MINISTRY OF HEALTH PROTECTION OF UKRAINE ODESSA NATIONAL MEDICAL UNIVERSITY

Department of general and clinical epidemiology and biosafety

LAPPROVE

Vice-rector for scientific and pedagogical work

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September 1, 2023

WORKING PROGRAM OF EDUCATIONAL DISCIPLINE "LABOR PROTECTION"

Level of higher education: second (master's)

Branch of knowledge: 22 "Health care"

Specialty: 222 "Medicine"

Educational and professional program: Medicine

The work program is compiled on the basis of the educational and professional program "Medicine" for the training of specialists of the second (master's) level of higher education in the specialty 222 "Medicine" of the field of knowledge 22 "Health care", approved by the Scientific Council of ONMedU (protocol No. 8 of June 29, 2023).

head of the department, Prof., Doctor of Medicine, M.I. Golubyatnykov

(signature)

Developers:

| associate professor of the department; PhD T.V. Fedorenko assistants to prof.: PhD T.V. Gerasimenko, PhD O.A. Melnyk, K.S. Hrytsenko |
|---|
| The work program was approved at the meeting of the department of general and clinical epidemiology and biosafety Protocol No. 1 dated August 28, 2023 |
| Head of the department Mykola GOLUBYATNYKOV |
| Agreed with the guarantor of the OPP |
| Approved by the subject cycle commission for medical and biological disciplines of ONMedU Protocol No of ""2023. |
| Head of the subject cycle methodical commission for medical and biological disciplines of ONMedU Leonid GODLEVSKYI |
| Reviewed and approved at the meeting of the department A general and obvious tpidemiology and biosafety with waren of mirrobiology |
| A general and dirical epidemiology and biosafety with waren of mirobiology and virology Protocol No. 1 of "1" September 2015 |
| Head of the department Mykola GOLUBYATNYKOV (Signature) (First Name Surname) |
| Reviewed and approved at the meeting of the department |
| Protocol No of " 20 |
| Head of Department |

(First Name Surname)

1. Description of the academic discipline:

| Name of indicators | Characteristics of the academic discipline | | |
|--------------------------|--|----------|--|
| | Full-time education | n | |
| The total number of: | Mandatory | | |
| Credits – 3.0 | A year of training | 2 | |
| Hours - 90 | Semester | III-IV | |
| Content subdivisions – 3 | Lectures | 0 hours | |
| | Practical | 30 hours | |
| | Independent work | 60 hours | |
| | Including individual tasks | 0 | |
| | Final control form | Test | |
| | | | |

2. The purpose and tasks of the academic discipline, competencies, program learning outcomes.

Goal: Mastering by the acquirer of knowledge and formation of elements of occupational health and safety professional competences in the field, and improvement of skills and competences acquired during the study of previous disciplines.

Task:

- 1. Cultivation of a safety culture to ensure effective management of occupational health and safety in the medical field.
- 2. Creation of favorable conditions for the industrial environment and occupational safety in accordance with the current legislative and regulatory acts for the implementation of the priority principle of protecting the life and health of medical workers.
- 3. Ensuring the preservation of life, health and working capacity of medical workers in industrial conditions.
- 4. Learn to apply a complex of legislative, organizational, engineering and technical, sanitary and hygienic, medical and preventive and other measures.
- 5. Education of moral and ethical values aimed at the prevention of industrial injuries and the occurrence of occupational and production-related diseases.

The process of studying the discipline is aimed at forming elements of the following competencies:

Integral competences are the ability to solve typical and complex specialized tasks and practical problems in professional activities in the field of health care, or in the training process, which involves the implementation of preventive and anti-epidemic measures and is characterized by the complexity and uncertainty of conditions and requirements.

- GC1 Ability to abstract thinking, analysis and synthesis
- GC2 Ability to learn and master modern knowledge
- GC3 Ability to apply knowledge in practical situations
- GC4 Knowledgeableself and understanding of the subject area and understanding of professional activity
- GC5 Ability to adapt and act in a new situation
- GC6 Ability to make informed decisions
- GC7 Ability to work in a team
- GC8 Interpersonal skills
- GC9 -. Ability to communicate in a foreign language
- GC10 Ability to use information and communication technologies
- GC11 Ability to search, process and analyze information from various sources
- GC16 The ability to evaluate and ensure the quality of the work performed.

Special (SC):

- SC13 Ability to carry out sanitary and hygienic and preventive measures
- SC16 Ability to maintain medical documentation, including electronic forms

SC17 - Ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population

Program learning outcomes (PLO):

- PLO 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.
- PLO 2. Understanding and knowledge of fundamental and clinical biomedical sciences, at a level sufficient for solving professional tasks in the field of health care.
- PLO 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.
- PLO18. To determine the state of functioning and limitations of a person's vital activities and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data about the disease and its course, peculiarities of the person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.
- PLO19. Plan and implement a system of anti-epidemic and preventive measures regarding the occurrence and spread of diseases among the population.
- PLO21. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.
- PLO24. To organize the necessary level of individual safety (own and the persons he cares for) in case of typical dangerous situations in the individual field of activity.

As a result of studying the academic discipline, the student of higher education must: Know:

- The relationship between the state of health of workers and the influence of harmful and dangerous production factors.
- Requirements of legislative and regulatory acts on occupational health and safety of medical workers.
- Requirements for ensuring occupational health and safety of medical personnel in modern conditions.
- Basic principles and approaches (strategies) to ensuring safety in medical and preventive institutions.

Be able:

- To draw conclusions about the presence of the influence of harmful and dangerous production factors on the body of medical workers.
- To justify the implementation of preventive measures in accordance with the principles of the current legislation of Ukraine.
- Plan measures to maintain a healthy lifestyle, personal hygiene and implement them in health care practice.
- Coordinate plans for preventive measures with development plans of territorial, administrative and production units.
- Analyze and evaluate situations dangerous to life, health and professional activity and independently make decisions about taking urgent measures.

Master the skills:

- Implementation of sanitary-hygienic and preventive health care measures for medical workers.
- Assessments of professional risks.
- Implementation of preventive and anti-epidemic measures regarding occupational, production-related and in-hospital diseases.
- Processing of social, economic and medical information.
- Assessment of the impact of the environment on the state of health of the population (individual, family, population).

- Estimates of the impact of socio-economic and biological determinants on the health of an individual, family, and population.
- Maintaining a healthy lifestyle, using self-regulation and self-control techniques.
- Organization of the necessary level of individual safety (own and the persons they care about) in case of typical dangerous situations in the individual field of activity.

3. Content of the academic discipline

Subpart I. General issues of labor protection

Topic 1. Legal and organizational foundations of labor protection.

Basic terms and definitions in the field of labor protection. Legal basis of labor protection. Legislation of Ukraine on labor protection, main provisions. International documents and international cooperation 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 contracts 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 September 30, 1994 "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 August 1, 2001 "On approval of the Regulation on the organization of work on occupational safety 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

Subsection 2. Peculiarities of working conditions in the medical field

Topic 4. Occupational 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 stomatological profile (surgical, therapeutic, etc.). Peculiarities of professional and production-related morbidity of medical workers. The main methods and criteria for sanitary and hygienic assessment of the working conditions of medical workers in the stomatological profile. 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.

Subsection 3. Special issues of labor protection in the medical field Topic 7. Hygiene and labor protection in medical institutions

The process of creating optimal hygienic conditions in treatment and prevention facilities is determined by the features of the planning and development of the land plot, the organization and internal planning of buildings, their sanitary and technical improvement, as well as the sanitary condition during operation.

Arrangement and organization of activities of medical and preventive facilities, in accordance with hygienic requirements, make it possible to create the best environmental conditions for patients; contribute to the introduction of a medical and protective regime; prevent nosocomial infections; facilitate the treatment work of medical staff; contribute to the speedy recovery of patients and ensure optimal conditions for the activities of medical workers. After all, without appropriate hygienic conditions, therapeutic actions are powerless.

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 the 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. Fundamentals of industrial safety.

General safety requirements for technological equipment in dental clinics. 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

4. The structure of the academic discipline

| Name of modules and topics | | Number of hours | | |
|--|-----------|-----------------|----|-----|
| | | Full-time | | |
| Name of modules and topics | total | including | | |
| | | l | р | ISW |
| 1 | 2 | 3 | 4 | 5 |
| Content module 1. General issues of labor pa | rotection | | | |
| Topic 1. Legal and organizational foundations of labor | 9 | - | 4 | 5 |
| protection | | | | |
| Topic 2. Organization of occupational health and safety in medical | 7 | - | 2 | 5 |
| institutions and institutions of higher medical education. | | | | |
| Topic 3. Hygiene and physiology of work, importance for | 9 | - | 4 | 5 |
| creating safe working conditions | | | | |
| Together according to content module 1. | 25 | - | 10 | 15 |
| Content module 2. Peculiarities of working conditions in the medical field | | | | |
| Topic 4. Professional hazards in the performance of functional duties | 9 | - | 4 | 5 |
| of medical workers | | | | |
| Topic 5. Hygienic characteristics of working conditions and the state | 7 | - | 2 | 5 |
| of health of medical workers | | | | |
| Topic 6. Accidents and accidents at LPZ, their investigation and | 7 | - | 2 | 5 |
| accounting | | | | |
| Together according to content module 2 | | - | 8 | 15 |
| Content module 3. Special issues of labor protection in the medical field | | | | |
| Topic 7. Hygiene and labor protection in medical institutions | 14 | - | 4 | 10 |
| Topic 8. Occupational health and safety in individual structural | 7 | - | 2 | 5 |

| subdivisions of medical facilities and higher medical educational institutions | | | | |
|--|----|---|----|----|
| Topic 9. Dangerous infectious diseases in the work of medical workers | 14 | - | 4 | 10 |
| Topic 10. Basics of occupational safety of medical workers | 7 | - | 2 | 5 |
| Together according to content module 3 | 42 | - | 12 | 30 |
| Total hours | 90 | - | 30 | 60 |

Auditory workload – 33.3%; SRS - 66.6%.

5. Topics of lectures / seminars / practical / laboratory classes

5.1. Topics of lectures

Lectures are not provided

5.2. Topics of seminar classes

Seminar classes are not provided.

5.3 Topics of practical classes

| 5.5 Topics of practical classes | | | | |
|---------------------------------|---|---------|--|--|
| No | 1 | | | |
| | | | | |
| | Content module 1. General issues of occupational health and safety in medical p | ractice | | |
| 1. | Legal and organizational foundations of labor protection | 4 | | |
| 2. | Organization of occupational health and safety in medical institutions and institutions | 2 | | |
| | of higher medical education. | | | |
| 3. | Hygiene and physiology of work, importance for creating safe working | 4 | | |
| | conditions | | | |
| | Content module 2. Technical safety of working with medical equipment | | | |
| 4. | Occupational hazards when working with medical equipment in medical practice | 4 | | |
| 5. | Hygienic characteristics of working conditions and the state of health of medical | 2 | | |
| | workers | | | |
| 6. | Accidents and accidents at the LPZ, their investigation and accounting | 2 | | |
| | Content module 3. Special issues of labor protection in the medical field | | | |
| 7. | Hygiene and labor protection in medical institutions | 4 | | |
| 8. | Occupational health and safety in structural subdivisions of medical facilities and | 2 | | |
| | higher medical educational institutions | | | |
| 9. | Dangerous infectious diseases in the work of medical workers | 4 | | |
| 10. | Basics of industrial safety of medical workers | 2 | | |
| | total | 30 | | |

5.4. Topics of laboratory classes

Laboratory classes are not provided.

6. Independent work of a student of higher education

| No | Topic | Number of hours | | |
|------|---|-----------------|--|--|
| | Content module 1. General issues of occupational health and safety in medical practice | | | |
| 1. | Legal and organizational foundations of labor protection | 5 | | |
| 2. | . Organization of labor protection in medical institutions. 5 | | | |
| 3. | 3. Hygiene and physiology of work, importance for creating safe working conditions | | | |
| Tota | Total for 1 content module 15 | | | |
| | Content module 2. Technical safety of working with medical equipment | | | |
| 4. | Occupational hazards when working with medical equipment in medical practice | 5 | | |
| 5. | Hygienic characteristics of working conditions and the state of health of medical workers | 5 | | |

| 6. Accidents and accidents when working with medical equipment, their investigation | | 5 | |
|---|---|----|--|
| | and accounting | | |
| Tota | l for 2 content modules | 15 | |
| | Content module 3. Special issues of labor protection in the medical field | | |
| 7. | Dangerous infectious diseases in the work of medical workers | 10 | |
| 8. | 8. Basics of industrial safety in medical practice | | |
| 9. | Occupational health and safety in individual structural subdivisions of medical | 10 | |
| | facilities and higher medical educational institutions. | | |
| 10. Basics of industrial safety of medical workers 5 | | | |
| A total of 3 content modules | | 30 | |
| Total | | 60 | |

7. Teaching methods

Practical training:conversation, solving situational problems, practicing skills for working with medical documentation.

Independent work: independent work with the textbook, independent work with the bank of test tasks Step-1, independent solution of situational tasks.

8. Forms of control and assessment methods (including criteria for evaluating learning outcomes)

Current control:oral survey, testing, assessment of performance of practical skills, solution of situational clinical tasks, assessment of activity in class.

Final control: differential calculation

Evaluation of the current educational activity in a practical session:

- 1. Evaluation of theoretical knowledge on the subject of the lesson:
 - methods: survey, solving a situational clinical problem;
 - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.
- 2. Evaluation of practical skills and manipulations on the subject of the lesson:
 - methods: assessment of the correctness of the performance of practical skills
 - maximum score -5, minimum score -3, unsatisfactory score -2;
- 3. Evaluation of the work on the ability to conduct an epidemiological investigation, collect an epidemiological history, prescribe anti-epidemic measures for infectious diseases with different transmission mechanisms, with multiple transmission mechanisms, in cases of suspected infectious diseases of international importance, according to the subject of the lesson:
 - methods: assessment of: a) communication skills of communication with the patient, b) the correctness of prescribing and evaluating laboratory tests to confirm the preliminary diagnosis of an infectious disease, c) compliance with the algorithm of anti-epidemic measures aimed at individual links of the epidemic process, d) justification of anti-epidemic and preventive measures of spread infectious disease in the center, e) drawing up a plan for anti-epidemic work; forecasting the epidemic process in this area
 - \max maximum score -5, \min minimum score -3, unsatisfactory score -2;

The grade for one seminar session is the arithmetic average of all components and can only have a whole value (5, 4, 3, 2), which is rounded according to the statistical method.

Current assessment criteria for practical training:

| Rating | Evaluation criteria | | | |
|-----------|--|--|--|--|
| Perfectly | It is presented to the applicant when he shows deep, solid and systematic | | | |
| "5" | knowledge in the scope of the curriculum, answers all questions without | | | |
| | mistakes, reasonably formulates conclusions, using the materials presented for the | | | |
| | independent work of the applicant, competently and consistently, with knowledge | | | |

| | of the methodology, completed practical work; using scientific terms and | | | |
|------------------|--|--|--|--|
| | concepts correctly. | | | |
| Fine | The acquirer reveals the main content of the educational material; gives | | | |
| "4" | incomplete definitions of concepts; admits inaccuracies in the use of scientific | | | |
| | terms, vaguely formulates conclusions, performed practical work, but made | | | |
| | minor mistakes during the research. | | | |
| Satisfactorily | The applicant reproduces the basic educational material, but makes significant | | | |
| "3" | mistakes when presenting it, gives simple examples, definitions of concepts are | | | |
| | insufficient, characterizes general issues of social medicine. | | | |
| Unsatisfactorily | The applicant discloses the content of the educational material fragmentarily, | | | |
| "2" | makes gross mistakes in the definition of concepts and when using terminology, | | | |
| | did not complete the practical work. | | | |

Credit is given to the applicant who completed all tasks of the work program of the academic discipline, took an active part in practical classes, completed and defended an individual assignment and has an average current grade of at least 3.0 and has no academic debt.

Assessment is carried out in the last lesson before the beginning of the examination session (with the tape system of learning. The grade for the assessment is the arithmetic average of all components on a traditional four-point scale and has a value that is rounded up to 2 (two) decimal places according to the statistical method.

9. Distribution of points received by students of higher education

The obtained average score for the academic discipline for applicants who have successfully mastered the work program of the academic discipline is converted from a traditional four-point scale to points on a 200-point scale, as shown in the table:

Conversion table of a traditional assessment into a multi-point scale

| Traditional four-point scale | Multipoint 200-point scale |
|------------------------------|----------------------------|
| Excellent ("5") | 185 - 200 |
| Good ("4") | 151 - 184 |
| Satisfactory ("3") | 120-150 |
| Unsatisfactory ("2") | Below 120 |

A multi-point scale (200-point scale) characterizes the actual success of each applicant in learning the educational component. The conversion of the traditional grade (average score for the academic discipline) into a 200-point grade is performed by the information and technical department of the University.

According to the obtained points on a 200-point scale, the achievements of the applicants are evaluated according to the ECTS rating scale. Further ranking according to the ECTS rating scale allows you to evaluate the achievements of students from the educational component who are studying in the same course of the same specialty, according to the points they received.

The ECTS scale is a relative-comparative rating, which establishes the applicant's belonging to the group of better or worse among the reference group of fellow students (faculty, specialty). An "A" grade on the ECTS scale cannot be equal to an "excellent" grade, a "B" grade to a "good" grade, etc. When converting from a multi-point scale, the limits of grades "A", "B", "C", "D", "E" according to the ECTS scale do not coincide with the limits of grades "5", "4", "3" according to the traditional scale. Acquirers who have received grades of "FX" and "F" ("2") are not included in the list of ranked acquirers. The grade "FX" is awarded to students who have obtained the minimum number of points for the current learning activity, but who have not passed the final examination. A grade of "F" is assigned to students who have attended all classes in the discipline, but have not

achieved a grade point average (3.00) for the current academic activity and are not admitted to the final examination.

Applicants who study in one course (one specialty), based on the number of points scored in the discipline, are ranked on the ECTS scale as follows:

Conversion of the traditional grade from the discipline and the sum of points on the ECTS scale

| Evaluation on the ECTS scale | Statistical indicator |
|-------------------------------------|-------------------------|
| A | Top 10% achievers |
| В | The next 25% of earners |
| С | The next 30% of earners |
| D | The next 25% of earners |
| Е | The next 10% of earners |

10. Methodological support:

- Working program of the academic discipline
- Syllabus of the academic discipline
- Multimedia presentations
- Situational clinical tasks
- Methodical development of practical classes
- Electronic bank of test tasks by subdivisions of the discipline.

11. List of questions for control of learning the discipline

- 1. Basic definitions in the field of labor protection
- 2. Subjects and objects of labor protection
- 3. The current state of labor protection in Ukraine and abroad
- 4. Legal foundations of labor protection (Constitution of Ukraine, Labor Code, Law of Ukraine "On Labor Protection")
- 5. Labor standards of the International Labor Organization. Conventions and recommendations of the ILO
- 6. Liability of officials and employees for violations of labor protection legislation
- 7. 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 of 30.09.94 "On the occupational health and safety service of the system of the Ministry of Health"
- 8. 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
- 9. Commission on occupational health and safety in medical institutions, main tasks and rights
- 10. Planning of labor protection measures. Identifying, evaluating and reducing the risks of hazardous events, quality management and safety culture. Accounting and analysis of labor protection indicators
- 11. Principles of organization, types of training and testing of knowledge on labor protection issues. Briefings on labor protection issues, their types
- 12. Order of the Ministry of Education and Culture of Ukraine No. 563 dated August 1, 2001 "On approval of the Regulation on the organization of work on occupational safety of participants in the educational process in institutions and educational institutions"
- 13. Hygiene and physiology of labor definition, purpose, tasks, research methods

- 14. The main physiological signs of physical and mental work. Physiological changes that occur in the organs and systems of the human body during work
- 15. Human capacity, dynamics and reasons for its changes during the working day
- 16. Physiological essence of fatigue, existing theories and modern understanding of the mechanism of its occurrence
- 17. Ways to prevent the development of fatigue. Methodology for the development of rational modes of work and rest
- 18. Classification of work of medical workers
- 19. Psychophysiological harmful and dangerous factors of the industrial environment and their impact on the state of health of medical workers
- 20. Physical harmful and dangerous factors of the industrial environment and their impact on the state of health of medical workers
- 21. Chemical harmful and dangerous factors of the industrial environment and their impact on the health of medical workers
- 22. Biological harmful and dangerous factors of the industrial environment and their impact on the health of medical workers
- 23. Hygienic features of working conditions and health status of doctors of various specialties (surgical, therapeutic, dental, etc.)
- 24. Basic methods and criteria for sanitary and hygienic evaluation of working conditions of medical workers
- 25. Methodology for evaluating the work of medical workers according to the criteria of "Hygienic classification of work according to indicators of harmfulness and dangerous factors of the production environment, difficulty and tension of the labor process" approved by the order of the Ministry of Health of Ukraine 04/08/2004 No. 248
- 26. Methods of investigation and accounting of accidents at work
- 27. Methods of investigation and accounting of accidents of a non-production nature
- 28. Traumatism, acute and chronic occupational diseases and poisoning in medicine, methods of their accounting and investigation
- 29. Measures to prevent accidents, injuries and occupational diseases of medical workers
- 30. Hygienic requirements for the design and construction of medical and preventive facilities
- 31. Measures to reduce physical and neuropsychological overload of medical workers. Scientific organization of work at the LPZ. Rational organization of the workplace and furniture. The main ways to prevent fatigue
- 32. Measures to reduce the adverse effect of physical factors on the body of medical workers. Microclimate requirements
- 33. Measures to reduce the adverse effects of noise, vibration, and ultrasound
- 34. Measures to reduce the adverse effect of chemical factors on the body of medical workers. Ways of preventing air pollution of the working area with harmful chemicals
- 35. Measures to prevent the harmful effects of biological factors. Sanitary and hygienic and anti-epidemic regime of the hospital
- 36. Occupational health and safety of medical personnel in individual structural units of the hospital (operating unit, radiodiagnostic units, physiotherapy rooms, patho-anatomical departments and morgues, etc.), the main normative documents regulating these issues
- 37. Basics of the organization of occupational health and safety of personnel in the pharmaceutical industry
- 38. Norms of working hours for employees of institutions and health care institutions
- 39. Labor protection in higher medical educational institutions
- 40. Guarantees of workers' rights to labor protection, benefits and compensation for difficult and harmful working conditions. Duties of employees regarding compliance with the requirements of regulatory legal acts on labor protection

- 41. 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"
- 42. Prevention of nosocomial infections as a component of occupational health and safety in medicine
- 43. The concept of dangerous infectious diseases
- 44. 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 the AIDS Center/Institute of Infectious Diseases
- 45. 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
- 46. Resolution of the Cabinet of Ministers of Ukraine No. 637 of April 29, 2013 "On approval of the State targeted social program for the prevention, diagnosis and treatment of viral hepatitis for the period up to 2016"
- 47. Tuberculosis and its prevalence in Ukraine and the world. Potential occupational hazard for medical workers
- 48. 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"
- 49. Colors, safety signs and signal markings
- 50. General safety requirements for technological equipment and processes in the refinery. Safety during the operation of pressure systems and cryogenic equipment
- 51. Electrical safety. Classification of premises according to the degree of danger of electric shock
- 52. Conditions of injury to a person by electric current. Safe operation of electrical installations: electrical protective equipment and measures
- 53. Basics of fire safety. State fire supervision. Fire prevention in the design and operation of medical facilities and medical equipment
- 54. Indicators of fire-explosive properties of materials and substances. Categories of premises according to explosion and fire hazard. Classification of explosive and fire-hazardous premises and zones. Fire resistance of building structures and materials
- 55. The main means and measures to ensure fire safety of the production facility. Fire alarm. Fire extinguishing means
- 56. Personnel actions in the event of a fire. Ensuring safe evacuation of personnel. Ensuring and monitoring the state of fire safety at production facilities. Training of fire safety rules for employees of the refinery

12. Recommended literature

Basic (basic)

- 1. Labor protection in the medical field: teaching method. manual / O.P. Yavorovskyi, M.I. Veremey, V.I. Zenkina and others. K.: VSV "Medicine", 2015. 208 p.
- 2. Life safety, basics of labor protection: education. manual / O.P. Yavorovskyi, V.M. Shevtsova, V.I. Zenkin and others; in general ed. O.P. Yavorovsky K.: VSV "Medicine", 2015. 288 p
- 3. Occupational health and safety for healthcare workers: study guide/ O.P.Yavorovsky, M.I.Veremey, V.I.Zenkina et al. K.: AUS Medicine Publishing, 2015. P. 4-16.

Additional:

1.Employment Law and Occupational Health – A Practical Handbook // James Maskie. – P/538/ Published by Oxford University Press on behalf of the Society of Occupational Medicine, 2007.

- 2. Fundamental Principles of Occupational Health and Safety $\!\!/\!\!/$ Benjamin O. Ally, 2008. – P.221.
- 3.Governing Body, March Session. Date, place and agenda of the 98th Session (2009) of the International Labor Conference. Available at: http://www.ilo.org/public/english/standards/relm/gb/docs/gb298/pdf/gb-2.pdf
- 4.Oxford Handbook of Occupational Health // Edited by Julia Smedley, Finlay Dick, Steve Sadhra. Publisher: Oxford University Press, 2007.
- 5. Encyclopaedia of Occupational Health and Safety, 4th ed., 4 vols (Geneva), 1998.

13. Electronic information resources

- 1. Official Internet representation of the President of Ukrainehttp://www.president.gov.ua/.
- 2. Verkhovna Rada of Ukrainehttp://www.rada.gov.ua/.
- 3. cabinet of Ministers of Ukrainehttp://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 Emergency Service of Ukrainehttp://www.dsns.gov.ua/
- 8. State Service of Ukraine on Labor Issueshttp://dsp.gov.ua/.
- 9. World Health Organization http://www.who.int/en/.

International Labor Organizationhttp://www.ilo.org/global/lang--en/index.htm.