

**MINISTRY OF HEALTH OF UKRAINE
ODESSA NATIONAL MEDICAL UNIVERSITY**

Department of Pharmacy Organization and Economy
with post-diploma specialization



WORKING PROGRAM ON THE DISCIPLINE

«LABOR PROTECTION IN INDUSTRY»

Level of higher education: second (master's degree)

Field of knowledge: 22 «Health care»

Specialty: 226 "Pharmacy, industrial pharmacy"

Educational and professional program: Pharmacy, industrial pharmacy


The working program is compiled on the basis of the educational and professional program "Pharmacy, industrial pharmacy" for the training of specialists of the second (master's) level of higher education in the specialty 226 "Pharmacy, industrial pharmacy" of the field of knowledge 22 "Health care", approved by the Academic Council of ONMedU (minutes No. 10 dated 27/06/2024).

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The working program was approved at the meeting of the Department of Pharmacy Organization and Economy with post-diploma specialization
Minutes No. 1 dated August 29, 2024.

Head of the department



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Approved by the guarantor of
the educational and professional program



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Approved by the subject cycle methodical commission for pharmaceutical disciplines of ONMedU
Minutes No._1 dated August 30, 2024.

Head of the subject cycle methodical commission

for pharmacy`s disciplines of ONMedU



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Revised and approved at the meeting of the department _____
Minutes No. ___ of "___" _____ 20__
Head of Department _____
(signature) (First Name Surname)

Revised and approved at the meeting of the department _____
Minutes No. ___ of "___" _____ 20__
Head of Department _____
(signature) (First Name Surname)

1. Description of the discipline

Name of indicators	Field of knowledge, specialty, specialization, level of higher education	Characteristics of the discipline
Total number:	Field of knowledge22 «Health care»	Full-time education, compulsory discipline
Credits of ECTS: 3	Specialty	Course: 4
Hours: 90	226 "Pharmacy, industrial pharmacy"	Semester: VII
Content modules: 1	Level of higher education second (master's degree)	Lectures (20 hours)
		Seminars (0 hours)
		Practical classes (30 hours)
		Laboratories (0 hours)
		Independent work (40 hours)
		including individual tasks (0 hours)
		Final control –test

2. The Purpose and Objectives of the Discipline, Competencies, and Program Learning Outcomes.

Purpose: mastering the knowledge and developing the level of knowledge and skills in legal and organizational issues of occupational safety and health necessary for future professionals in their future professional activities.

Objectives:

1. To promote the formation of professionally necessary knowledge, skills and abilities in accordance with the educational qualification characteristics.
2. Provide a theoretical basis for gaining knowledge on ensuring safe working conditions during the receipt, transportation, storage and sale of medicinal products.
3. To master the methods and means of creating safe working conditions to maintain the health and efficiency of personnel in the industrial production of medicines.

The subject of the discipline is the social aspects of pharmaceutical activity, in particular the mechanisms of improving the availability of pharmaceutical care to the population, the formation of social responsibility of pharmaceutical professionals.

- **General (GC):**

GC02. Knowledge and understanding of the subject area and understanding of professional activities.

GC06. Ability to work in a team

GC11. Ability to apply knowledge in practical situations.

GC12. The desire to preserve the environment.

- **Special (SC):**

SC12. Ability to ensure proper storage of medicines of natural and synthetic origin and other pharmacy products in accordance with their physical and chemical properties and the rules of Good Storage Practice (GSP) in health care facilities.

SC24. Ability to use in professional activities knowledge of regulatory and legal acts of Ukraine and recommendations of good pharmaceutical practices.

Program learning outcomes (PLO):

PLO03. To have specialized knowledge and skills to solve professional problems and tasks, including for the purpose of further development of knowledge and procedures in the field of pharmacy.

PLO25. To comply with the norms of sanitary and hygienic regime and safety requirements in the performance of professional activities

PLO 43. To organize the necessary level of individual safety (own and of persons under his/her care) in the event 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:

- requirements of the sanitary and hygienic regime and labor protection conditions;
- orders and instructional materials of the Ministry of Health of Ukraine on information and technical support of pharmacists' workplaces;
- the basics of the system of law and pharmaceutical legislation, requirements for working conditions, methods of analyzing working conditions.

- be able to:

- conduct professional activities in social interaction based on humanistic and ethical principles; identify future professional activities as socially significant for human health;
- to position their professional activity and personal qualities in the pharmaceutical labor market; to formulate the goals of their own activities, taking into account social and industrial interests;
- perform professional activities using creative methods and approaches.
- to carry out professional communication in the state language, use oral communication skills in a foreign language, analyzing texts of professional orientation and translating foreign language information sources;
- use methods for assessing performance indicators; identify reserves for improving work efficiency;
- analyze information obtained as a result of scientific research, generalize, systematize and use it in professional activities;
- provide first aid to patients in emergency situations and victims in extreme situations.

3. The content of the discipline

Content module 1: Legal and organizational basis of labor protection. Fundamentals of physiology, occupational health and industrial sanitation. Fundamentals of safety.

Topic 1: Basic laws and regulations on labor occupational safety and health. Basic legislative acts on labor protection: The Law of Ukraine 'On Labor Protection', the Law of Ukraine 'On Health Protection'; the Law of Ukraine 'On Compulsory Social State Social Insurance'; the Civil Protection Code of Ukraine; the Law of Ukraine 'On Ensuring Sanitary and Epidemiological Welfare of the Population'; the Law of Ukraine 'On the Basic Principles of State Supervision (Control) in the Sphere of Economic Activity'; Resolution of the Cabinet of Ministers of Ukraine No. 442 of 01.08.92. 'On the Procedure for Certification of Workplaces for Working Conditions'; Resolution of the Cabinet of Ministers of Ukraine No. 337 of 17 April 2019 "On Approval of the Procedure for Investigation and Recording of Accidents, Occupational Diseases and Accidents at Workplaces"; Labour Agreements. Internal labor regulations. Labor protection of women. Liability for violation of the law. Stimulation of labor protection. State social insurance against accidents and occupational diseases.

Topic 2. Guarantees of the right to occupational safety and health. The Labor Code of Ukraine. Collective agreement. Employment contract. Internal labor regulations. Rights and obligations of citizens on labor protection. Labour protection of women, youth and disabled persons. Mandatory medical examinations of employees of certain categories. State and public control over labor protection. Liability for violation of labor protection legislation.

Topic 3. Accidents, occupational diseases of employees of pharmacy institutions, their investigation and accounting. Causes of accidents and occupational diseases, their classification. Preventive measures to prevent accidents and diseases at work. The procedure for investigating accidents that occurred during working hours. Responsibilities of the manager and witnesses in the event of an accident. Reporting an accident. Organization of an accident investigation. Work of the accident investigation committee. Peculiarities of conducting a special accident investigation. Investigation materials, accounting and reporting.

Topic 4. Psychosocial hazards. Common psychosocial hazards Work health and safety duties. Consulting workers. Control the risks. The process to manage psychosocial risks. Mobbing in the workplace. Concept, causes of mobbing and its signs. Forms of mobbing and ways of its manifestation. Employer's obligations to counter mobbing. Actions of an employee who has been discriminated against or mobbed at work. Rights of victims of harassment and legal consequences for committing mobbing. Administrative liability for mobbing.

Topic 5. Occupational risks in the pharmaceutical industry. Potential Hazards and Recommended Controls for Pharmacy Worker. Biological Hazards and Controls. Chemical Hazards and Controls. Local Exhaust Ventilation. Isolation/Enclosed Processes. Chemical Storage Physical Hazards and Controls. Radiation. Trips, Slips and falls. Cuts. Temperature Extremes. Pressure Electrical Hazards Mechanical Hazards. Fire Hazards.

Topic 6. Occupational health and safety in pharmacies. Requirements for the location and composition of the premises of pharmacy institutions. Requirements for safety and industrial sanitation in the manufacture of medicines. Requirements for safety and industrial sanitation in the production of purified water and water for injection. Safety and industrial hygiene requirements for the storage of medicinal products. Arrangement of warehouses and material premises in accordance with the groups of medicinal products. Sanitary supervision of pharmacy institutions. Methods of pharmaceutical waste disposal.

Topic 7. Occupational health and safety when working with hazardous drugs. Hazardous drugs in the workplace. Performing a risk assessment for hazardous drugs. Task-specific guidelines for reducing exposure to hazardous drugs. Drug shipping. Drug receiving and storage. Drug transport. Drug preparation. Drug administration. Waste disposal. Spill response.

Topic 8. Microclimate of production facilities. Requirements for the microclimate of the premises. Requirements for the air of the working area. Ventilation of premises, their classification and definition. Indicators for evaluating the work of general ventilation. Calculation of air exchange. Evaluation of the effectiveness of ventilation. Normalization of microclimate parameters. Definition of the working area. Ventilation of workplaces in a pharmacy. Optimal and permissible microclimatic conditions.

Topic 9. Sanitary and hygienic regulation of air pollution in the workplace. Maximum permissible concentrations and approximate safe levels of exposure to harmful substances in the air of the work area. General measures and means against air pollution. Protection of workers.

Topic 10. Requirements for production facilities and technological equipment. Production of medicinal products. Safety requirements for pressure vessels. Safety of operation of steam and hot water boilers. Safety of operation of compressor refrigeration units. Safety of operation of stationary pressure vessels. Requirements for the storage and transportation of raw materials, materials, finished products and production wastes. Safety, signalling and locking devices. Safety in the operation of cylinders. Classification of cylinders. Inscriptions on cylinders, colour of paint, colour of the transverse stripe.

Topic 11. Safety and personal hygiene of personnel when working in pharmacies. Safety and industrial sanitation rules NAOP 9.1.50-1.07-76. Implementation of measures aimed at preventing hazards associated with the specifics of work in a pharmacy. Occupational safety and personal hygiene of staff working in pharmacies. Occupational health and safety instructions by profession and type of work

Topic 12. Personal protective equipment for pharmaceutical workers The role of PPE in workplace safety. Purpose of PPE. Classification. Principles of selection of PPE. Application, care of PPE. Rules for the use of PPE. Responsibility for the proper condition of PPE

Topic 13. Electrical safety. Causes of electrical injuries at workplace. The effect of electric current on humans. Factors affecting the consequences of electric shock. Types of electrical injuries. Safety precautions when working with electrical appliances. Organisation of safe operation of electrical appliances. First aid in case of electric shock. Training and briefings on electrical safety.

Topic 14. Fire safety requirements in pharmacy institutions. Basic concepts and definitions. Regulatory documents governing fire safety. Fire hazardous properties of materials and substances. Fire prevention systems. Fire protection system. Occupational safety requirements for the storage and

use of combustible substances. Fire supervision of pharmacy institutions.

Topic 15: Radiation. Types of radiation. Human protection against ionising radiation. Detailed instructions on the procedure for conducting work, accounting, storage and use of radiation sources. Procedure for conducting Dosimetric monitoring. Means of protection of workers against radiation.

4. The structure of the discipline

Names of topics	Number of hours					
	Total	including				
		lectures	seminars	practical classes	lab classes	ISW
<i>Content module 1. Legal and organizational foundations of labor protection. Basics of physiology, occupational hygiene and industrial sanitation. Basics of safety technology.</i>						
Topic 1: Basic laws and regulations on labor occupational safety and health.	6	2	-	2	-	2
Topic 2. Guarantees of the right to occupational safety and health.	8	2	-	2	-	4
Topic 3. Accidents and occupational diseases of pharmaceutical workers, their investigation and accounting.	6	2	-	2	-	2
Topic 4. Psychosocial hazards in the workplace.	6	2	-	2	-	2
Topic 5. Occupational risks in the pharmaceutical industry	8	2	-	4	-	2
Topic 6. Occupational health and safety in pharmacies.	6	2	-	-	-	4
Topic 7. Occupational health and safety when working with hazardous medicines.	8	2	-	4	-	2
Topic 8. Microclimate of production facilities	4	-	-	2	-	2
Topic 9. Sanitary and hygienic regulation of air pollution in the workplace.	6	-	-	2	-	4
Topic 10: Requirements for production facilities and technological equipment	4	-	-	-	-	4
Topic 11: Safety and personal hygiene of personnel when working in pharmacies	6	2	-	2	-	2
Topic 12. Personal protective equipment for pharmaceutical workers.	4	-	-	2	-	2
Topic 13. Electrical safety.	6	2	-	2	-	2
Topic 14: Fire safety requirements in pharmacies.	8	2	-	2	-	4
Topic 15: Radiation.	4	-	-	2	-	2
Total	90	20		30		40

5. Topics of lectures / seminars / Practical Classes / laboratory classes

5.1. Topics of lectures

№	Topic name	hours
1	Topic 1. Lecture 1. Basic laws and regulations on labor occupational safety and health.	2
2	Topic 2. Lecture 2. Guarantees of the right to occupational safety and health.	2

3	Topic 3. Lecture 3. Accidents and occupational diseases of pharmaceutical workers	2
4	Topic 4. Lecture 4. Psychosocial hazards in the workplace.	2
5	Topic 5. Lecture 5 Occupational risks in the pharmaceutical industry	2
6	Topic 6. Lecture 6 Requirements for the location and composition of pharmacy premises.	2
7	Topic 7. Lecture 7. Occupational health and safety when working with hazardous medicines.	2
8	Topic 11. Lecture8. Safety and personal hygiene of personnel when working in pharmacies	2
9	Topic 13: Lecture 9. Electrical safety.	2
10	Topic 14. Lecture 10. Fire safety requirements in pharmacies.	2
Total		30

5.2. Topics of seminar classes

Seminar classes are not provided.

5.3. Topics of practical classes

№	Topic name	hours
1.	Topic 1. Practical class 1. Basic legislative acts on occupational safety and health.	2
2.	Topic 2. Practical class 2 Rights and obligations of citizens in the field of occupational safety and health. Liability for violation of labor protection legislation.	2
3.	Topic 3. Practical class 3 Causes of accidents and occupational diseases, their classification.	2
4	Topic 4. Practical class 4. Common psychosocial hazards in the workplace. The process to manage psychosocial risks	2
5.	Topic 5. Practical class 5. Potential Hazards and Recommended Controls for Pharmacy Worker. Biological Hazards and Controls.	2
6	Topic 5. Practical class 6. Chemical and Physical Hazards. Controls	2
7.	Topic 7. Practical class 7 Hazardous drugs in the workplace. Performing a risk assessment for hazardous drugs.	2
8	Topic 7. Practical class 8 Drug receiving, storage and shipping of hazardous drugs. Waste disposal. Spill response.	2
9.	Topic 8. Practical class 9. Microclimate of industrial premises.	2
10.	Topic 9: Practical class 10. Sanitary and hygienic regulation of air pollution in the workplace.	2
11.	Topic 11. Practical class 11. Safety and personal hygiene of personnel when working in pharmacies	2
12.	Topic 12: Practical class 12. Personal protective equipment for pharmaceutical workers.	2

13.	Topic 13. Practical class 13. Types of electrical injuries. Safety precautions when working with electrical appliances.	2
14.	Topic 14. Practical class 14. Fire hazardous properties of materials and substances. Fire prevention systems.	2
15.	Topic 15. Practical class 15 Types of radiation. Means of protection against radiation.	2
Total		30

5.4. Topics of laboratory classes

Laboratory classes are not provided.

6. Independent work of a student of higher education

№	Topic name	hours
1.	Topic 1. Basic laws and regulations on labor occupational safety and health.	2
2.	Topic 2. Guarantees of the right to occupational safety and health.	4
3.	Topic 3. Accidents and occupational diseases of pharmaceutical workers, them investigation and accounting.	2
4.	Topic 4. Psychosocial hazards in the workplace.	2
5.	Topic 5. Occupational risks in the pharmaceutical industry	2
6.	Topic 6. Occupational health and safety in pharmacies.	4
7.	Topic 7. Occupational health and safety when working with hazardous medicines.	2
8.	Topic 8. Microclimate of production facilities	2
9.	Topic 9. Sanitary and hygienic regulation of air pollution in the workplace.	4
10.	Topic 10. Requirements for production facilities and technological equipment	4
11.	Topic 11. Safety and personal hygiene of personnel when working in pharmacies	2
12.	Topic 12. Personal protective equipment for pharmaceutical workers.	2
13.	Topic 13. Electrical safety.	4
14.	Topic 14. Fire safety requirements in pharmacies.	4
15.	Topic 15. Radiation.	2
Total		40

7. Teaching methods

Lectures: lectures, lectures-visualizations, narration, explanation, conversation, instruction, discussion, debate, discussion of problem situations, situational learning, illustration (including multimedia presentations), demonstration, presentation of the results of own research.

Practical classes: Discussion, role-playing games, solving situational problems, case studies, solving calculation problems, practicing practical skills, and completing individual assignments.

Independent work: independent work with the recommended basic and additional literature, with electronic information resources.

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

Current control: oral survey, control written works, evaluation of individual assignments, defense of the results of practical works, evaluation of reports, evaluation of activity in the class, testing (pen-and-paper or computerized), evaluation of required skills

Final control: Test

Evaluation of the current educational activity in a practical class:

1. Evaluation of theoretical knowledge on the topic of the class:
 - methods: survey, solving a situational clinical problem;
 - the highest grade available is 5, the lowest passing grade is 3, the failing (unsatisfying) grade is 2.
2. Evaluation of practical skills on the subject of the lesson:
 - methods: standardized and include control of vocabulary, grammar, and communication skills;
 - the highest grade available is 5, the lowest passing grade is 3, and the failing (unsatisfying) grade is 2.

The grade for one practical class is the arithmetic mean of all components and can only be a whole number (5, 4, 3, 2), which is rounded according to the statistical method.

Current Evaluation Criteria at Practical Classes

Rating	Evaluation criteria
Excellent "5"	The higher education student is fluent in the material required, demonstrates versatile and deep knowledge of the program material, can perform the tasks provided for in the program successfully; has mastered the content of the required and additional literature, and has realized the interrelationship of individual sections of the discipline and their importance for the future profession; has demonstrated creative abilities in understanding and using educational program material and the ability to update and replenish knowledge independently; level of competence - high (creative);
Good "4"	The HE student has demonstrated complete knowledge of the educational program material, successfully performs the tasks provided by the program, has mastered the basic literature recommended by the program, and is capable of independent updating and renewal in the course of further education and professional activities, but makes minor mistakes, which are eliminated by the student him/herself when the examiner points them out; the level of competence is sufficient (constructive and variable);
Satisfactory "3"	The HE student does not have sufficient knowledge but knows the fundamental curriculum material to the extent necessary for further education and subsequent work in the profession; copes with the tasks provided by the program, makes some mistakes in the answers at the exam and when completing the exam tasks, but has the necessary knowledge to overcome the mistakes made under the guidance of a scientific and pedagogical worker; level of competence - average (reproductive);
Unsatisfactory "2"	The HE student does not acquire knowledge of program material, makes fundamental mistakes in the assignments provided by the program, cannot use the knowledge in further studies on their own, did not manage to master the skills of independent work; the level of competence is low (receptive-productive)

A test is awarded to an applicant who has completed all the tasks of the work program of the discipline, actively participated in practical classes, completed and defended an individual assignment and has a current average grade of at least 3.0 and has no academic debt.

The test is taken: at the last lesson before the start of the examination session - in the case of the tape system of education, at the last lesson - in the case of the cycle system of education. The grade for the test is the arithmetic mean of all components on a traditional four-point scale and has a value that is rounded according to the statistical method with two decimal places.

9. Distribution of points received by applicants for higher education.

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

Table of conversion of traditional grade into a multi-point scale

Traditional four-point scale	200-Point Grading 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 assessment (average score for the academic discipline) into a 200-point one is performed by the information and technical department of the University. According to the received points on a 200-point scale, the achievements of the students 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 given 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% students
B	The next 25% students
C	The next 30% students
D	The next 25% students
E	The next 10% students

10. Methodological support

- Working program on the educational component
- Syllabus
- Guidelines for practical classes
- Guidelines for independent student work
- Multimedia presentations
- Situational/case tasks
- Scenarios of role-playing games (if necessary)

Educational and methodical literature:

1. Unhurian L. M., Bieliaieva A. I., Vishnitskaya I. V., Aleksandrova A. A. Texts of lectures on

- the discipline "Labor protection in the industry." Odessa: ONMedU, 2020. 111 p.
2. Unhurian L. M., Bieliaieva A. I., Aleksandrova A. A., Vishnitskaya I. V. et al. Labor protection in the industry: workshop. Odessa: ONMedU, 2019. 48 p.
 3. Unhurian LM, Bieliaieva AI, Vishnitskaya IV, Aleksandrova AA and others. Labor protection in the industry: teaching aid. Odessa: ONMedU, 2019. 60 p.

11. Questions for Preparing for the Final Assessment

1. Organizational issues of labor protection (basic laws and regulations).
2. Labor agreements.
3. Rules of internal labor regulations.
4. The main types of labor activity
5. Labor protection of women. Responsibility for violation of the law.
6. Stimulation of labor protection.
7. State social insurance against accidents and occupational diseases.
8. Causes of accidents and occupational diseases.
9. Classification of accidents and occupational diseases.
10. The procedure for investigating accidents.
11. Special investigation of accidents.
12. Investigation of cases of chronic occupational diseases and poisoning.
13. Basic measures to prevent accidents and occupational diseases.
14. Working capacity and fatigue.
15. Categories of difficulty and intensity of work.
16. The main forms of labor activity.
17. Physical factors of the production environment
18. Criteria for assessing the hearing function of persons working in conditions of exposure to noise and vibration
19. Normative values of vibration levels
20. Low and high atmospheric pressure.
25. Occupational safety when working with toxic substances.
26. Occupational safety when working with potent substances.
27. Requirements for narcotic, poisonous and potent substances.
28. Procedure for admission of personnel to work, medical examinations (drug tests).
29. Reporting of institutions working with SRS.
30. Safety requirements for the storage and use of combustible substances.
31. Fire supervision of pharmacy institutions.
32. Classification of working conditions depending on the content of harmful substances in the air of the working area.
33. Microclimate of production facilities.
34. Normalization of microclimate parameters.
35. Maximum permissible concentrations and approximate safe levels of exposure to harmful substances in the air of the work area.
36. General measures and means of air pollution. Protection of workers.
37. Types of radiation.
38. Means of protection against radiation.
39. Safety requirements for vessels (process equipment) operating under pressure.
40. Safety, signaling and locking devices.
41. Safety in the operation of cylinders.
42. Classification of cylinders.
43. Inscriptions on the cylinders, color of coloring, color of the transverse strip.
44. The effect of electric current on humans.
45. Factors affecting the consequences of electric shock.
46. Training and instruction on electrical safety.
47. Basic concepts and definitions of fire safety.

48. Regulatory documents governing fire safety.
49. Fire hazardous properties of materials and substances.
50. Fire prevention systems.
51. Fire protection system.
52. Types of pharmacy institutions.
53. Requirements for production facilities and equipment of pharmacy institutions in accordance with current regulations.
54. Safety and personal hygiene of personnel when working in pharmacies.
55. Labor protection instructions by profession and type of work.
56. Requirements for safety and industrial sanitation in the preparation of medicines in a pharmacy.
57. Requirements for safety and industrial sanitation in the production of purified water and water for injection.
58. Requirements for safety and industrial sanitation during storage of medicinal products.
59. Arrangement of warehouse and material premises in accordance with the groups of medicines.
60. Sanitary supervision of pharmacy institutions.

12. List of recommended literature

Basic

1. Unhurian L. M., Bieliaieva A. I., Vishnitskaya I. V., Aleksandrova A. A. Texts of lectures on the discipline "Labor protection in the industry." Odessa: ONMedU, 2020. 111 p.
2. Unhurian L. M., Bieliaieva A. I., Aleksandrova A. A., Vishnitskaya I. V. et al. Labor protection in the industry: workshop. Odessa: ONMedU, 2019. 48 p.
3. Unhurian LM, Bieliaieva AI, Vishnitskaya IV, Aleksandrova AA and others. Labor protection in the industry: teaching aid. Odessa: ONMedU, 2019. 60 p.
4. Voinalovych O. V., Golopura S. M. Occupational Safety and Health. Practical. Kyiv: Center of Educational Literature, 2018. 448 p.
5. Reese, Charles D. Occupational Safety and Health: fundamental principles and philosophies. Crc Press, 2017. 403 p.
6. Phil Hughes, Ed Ferrett. Introduction to Health and Safety at Work: for the NEBOSH National General Certificate in Occupational Health and Safety. Routledge, 2015. 676 p.
7. Pedro M. Arezes, João S. Baptista, Mónica P. Barroso. Occupational and Environmental Safety and Health. Springer International Publishing, 2019. 765 p.
8. Thomas P Fuller. Global Occupational Safety and Health Management Handbook. CRC Press, 2019. 359 p.
9. Karl H.E. Kroemer. Fitting the human introduction to ergonomics. Human factors engineering. Boca Raton: CRC Press, 2017. 480 p.

Additional

1. Law of Ukraine "On labor protection" No. 2694-XII. dated 14.10.1992 (as amended)
2. Law of Ukraine "Fundamentals of Ukrainian legislation on healthcare" No.2801-XII of 19.11.1992. (As amended)
3. Law of Ukraine "On ensuring sanitary and epidemic well-being of the population" No. 4004-XII dated February 24, 1994 (As amended)
4. Law of Ukraine "On Compulsory State Social Insurance" No. 1105-XIV of 23.09.1999 (As amended)
5. Law of Ukraine "On the basic principles of state supervision of business entities" No. 877-V dated 05.04.2007. (As amended)
6. Code of Civil Protection of Ukraine No. 5403-VI dated 02.10.2012 (As amended)
7. Resolution of the Cabinet of Ministers of Ukraine "On Approval of the Procedure for Investigation and Recording of Accidents, Occupational Diseases and Industrial Accidents" No. 337 dated April 17, 2019
8. Resolution of the Cabinet of Ministers of Ukraine No. 431 of 23.06.94r. "On the procedure

- for conducting state examination (verification) of technological, design, technical documentation for the manufacture of means of production for compliance with their regulations on labor protection"
9. Regulations on the Ministry of Health of Ukraine Approved by the Decree of the President of Ukraine dated March 25, 2015 No. 267.
 10. Regulations on the State Drug Control Service of Ukraine. Approved by the Decree of the President of Ukraine dated April 13, 2011 N 457/2011.
 11. Regulations on the State Service of Ukraine for Medicines. Approved by the Decree of the President of Ukraine dated April 8, 2011 No. 440/2011
 12. Order of the Ministry of Health of Ukraine No. 275 dated 15.05.2006. "On the approval of the instructions for the sanitary and anti-epidemic regime of pharmacies."
 13. CMU No. 843 dated 10.09.2001r. "On the approval of the criterion by which the degree of risk from the implementation of activities in the field of public health protection is assessed and the determination of the frequency of implementation of planned measures of state supervision (control)."
 14. Resolution of the Cabinet of Ministers of Ukraine "On approval of the licensing conditions for the implementation of economic activities for the production of medicines, wholesale and retail trade in medicines, import of medicines (except for active pharmaceutical ingredients)" No. 929 dated November 30, 2016
 15. NPAOP 0.00-4.35-04 "Standard regulation on the labor protection service". 26.DNAP 0.00-6.23-92 "Procedure for certification of workplaces for working conditions".
 16. NAPB A.01.001-2004. Fire safety rules in Ukraine.
 17. Aslan, I., & Morsunbul, D. Preferences for job life quality and motivation in healthcare. Marketing and Management of Innovations. №2. P. 79-93.
 18. Saifullah Hakro, Li Jinshan. Workplace Employees' Annual Physical Checkup and During Hire on the Job to Increase Health-care Awareness Perception to Prevent Disease Risk: A Work for Policy-Implementable Option Globally. Safety and Health at Work. №10. 2018. P. 132-140.
 19. Mark A. Friend, James P. Kohn. Fundamentals of Occupational Safety and Health. Lanham, Toronto, Plymouth: The Scarecrow Press 2007. 506 p.

13. Information resources, including the Internet

1. Departments' site: http://info.odmu.edu.ua/chair/economy_pharmacy/files
2. Ministry of Health of Ukraine http://www.moz.gov.ua/ua/portal/dn_20050719_360.html
3. World Health Organization <http://www.who.int/>
4. Occupational Safety and Health Administration (OSHA) <https://www.osha.gov/workers>
5. The National Institute for Occupational Safety and Health (NIOSH) <https://www.cdc.gov/niosh/index.htm>
6. National Scientific Medical Library of Ukraine <http://library.gov.ua/>
7. National Library of Ukraine named after V.I. Of Vernadsky <http://www.nbu.gov.ua/>
8. HTA [E-resource]. <https://www.hta.ua>
9. FDA [E-resource]. - Access: <https://www.fda.gov>
10. WHO [E-resource]. - Access: <https://www.who.int>
11. <https://www.sop.com.ua/> - Site of the magazine "Labor Protection Service"
12. <https://esop.mcfra.ua/> - Site of the magazine "Handbook of labor protection specialist"