



INTERNATIONAL EUROPEAN UNIVERSITY
EDUCATIONAL AND RESEARCH INSTITUTE
"EUROPEAN MEDICAL SCHOOL"

**Department of Fundamental, Medical and Preventive
Disciplines**

APPROVED by
The Scientific and Methodical Council of the
University, protocol dd. August 29, 2023 No. 7
Deputy Chair of SMC *O. Lisnichuk* O. LISNICHUK

WORKING PROGRAM OF THE ACADEMIC DISCIPLINE:
OCCUPATIONAL HEALTH AND SAFETY FOR
HEALTHCARE

to train students of the second (Master's) level
(full-time mode of study)

Knowledge area 22 "Health care"

Specialty 222 "Medicine"

Educational program: Medicine

Discipline status: Compulsory

The working program of the **Occupational Health and Safety for Healthcare** academic disciplines is based on the Medicine educational and professional program for the second (Master) level of the 222 Medicine specialty approved by the University Academic Council on May 30, 2023, protocol №4.

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INTRODUCTION

The study program of the academic discipline "Occupational safety in the industry" was developed in accordance with Standard of higher education of Ukraine for the training of specialists of the second (master's) level, field of knowledge 22 - "Health care", specialty - 222 "Medicine", educational qualification "Master of Medicine", professional qualification "Doctor".

Description of the academic discipline (abstract)

The study program of the discipline "Occupational Safety in the Industry" is intended for higher medical institutions of education of Ukraine in accordance with the requirements of the ECTS credit-transfer system of 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 the discipline or its section.

In accordance with the curriculum for training specialists of the second (master's) level of higher education in the field of knowledge 22 "Health care", the study discipline "Occupational health in the industry" is taught in the 3rd semester of the second year of study.

3 credits (90 hours) are provided for the study of the discipline "Occupational safety in the industry", of which 32 classroom hours, 58 - independent work.

Information volume of the academic discipline

Name indicators	Field of knowledge, direction of training, educational - qualification level	Characteristic educational disciplines
		daytime form teaching
Number loans – 3.0	Branch of knowledge 22 "Health care" Direction training "Medicine"	Normative Year of training 2nd
Content sections – 3	Specialty: 222 "Medicine"	Semester 3 _
General number hours – 90 the total number of classrooms hours - 32		
Weekly load: classrooms – 2	Educational qualification level: "Master of Medicine" Qualifications professional "doctor"	Lectures 4 p.m.
		Practical 4 p.m.
		Independent work 58 hours
		Type of control: TEST

The subject of study of the academic discipline is: the study of the system of legal, socio-economic, organizational-technical, sanitary-hygienic and medical-prophylactic measures and means aimed at preserving the life, health and working capacity of medical workers in the process of work .

Interdisciplinary connections.

For the successful assimilation of the discipline, the student of higher education needs the knowledge obtained in the process of studying the following disciplines of general training: "Medical and biological physics. Medical informatics", "Medical chemistry", "Medical biology", "Physiology". The main provisions of the educational discipline can be applied when studying the disciplines of professional training, which involves the integration of teaching with these disciplines and the application of the acquired knowledge, abilities and skills in the process of further education and in professional activities.

1. Goal and task educational disciplines

1.1. the purpose teaching educational disciplines "Protection labor in industry" is:

- formation of future specialists' knowledge, skills and competencies to ensure effective management of labor protection in the medical field;
- creation of favorable conditions for the production environment and labor safety in the industry in accordance with current legislative and other normative legal acts.

1.2. The main tasks of studying the discipline "Occupational safety in the industry" are:

- Ensuring the preservation of life, health and working capacity of medical workers in industrial conditions.
- Education of moral and ethical values aimed at the prevention of industrial injuries and the occurrence of occupational and production-related diseases.
- Development and application of a complex of legislative, organizational, engineering and technical, sanitary and hygienic, medical and preventive and other measures.
- Creation of favorable conditions for the production environment and labor safety in accordance with current legislative and regulatory acts

1.3 Competencies and learning outcomes

The list of graduate competencies , the formation of which is facilitated by the study of the discipline "Bioethics and medical communications" and its relationship with the normative content of the training of students of higher education in the field of knowledge 22 "Health care", formulated in terms of learning outcomes in the second Standard of Higher Education of Ukraine (master's) level of higher education.

According to the requirements of the Standard of Higher Education of Ukraine, the second (master's) level of higher education of the discipline ensures that students acquire the following levels of competence :

general competence (ZK)	
ZK 1	Ability to abstract thinking, analysis and synthesis.
ZK 2	Ability to learn and master modern knowledge
ZK 3	Ability to apply knowledge in practical situations
ZK 4	Knowledge and understanding of the subject area and understanding of professional activity

ZK 5	Ability to adapt and act in a new situation
ZK 6	Ability to make informed decisions
ZK 7	Ability to work in a team
ZK 8	Ability to interpersonal interaction
ZK-10	Ability to use information and communication technologies
ZK 11	Ability to search, process and analyze information from various sources
ZK 12	Determination and persistence in relation to assigned tasks and assumed responsibilities
ZK 13	Awareness of equal opportunities and gender issues.
ZK 14	The ability to realize one's rights and responsibilities as a member of society, to realize the values of a civil (free democratic) society and the need for its sustainable development, the rule of law, the rights and freedoms of a person and a citizen in Ukraine.
ZK 15	The ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding 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 technologies, to use various types and forms of motor activity for active recreation and leading a healthy lifestyle.
Professional competences (FC)	
FC 4	The ability to determine the necessary regime of work and rest in the treatment and prevention of diseases.
FC 13	Ability to carry out sanitary and hygienic and preventive measures
FC 15	The ability to conduct an examination of working capacity.
FC 16	Ability to maintain medical documentation, including electronic forms.
FC 17	The ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population.
FC 25	Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results
Program Learning Outcomes (PLP)	
PRN 1	Have thorough knowledge of the structure of professional activity. To be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy
PRN 2	Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care
PRN 3	Specialized conceptual knowledge, which includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems.

PRN 10	Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.
PRN 21	Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information
PRN 22	Apply modern digital technologies, specialized software, and statistical methods of data analysis to solve complex healthcare problems.
PRN 24	To organize the required level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.
PRN 25	It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.
PRN 27	Communicate freely in the national and English languages, both orally and in writing to discuss professional activities, research and projects.

Upon completion of the "Occupational Safety in the Industry" discipline, students should **know**:

- dangerous and harmful factors production environment;
- rules techniques security under time work with electrical appliances, devices, what are working underpressure in structural subdivisions;
- rules techniques security in structural units of various medical and preventive institutions profile;
- foundations fire station security;
- reasons occurrence fires and prevention their in institutions protection health;
- characteristic surrounding, production and household environment;
- reasons occurrence and classification extraordinary situations;
- methods protection people in extraordinary situations;
- foundations organizations and carrying out rescue works in case occurrence extraordinary situations;
- organization medical help the population in conditions extraordinary situations.

After completing the study of the discipline " Occupational safety in the industry", students should be **able to**:

- follow rules protection labor on prevention unhappy cases and professional diseases in structural subdivisions medical and preventive institutions ;
- lead documentation with protection labor in structural divisions; elaborate instructions with protection labor;
- safely serve electrical equipment, devices, what are working under pressure;
- follow rules fire station security;
- use primary means fire extinguishing;
- conduct examination residential and production premises;
- give the first medical help victims in conditions extraordinary situations;

- use medical and anti-chemical means protection people in conditions extraordinary situations

1. Content of the academic discipline

The discipline program is structured into three sections.

Chapter I. General issues of labor protection

Section II . Peculiarities of working conditions in the medical field

Section III . Special issues of labor protection in the medical field

Chapter 1. General issues of labor protection

Content section 1. General issues of labor protection

Topic 1 . Legal and organizational foundations of labor protection.

Basic terms and definitions in the field of labor protection. Labor protection as an integral component of social responsibility. State management of labor protection, state supervision and public control over labor protection. The State Labor Service of Ukraine, its structure and functions.

A risk-oriented approach in assessing the potential and real danger of harmful effects of the factors of the industrial environment on human health.

Collective and labor agreements as a reflection of labor protection legislation. Conclusion of an employment agreement according to the specifics of types of work and features of functional duties. Regulation of labor protection issues in the collective agreement.

Liability of officials and employees for violations of labor protection legislation.

Topic 2. Organization of occupational health and safety in medical institutions and institutions of higher medical education.

Branch programs for improving the state of safety, occupational hygiene and the production environment. Regulations on the organization of the occupational health and safety management system in the industry. Order of the Ministry of Health No. 268 dated 30.09.94 "On the occupational health and safety service of the Ministry of Health". The structure, main functions and tasks of labor protection management in medical institutions. Occupational health and safety service of a medical and preventive institution, its structure, number, main tasks and functions. Rights and obligations of employees of the labor protection service. Commission on occupational health and safety in medical institutions, main tasks and rights. Offices of industrial safety and labor protection, main tasks and areas of work. Planning of labor protection measures. Identification, assessment and reduction of risks of dangerous events, quality management and formation of a safety culture. Accounting and analysis of labor protection indicators. Plans for the localization and liquidation of emergency situations and accidents. Principles of organization, types of training and testing of knowledge on labor protection issues. Briefings on labor protection issues, their types. Stimulation of labor protection. Socio-economic effect of labor protection of medical workers. Order of the Ministry of Education and Culture of Ukraine No. 563 dated 01.08.2001 "On the approval of the Regulation on the organization of work on labor protection of participants in the educational process in institutions and educational institutions".

Topic 3. Hygiene and physiology of work, importance for creating safe working conditions.

Hygiene and physiology of labor - definition, purpose, tasks, research methods. Classification of dangerous and harmful production factors. The main physiological

signs of physical and mental work. Physiological changes that occur in the organs and systems of the human body during work. Human capacity, dynamics and reasons for its changes during the working day. Physiological essence of fatigue, existing theories and modern understanding of the mechanism of its occurrence. Ways to prevent the development of fatigue. Methodology for the development of rational modes of work and rest.

Chapter II Peculiarities of working conditions in the medical field

Content section 2. Peculiarities of working conditions in the medical field

Topic 4 . Professional hazards in the performance of functional duties of medical workers.

Classification of work of medical workers. Psychophysiological harmful and dangerous factors of the industrial environment and their impact on the state of health of medical workers. Physical harmful and dangerous factors of the industrial environment and their impact on the state of health of medical workers. Chemical harmful and dangerous factors of the industrial environment and their impact on the health of medical workers. Biological harmful and dangerous factors of the industrial environment and their impact on the health of medical workers.

Topic 5 . Hygienic characteristics of working conditions and the state of health of medical workers.

Hygienic features of working conditions and health status of doctors of various specialties (surgical, therapeutic, stomatological, etc.). Peculiarities of professional and production-related morbidity of medical workers. Basic methods and criteria for sanitary and hygienic evaluation of working conditions of medical workers. The concept of difficulty, tension, harmfulness and danger of work. Methodology for evaluating the work of medical workers according to the criteria of "Hygienic classification of work according to indicators of harmfulness and danger of factors of the industrial environment, difficulty and tension of the labor process", approved by the order of the Ministry of Health of Ukraine dated 04.08.2014 No. 248. Attestation of workplaces according to working conditions. Purpose, main tasks and content of certification. Organization of work and the procedure for certification of workplaces. Map of working conditions.

Topic 6. Accidents and accidents at LPZ, their investigation and accounting.

The main content of 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 of 22.03.01 "On approval of the Procedure for investigation and accounting of accidents of a non-industrial nature" ” and No. 1662 dated November 8, 2000 “On approval of the list of occupational diseases”. Methods of investigation and accounting of accidents at work. Methods of investigation and accounting of accidents of a non-production nature. Traumatism, acute and chronic occupational diseases and poisoning in medicine, methods of their accounting and investigation. Measures to prevent accidents, injuries and occupational diseases of medical workers.

Social insurance fund against accidents at work and occupational diseases. Compensation for damage to the victim at work.

Section III. Special issues of labor protection in the medical field

Content section 3. Special issues of labor protection in the medical field

Topic 7 . Labor protection in medical institutions.

Hygienic requirements for the design and construction of medical and preventive facilities. Safety requirements during the operation of the main medical equipment. Measures to reduce the physical and neuropsychological burden of medical workers. Scientific organization of work at the LPZ. Hygienic upbringing and sanitary education. Measures to reduce the adverse effect of physical factors on the body of medical workers. Measures to reduce the adverse effect of chemical factors on the body of medical workers. Measures to prevent the harmful effects of biological factors. Sanitary and hygienic and anti-epidemic regime of the hospital. Requirements for personal protective equipment and work clothes of medical workers.

Topic 8 . Occupational health and safety in individual structural subdivisions of medical facilities and higher medical educational institutions.

Labor protection of medical personnel in separate structural units of the hospital (surgical, dental, infectious, physiotherapeutic, patho-anatomical, psychiatric, and others), as well as when working with medical equipment. Basics of the organization of occupational health and safety of personnel in the pharmaceutical industry. The main regulatory documents regulating these issues.

Labor protection in higher medical educational institutions.

Labor protection of women, minors, persons of older age groups and the disabled, the main regulatory documents regulating these issues. Medical examinations of medical workers. The main provisions of the Order of the Ministry of Health of Ukraine No. 246 dated May 21, 2007 "On approval of the Procedure for conducting medical examinations of employees of certain categories".

Topic 9. Dangerous infectious diseases in the work of medical workers.

Prevention of nosocomial infections as a component of occupational health and safety in medicine. The concept of dangerous infectious diseases. HIV and AIDS in the practice of a doctor. Possible routes of entry of biological material from an HIV-infected person into the body of a medical worker. Concept of "industrial accident" and emergency appeal to AIDS Center/Institute of Infectious Diseases. The main provisions of the Law of Ukraine "On countering the spread of diseases caused by the human immunodeficiency virus (HIV) and legal and social protection of people living with HIV", Orders of the Ministry of Health of Ukraine No. 955 dated November 5, 2013 "Procedure for emergency post-contact prevention of HIV infection in of employees in the performance of professional duties", No. 148 dated 17.03.2015 "On the approval of the Procedure for confirming the connection of HIV infection with the performance of professional duties by the employee", No. 955 dated 05.11.2013 "On the approval of normative legal acts on protection against HIV infection during the performance of professional duties" and others.

Viral hepatitises, their potential danger for medical workers. Prevention of infection with hepatitis viruses and immunoprophylaxis when in contact with biological materials of a hepatitis patient. Resolution of the Cabinet of Ministers of Ukraine No. 637 of April 29, 2013 "On the approval of the State targeted social program for the prevention, diagnosis and treatment of viral hepatitis for the period up to 2016".

Tuberculosis and its prevalence in Ukraine and the world. Potential occupational hazard for medical workers. Measures to prevent tuberculosis infection of medical

workers. Laws of Ukraine "On Combating Tuberculosis", "On Approval of the National Targeted Social Program for Combating Tuberculosis for 2012-2016".

Topic 10. Basics of occupational safety of medical workers.

General safety requirements for technological equipment and processes in the refinery. Electrical safety, safe operation of electrical equipment at the refinery. Basics of fire safety. State fire supervision, the main regulatory documents regulating it. Design and operation of medical facilities and medical equipment from the point of view of fire safety. The main means and measures to ensure fire safety of the refinery. Fire alarm. Fire extinguishing means. Actions of personnel during firefighting. Evacuation of personnel. Control of the state of fire safety. Training of fire safety rules for employees of the refinery.

2. Structure educational disciplines "Protection labor in industry"

The name of meaningful sections and topics	Number of hours			
	Total	Including		
		l	p	s.r
Chapter 1. General issues of labor protection Substantive section 1. General issues of labor protection				
Topic 1. Legal and organizational foundations of labor protection.	9	2	2	5
Topic 2. Organization of occupational health and safety in medical institutions and institutions of higher medical education.	10	2	2	6
Topic 3. Hygiene and physiology of work, significance for creation safe working conditions.	10	2	2	6
Section II. Peculiarities of working conditions in the medical field Substantive section 2. Peculiarities of working conditions in the medical field				
Topic 4. Professional hazards in the performance of functional duties of medical workers.	10	2	2	6
Topic 5. Hygienic characteristics of working conditions and the state of health of medical workers.	8		2	6
Topic 6. Accidents and accidents at LPZ, their investigation and accounting.	10	2	2	6
Chapter III. Special issues of labor protection in the medical field Substantive section 3. Special issues of labor protection in the medical field				
Topic 7. Labor protection in treatment medical institutions.	8		2	6
Topic 8. Occupational health and safety in individual structural subdivisions of medical facilities and higher medical educational institutions.	10	2	2	6
Topic 9. Dangerous infectious diseases in the work of medical workers.	8	2		6
Topic 10. Basics of occupational safety of medical workers.	10	2	2	6
EVERYTHING FROM THE DISCIPLINE	90	16	16	58

3. Topics of lectures

No. z/p	Topic name	Number hours
1	Legal and organizational foundations of labor protection	2
2	Organization of occupational health and safety in medical institutions and institutions of higher medical education	2

3	Hygiene and physiology of work, importance for creating safe working conditions	2
4	Professional hazards in the performance of functional duties of medical workers	2
5	Accidents and accidents at the LPZ, their investigation and accounting.	2
6	Occupational safety and health of doctors of various specialties	2
7	Dangerous infectious diseases in the work of medical workers	2
8	Basics of industrial safety of medical workers	2
TOGETHER:		16

4. Topics of seminar classes are not provided by the program

5. Topics of practical classes

No. z/p	Topic name	Number hours
1	Legal and organizational foundations of labor protection	2
2	Principles of organization, types of training and testing of knowledge on labor protection issues. Types of briefings	2
3	Hygiene and physiology of work. Difficulty and intensity of work. Human capacity	2
4	Harmful and dangerous factors of the production environment of medical workers	2
5	Hygienic characteristics of working conditions and the state of health of medical workers.	2
6	Investigation and accounting of accidents and accidents at the LPZ	2
7	Dangerous infectious diseases in the work of medical workers	2
8	Fire safety, electrical safety	2
TOGETHER:		16

6. Topics for independent classes

No. z/p	Topic name	Number hours
	Preparation for practical classes – theoretical preparation and development of practical skills	31
1.	Regulation of labor protection issues in the collective agreement.	3
2.	Liability of officials and employees for violations of labor protection legislation.	3
3.	Stimulation of labor protection. Socio-economic effect of labor protection of medical workers. Order of the Ministry of Education and Culture of Ukraine No. 563 dated 01.08.2001 "On the approval of the Regulation on the organization of work on occupational health and safety of participants in the educational process in institutions and educational institutions"	3
4.	Methodology for the development of rational modes of work and rest.	3
5.	Purpose, main tasks and content of certification. Organization of work and the procedure for certification of workplaces. Map of working conditions.	3
6.	Social insurance fund against accidents at work and occupational diseases. Compensation for damage to the victim at work	3

7.	The main provisions of the Order of the Ministry of Health of Ukraine No. 246 dated May 21, 2007 "On approval of the Procedure for conducting medical examinations of employees of certain categories".	3
8.	Measures to prevent tuberculosis infection of medical workers. Laws of Ukraine "On Combating Tuberculosis", "On Approval of the National Targeted Social Program for Combating Tuberculosis for 2012-2016".	3
9.	Control of the state of fire safety. Training of fire safety rules for employees of the refinery	3
TOTAL:		58

8. Individual tasks are not provided for in the program.

9. Teaching methods

According to the sources of knowledge, teaching methods are used: verbal - story, explanation, lecture, instruction; visual - demonstration, illustration; practical - practical work, solving situational problems. According to the nature of the logic of knowledge, methods are used: analytical, synthetic, analytical-synthetic, inductive, deductive. According to the level of independent mental activity, the following methods are used: problem-based, searching, research.

1. Verbal methods: lecture, conversation;
2. Team-based learning (TBL). Team-oriented training.
3. Research-based learning (RBL). Learning through research
4. Exchange of thoughts (think-pair-share).
5. Students' independent work on understanding and assimilation of new material
6. Use of control and educational computer programs
7. Types of educational classes according to the curriculum are: lectures; practical training; independent work of students.

10. Control methods

Current control is carried out on the basis of control theoretical knowledge, practical skills and abilities.

Forms of current control are: *in the dream survey* (frontal, individual, combined), interview; practical verification of professional skills (conducted based on the results of practical work at the end of the class); test control ("open" and "closed" test tasks). Current control is mandatory. During the evaluation of mastering of each topic from all disciplines of the curriculum for the current educational activity, the student is given grades on a 4-point (traditional scale) taking into account the approved evaluation criteria for the discipline. All types of work provided by the curriculum are taken into account. The student must receive a grade in each topic. The teacher conducts a survey of each student in the group at each lesson and assigns a grade in the journal of attendance and student success according to the traditional scale ("5", "4", "3", "2").

When evaluating the student's current educational activity, 20% of the grade is the student's independent work, which takes into account the knowledge of the topic of independent study and the performance of work in the notebook.

The final (summary) control of the sections is conducted at the end of the section in the form of a written test, theoretical questions and control of practical skills.

Such methods of control as oral, written and test are used, which should contribute to increasing the motivation of students-future specialists for educational and cognitive activities. According to the specifics of professional training, preference is given to test and written control. In the case of final control, preference is given to written or test control.

11. Form of final control of study success

The final control of the discipline is carried out on the basis of control of theoretical knowledge, practical skills and abilities.

Assessment is a form of final control, which consists in assessing the student's learning of the learning material based solely on the results of his performance of certain types of work in practical, seminar or laboratory classes. Semester assessment of subjects is carried out after the end of its study, before the beginning of the examination session.

12. Scheme of accrual and distribution of points received by students

The maximum number of points for a discipline is 200 points. The ratio between the results of the evaluation of the current educational activity and the final control of knowledge is 60% and 40%.

The study of the discipline ends with a credit.

The maximum number of points that a student can score for the current educational activity while studying the discipline is 200 points, the minimum number of points - the minimum number of points - is 120 points.

The calculation of the number of points is carried out on the basis of the grades received by the student on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean, rounded to two decimal places.

The student receives a credit in the last lesson of the discipline based on the results of the current assessment. Only those students who do not have academic debt and whose average score for the current academic activity in the academic discipline is at least 3.00 are admitted to the credit.

The average grade for the current activity is converted into points on a 200-point scale, according to the conversion table (Table 1).

Table 1.

Recalculation of the average grade for the current activity into 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	4-point scale	200-point scale
5	200	4.47	179	3.94	158	3.42	137
4.97	199	4.44	178	3.92	157	3.39	136
4.94	198	4.42	177	3.89	156	3.37	135
4.92	197	4.39	176	3.87	155	3.34	134
4.89	196	4.37	175	3.84	154	3.32	133
4.87	195	4.34	174	3.82	153	3.29	132
4.84	194	4.32	173	3.79	152	3.27	131
4.82	193	4.29	172	3.77	151	3.24	130
4.79	192	4.27	171	3.74	150	3.22	129
4.77	191	4.24	170	3.72	149	3.19	128

4.74	190	4.22	169	3.69	148	3.17	127
4.72	189	4.19	168	3.67	147	3.14	126
4.69	188	4.17	167	3.64	146	3.12	125
4.67	187	4.14	166	3.62	145	3.09	124
4.64	186	4.12	165	3.59	144	3.07	123
4.62	185	4.09	164	3.57	143	3.04	122
4.59	184	4.07	163	3.54	142	3.02	121
4.57	183	4.04	162	3.52	141	3	120
4.54	182	4.02	161	3.49	140	< 3	70-119 (refolding)
4.52	181	4.00	160	3.47	139		
4.49	180	3.97	159	3.44	138		

The learning result is also evaluated on a two-point scale (passed/failed).

Table 2

The scale of transferring points to the national system

According to the national system	On a 200-point scale
counted	from 120 to 200 points
not counted	less than 119 points

Students' independent work, which is provided for by the topic of the lesson along with classroom work, is evaluated during the current control of the topic in the corresponding lesson.

13. Methodological support

1. Working curriculum of the discipline;
2. Plans of lectures, practical classes and independent work of students;
3. Multimedia, video and sound reproduction, projection equipment (video cameras, projectors, screens, smartboards, etc.)
4. Methodical instructions for practical classes for students;
5. Methodical materials that ensure independent work of students;
6. Test and control tasks for practical classes;

14. Recommended literature:

1. Basic literature:

1. Occupational health and safety in the medical field: education and method. help _ / O.P. Yavorovskiy, M.I. Veremey, V.I. Zenkina and others. - K.: VSV "Medicine", 2015. 208 p.
2. Life safety, basics of labor protection: training . manual ./ O.P. Yavorovskiy, V.M. Shevtsova, V.I. Zenkin and others; in general _ editor O.P. Yavorovskiy . - K.: VSV "Medicine", 2015. - 288 p.
3. Occupational health and safety in medical and preventive institutions. Life safety: a textbook / BC Tarasyuk, G.B. Kuchanska . — K.: VSV "Medicine", 2015. — 520 p.
4. Occupational health and safety of medical workers: textbook for students . higher medical (pharmaceutical) studies . institutions of I-III levels of accreditation/ N.M. Kasevich, K.I. Shapoval — 3rd ed., revised . and added _ — K.: VSV "Medicine", 2013. — 264 p.

5. Berezutsky V.V. Dangerous production risks and reliability: training . manual / V.V. Berezutskyi , M.I. Adamenko; Kharkiv Polytechnic Institute , National technical _ Univ. - Kharkiv: FOP Panov A.M., 2016. - 385 p.

2. Supporting literature

1. Hygiene and labor protection of medical workers. Study guide/ Ed. V.F. Moskalenko, O.P. Yavorovsky . - K.: "Medicine", 2009. - P.6-56.
2. Hygiene and labor protection of medical workers. Educational
3. manual /Edited by V.F. Moskalenko , O.P. Yavorovskyi . - K.: "Medicine", 2009. -
4. 176 p.
5. Aladysheva L. About psychological examination as a tool for reducing industrial injuries // Okhorona prazit. - 2015.- No. 7. - P. 44-46.
6. Andryushchenko K. Mandatory state social insurance against accidents at work in the context of European integration // Publ . right. - 2015. - No. 4. - P. 229-235.
7. Occupational Health. Terms and definitions of basic concepts: DSTU 2293:2014 / Nat . standard of Ukraine. - Entered into force on 05-01-2015 // To help the occupational health and safety specialist. - 2015. - No. 10. - P. 41-49.
8. Constitution of Ukraine. Basic Law dated 28.06.1996.
9. Labor Code of Ukraine. Law No. 322-VIII dated 10.12.71.
10. Law of Ukraine "On Labor Protection" dated 14.10.92.
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12. Law of Ukraine "On Collective Agreements and Agreements" No. 1874 of 12/24/95.
13. The Law of Ukraine "On Insurance Tariffs for Mandatory State Social Insurance against Accidents at Work and Occupational Diseases That Caused Loss of Working Capacity" No. 1423 dated September 13, 2000.
14. Law of Ukraine "On Administrative Violations" No. 8074-10 dated 07.12.84.
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3. Informational resource

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3. Office Ministers of Ukraine <http://www.kmu.gov.ua/>.
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6. Ministry of Ecology and Natural Resources of Ukraine <http://www.menr.gov.ua/>.
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10. International Labor Organization <http://www.ilo.org/global/lang--en/index.htm> .

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