. Measures to reduce the adverse effects of physical factors on the body of health professionals. Requirements for the microclimate.
43. Measures to reduce the adverse effects of noise, vibration, ultrasound.
44. Requirements for industrial lighting of medical workers' workplaces.
45. Requirements for ultraviolet radiation, electromagnetic fields of radio frequencies and laser radiation in the workplace of medical workers.
46. Requirements for video terminals and personal computers.
47. Requirements for ionizing radiation of medical and pharmaceutical workers.
48. Measures to reduce the adverse effects of chemical factors on the body of health professionals. Ways to prevent air pollution of the working area with harmful chemicals.
49. Measures to prevent the harmful effects of biological factors. Sanitary and anti-epidemic regime of the hospital.

50. Hygienic education and health education.
51. Requirements for personal protective equipment and work clothes of medical workers.
52. Organization of air exchange in the premises of the hospital, ventilation.
53. Occupational safety of medical personnel in separate structural subdivisions of the hospital (operating room, radiodiagnostic subdivisions, physiotherapy rooms, pathology departments and morgues, etc.), the main normative documents regulating these issues.
54. Fundamentals of labor protection of personnel in the pharmaceutical industry.
55. Working hours for employees of health care facilities.
56. Occupational safety in higher medical educational institutions.
57. Guarantees of workers' rights to labor protection, benefits and compensation for difficult and harmful working conditions. Responsibilities of employees to comply with the requirements of regulations on labor protection.
58. Labor protection of women, minors, the elderly and the disabled, the main regulations governing these issues.
59. Medical examinations of medical workers. The main provisions of the Order of the Ministry of Health of Ukraine №246 of 21.05.2007 "On approval of the Procedure for medical examinations of certain categories of workers."
60. Prevention of nosocomial infections as a component of labor protection in medicine.
61. The concept of dangerous infectious diseases.
62. HIV and AIDS in the doctor's practice. Possible ways of getting biological material from an HIV-infected medical worker. The concept of "industrial accident" and an emergency appeal to the AIDS Center / Institute of Infectious Diseases.
63. The main provisions of the Law of Ukraine "On Combating the Spread of Diseases Caused by Human Immunodeficiency Virus (HIV) and Legal and Social Protection of People Living with HIV" and the Law of Ukraine On Approval of the National Targeted Social Program to Combat HIV / AIDS for 2014-2018 № 1708-VII dated 20.10.2014.
64. Main provisions of the Orders of the Ministry of Health of Ukraine № 955 of 05.11.2013 "Procedure for emergency post-exposure prophylaxis of HIV infection in employees in the performance of professional duties", № 148 of 17.03.2015 "On approval of the Procedure for confirming the connection between HIV infection and performance an employee of his / her professional duties ", № 955 of 05.11.2013" On approval of normative-legal acts on protection against HIV infection in the performance of professional duties "and others.
65. Viral hepatitis, their potential danger to healthcare professionals. Prevention of hepatitis virus infection and immunoprophylaxis in contact with biological materials of a patient with hepatitis.
66. Resolution of the Cabinet of Ministers of Ukraine № 637 of April 29, 2013 "On Approval of the State Targeted Social Program for Prevention, Diagnosis and Treatment of Viral Hepatitis for the Period up to 2016".
67. Tuberculosis and its prevalence in Ukraine and the world. Potential occupational hazards for healthcare professionals.
68. Measures to prevent tuberculosis infection of medical workers. Laws of Ukraine "On Combating Tuberculosis", "On Approval of the National Targeted Social Program to Combat Tuberculosis for 2012-2016".
69. Colors, safety signs and signal markings.

70. General safety requirements for technological equipment and processes in the hospital. Safety during operation of pressure systems and cryogenic equipment.
71. Electrical safety. Classification of premises according to the degree of danger of electric shock.
72. Conditions of electric shock. Safe operation of electrical installations: electrical protective equipment and measures.
73. Fundamentals of fire safety. State fire supervision. Fire prevention during the design and operation of PHC and medical equipment.
74. Indicators of explosive properties of materials and substances. Categories of premises by explosion and fire hazard. Classification of explosive and flammable premises and zones. Fire resistance of building structures and materials.
75. The main means and measures to ensure fire safety of the production facility. Fire alarm. Fire extinguishers. Actions of personnel in case of fire. Ensuring the safe evacuation of personnel. Ensuring and controlling the state of fire safety at production facilities. Training in fire safety rules for employees of hospitals..

3.4. Individual tasks

Individual work of students under the guidance of a teacher in the discipline "Occupational Safety in the Field of Medicine" is carried out during the semester in the form of: study of literature sources recommended for mastering topics and problems and preparing reports with presentations on them; study of normative documents recommended for studying various topics of the discipline; work with health databases; performance of individual tasks.

Part-time students must complete an individual assignment and send it to the teacher for verification (by e-mail) no later than 10 days before the start of the training session.

Tasks (topics) for individual work students choose independently, and coordinate it with teachers.

Criteria for evaluating an individual task. The work should have a volume of 10-16 pages of standard text (font size A4, font - Times New Roman, size - 14, line spacing - 1.5, paragraph indent - 1.25, width alignment, between paragraph indents - no) and fully disclose the content of selected issues. The presentation of the report should be performed in the software services PowerPoint, Prezi, Google slides, etc. The work should be structured and contain the title of the report, relevance, purpose, objectives, main content of the work, the list of used literature sources, designed in accordance with the existing requirements of DSTU 8302: 2015 "Information and documentation".

The work must be submitted for examination within the specified time.

Inconsistency of content, too large or small amount of work, non-compliance with formal requirements for registration, lack of list of sources used or its incorrect design, insufficient structure of work, late submission of work for inspection are grounds for lowering the assessment or returning the work for revision.

3.5. Other incentives

For participation in research student conferences, in scientific researches, in interrogations the student can receive additional points 1 - 10.

3.6. Rules for appealing the assessment

Rules for appealing the assessment. The grade in the discipline can be appealed on the basis of the requirements of the "Regulations on the organization of the educational process in KhNMU" No. 370 dated 27.08.2019, supplemented in accordance with the order No. 114 dated 20.05.2020.

4. DISCIPLINE POLICY

Discipline requirements. In order to successfully complete the relevant course, it is necessary to regularly attend lectures and practical classes strictly in medical form; 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.

Class attendance and behavior.

Students can discuss different tasks, but their performance is strictly individual. Writing, use of various software tools, tips are not allowed. Students are not allowed to be late for practical classes and attendance without their medical form.

Students' participation in research and conferences on this topic is encouraged.

All KhNMU students 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 define an effective mechanism for resolving conflict situations related to discrimination and sexual harassment. This Regulation is developed 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 Preventing and Combating 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 paragraph 1 of Article 4 of the Convention on the Elimination of All Forms of Discrimination against Women; cultural rights; UN Committee on Economic, Social and Cultural Rights); Recommendations on education in the spirit of international understanding, cooperation and peace and education in the spirit of respect for human rights and fundamental freedoms (UNESCO); The concept of the State social program to ensure 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' offices, 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 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 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 KhNMU are confirmed by the Code of Corporate Ethics and the Charter of KhNMU.

Students are expected to attend all lectures and workshops. If they missed classes, it is necessary to work it out (according to the schedule on the information stand of the department)

Written and homework must be completed completely and on time, if students have questions, you can contact the teacher in person or by e-mail, which the teacher will provide at the first practical lesson.

Behavior in the lecture-hall:

During the lecture, students are recommended to keep a synopsis of the lesson and keep a sufficient level of silence. Asking questions to the lecturer is perfectly normal.

Practical lessons

- Active participation during the discussion in the audience, students should be ready to understand the material in detail, ask questions, express their point of view, discuss.
- During the discussion it is important:
- respect for colleagues,
 - tolerance for others and their experience,
 - susceptibility and impartiality,
 - the ability to disagree with the opinion, but to respect the identity of the opponent (s),

- careful argumentation of his opinion and the courage to change his position under the influence of evidence,
- self-expression, when a person avoids unnecessary generalizations, describes his feelings and formulates his wishes based on their own thoughts and emotions,
- Mandatory acquaintance with primary sources.

A creative approach in its various manifestations is welcome. Students are expected to be interested in participating in city, national and international conferences, competitions and other events in the subject profile.

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

During classes it is allowed:

- leave the audience for a short time if necessary and with the permission of the teacher;
 - to drink water;
 - take photos of presentation slides;
 - take an active part in the lesson
- It is forbidden:
- eating (except for persons whose special medical condition requires another - in this case, medical confirmation is required);
 - smoking, drinking alcohol and even low-alcohol beverages or drugs;
 - use obscene language or use words that offend the honor and dignity of colleagues and faculty;
 - gambling;
 - damage the material and technical base of the university (damage inventory, equipment; furniture, walls, floors, litter the premises and territories);
 - shouting or listening to loud music in classrooms and even in corridors during classes.

Use of electronic gadgets. Use electronic gadgets for games, correspondence on social networks (except for breaks), loud conversations, etc. You are not allowed to use a mobile phone, tablet or other electronic gadgets during classes for purposes other than the educational process.

Policy for people with special educational needs.

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.

5. ACADEMIC INTEGRITY

The Department of Hygiene and Ecology № 2 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.

6. RECOMMENDED LITERATURE

Basic:

1. Occupational Health and Safety for Healthcare Workers: study guide/ О.П. Яворовський, М.І.Веремей, В. І. Zenkina et al. – 3rd edition. – Kyiv: AUS Medicine Publishing, 2018. – 120 p.
2. Безпека життєдіяльності, основи охорони праці: навч. посіб. / О.П. Яворовський, В.М. Шевцова, В.І. Зенкіна та ін.; за заг. ред О.П. Яворовського. – К.: ВСВ “Медицина”, 2015. – 288 с.
3. Безпека життєдіяльності, основи охорони праці: Навчально-методичний посібник/ упор.: О.П. Яворовський, В.М. Шевцова, Г.А. Шкурко та ін.- Черкаси: видавець Чабаненко Ю.А., 2012. – 232 с.
4. Гігієна праці: Підручник /Ю.І. Кундієв, О.П. Яворовський, А.М. Шевченко та ін.; за ред. акад. НАН України, НАМН України, проф. Ю.І. Кундієва, чл-кор. НАМН України проф.

О.П.Яворовського.- К.: ВСВ “Медицина”, 2011.- 904с.

5. Гігієна праці (методи досліджень та санітарно-епідеміологічний нагляд) /За ред..А.М.Шевченка, О.П.Яворовського. – Вінниця: Нова книга, 2005.

6. Охорона праці у фармацевтичній галузі: навч. посіб. /О.В.Жуковіна, О.І.Зайцев, О.І.Жуковін, Г.А.Грецька. –К.: Медицина, 2009, -432с.

7. Гігієна та охорона праці медичних працівників: навч.посібник /За ред. В.Ф.Москаленка, О.П.Яворовського. – К.: ВСВ «Медицина», 2009. – 176 с.

8. Свидовый В.И. Гигиена и охрана труда медицинских работников /В.И.Свидовый, Е.Е.Палишкина. – СПб ГМД им. И.И.Мечникова, 2006. -90с.

9. Конституція України. Основний закон від 28.06.1996.

10. Кодекс законів про працю України. Закон № 322-VIII від 10.12.71.

11. Основи законодавства України про охорону здоров'я № 2802-XII від 19.11.92.

12. Закон України “Про охорону праці” від 14.10.92.

13. Закон України “Про забезпечення санітарного та епідемічного благополуччя населення” № 4004-XII від 24.02.94.

14. Закон України «Про пожежну безпеку»

15. Закон України «Про загальнообов'язкове державне соціальне страхування від нещасного випадку на виробництві та професійного захворювання, які спричинили втрату працездатності».

Additional:

16. Закони України “Про протидію захворюванню на туберкульоз” № 2586-III від 05.07.2001.

17. Постанова Кабінету Міністрів України “Порядок розслідування та ведення обліку нещасних випадків, професійних захворювань і аварій на виробництві” № 1232 від 30 листопада 2011 року.

18. Постанова Кабінету Міністрів України №1662 від 08.11.2000 “Про затвердження переліку професійних захворювань”.

19. Постанова Кабінету Міністрів України № 442 від 1.08.1992 “Про Порядок проведення атестації робочих місць за умовами праці”.

20. Наказ МОЗ України № 268 від 30.09.94 “Про службу охорони праці системи Міністерства охорони здоров'я України”.

21. Наказ МОЗ України №246 від 21.05.2007 року “Про затвердження Порядку проведення медичних оглядів працівників певних категорій”.

22. Наказів МОЗ України № 955 від 05.11.2013 “Порядок проведення екстреної постконтактної профілактики ВІЛ-інфекції у працівників при виконанні професійних обов'язків”.

23. “Гігієнічна класифікація праці за показниками шкідливості та небезпечності факторів виробничого середовища, важкості та напруженості трудового процесу”, затверджена наказом МОЗ України № 248 від 08.04.2014.

24. Наказ Держнаглядохоронпраці України № 15 від 26.01.05 “Типове положення про порядок проведення навчання і перевірки знань з питань охорони праці”.

25. Норми радіаційної безпеки України (НРБУ-97). – Київ: Відділ поліграфії Українського центру держсанепіднагляду МОЗ України, 1998. – 125 с.

26. ДСН 3.3.6.039-99 “Державні санітарні норми виробничої загальної та локальної вібрації”.

27. ДСН 3.3.6.037-99 “Державні санітарні норми виробничого шуму, ультразвуку та інфразвуку”.

28. ДСН 3.3.6.042-99 “Санітарні норми мікроклімату виробничих приміщень”.

29. ДБН В.2.5-28-2006 “Природне та штучне освітлення”.

30. ДСанПінН 3.3.6.096-2002 “Державні санітарні норми і правила при роботі з джерелами електромагнітних полів”.

31. ГОСТ 12.1.005-88 ССБТ “Общие санитарно-гигиенические требования к воздуху

рабочей зоны”.

32. ДСТУ 2293-99 “Охорона праці. Терміни та визначення основних понять”.
33. ДБН В.2.2-9:2009 “Громадські будинки та споруди”.
34. ДБН В 2.2-10-01 “Проектування закладів охорони здоров’я”.
35. Наказ МОН України № 563 від 01.08.01 “Положення про організацію роботи з охорони праці учасників навчально-виховного процесу в установах і закладах освіти”.
36. ДНАОП 0.00-1.21-98 “Правила безпечної експлуатації електроустановок споживачів”.
37. НАОП 9.1.50-1.10-84 (НПАОП 85.11-1.10-84) “Правила з техніки безпеки при експлуатації виробів медичної техніки в установах охорони здоров’я. Загальні вимоги”.
38. НАОП 9.1.50-1.13-59 (НПАОП 85.11-1.13-59) “Правила обладнання і експлуатації інфекційних установ (інфекційних відділень, палат), а також охорони праці персоналу цих установ”.
39. НАОП 9.1.50-2.02-3 (ОСТ 42-21-15-83) “Кабінети рентгенодіагностичні. Вимоги безпеки”.
40. НАОП 9.1.50-6.04-91 “Методичні рекомендації щодо поліпшення умов праці медичних працівників, які зайняті ультразвуковою діагностикою”.

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 Emergencies <http://www.dsns.gov.ua/>.
8. State Service of Ukraine for Labor <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>.

8. OTHERS

1. Useful links:
2. Regulations on prevention and settlement of cases related to sexual harassment and discrimination in KhNMU http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog-sex.doc
3. Regulations on Academic Integrity and Ethics of Academic Relations at Kharkiv National Medical University
4. http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_ad_etyka_text.pdf
5. The procedure for conducting classes on in-depth study by students of Kharkiv National Medical University of certain disciplines in excess of the curriculum
http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/nak-poriad-pogl-vyv-dyvc.docx
6. Regulations on the Commission on Academic Integrity, Ethics and Conflict Management of KhNMU
http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_komis_ad_text.pdf
7. Regulations on the recognition of the results of non-formal education at Kharkiv National Medical University
http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/polog_neform_osv.pdf
8. INCLUSIVE EDUCATION:
9. http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=7108%3A2021-03-10-14-08-02&catid=12%3A2011-05-10-07-16-32&Itemid=33&lang=uk
10. ACADEMIC INTEGRITY:
11. http://www.knmu.kharkov.ua/index.php?option=com_content&view=article&id=2520%3A2015-04-30-08-10-46&catid=20%3A2011-05-17-09-30-17&Itemid=40&lang=uk
12. http://files.knmu.edu.ua:8181/upload/redakt/doc_uchproc/kodex_AD.docx

