

**MINISTRY OF HEALTH PROTECTION OF UKRAINE**  
**ODESSA NATIONAL MEDICAL UNIVERSITY**  
 Department of pharmacy organization and economy with post-diploma  
 specialization

**Syllabus of the academic discipline**  
**"Occupational Health in industry "**

Amount	Total number of hours per discipline: 90 hours, 3 credits.
Semester, year of study	Semester: VII, 4th year of study.
Days, time, place of educational discipline	According to the schedule of classes Department of pharmacy organization and with post-diploma specialization Odesa, St. Malinovsky, bldg. 37, 2nd floor, room 212
Teacher(s)	Doctor of Pharm. Sc., Prof. Liana UNHURIAN Senior teacher Oksana STEPANOVA
Contact Information	Help by phone: (048) 777-98-18 Email: iryna.vyshnytska@onmedu.edu.ua liana.unguryan@onmedu.edu.ua Face-to-face consultations: from 2:30 p.m. to 4:00 p.m. every Tuesday, from 9:00 a.m. to 1:00 p.m. every Saturday. Online consultations: from 2:30 p.m. to 4:00 p.m. every Tuesday, from 9:00 a.m. to 1:00 p.m. every Saturday. A link to an online consultation is provided to each group during classes separately.

**COMMUNICATION**

Communication with applicants will be conducted in the classroom (face-to-face). During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber messengers (through groups created in Viber for each group, separately through the head of the group).

**ABSTRACT OF THE EDUCATIONAL DISCIPLINE**

*Subject* the study of the regulatory discipline is the study of the factors of the production environment, organizational-technical and sanitary-hygienic conditions in which the labor activity of a person is carried out, as well as the system of legal measures regarding the implementation of the rules of safety technology and industrial sanitation.

*Prerequisites:* is based on the students' study of physiology and pathophysiology, microbiology, organic, biological, pharmaceutical and toxicological

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chemistry, computer technology in the field, pharmacy and industrial drug technology, integrated with the organization and economy of pharmacy, management and marketing in pharmacy.

*Post-requisites:* creates the foundations for the student's further study of clinical and hygienic disciplines, provides for integration with these disciplines and the formation of skills and knowledge on life safety in the process of further education.

*The purpose is:* formation of future specialists in the level of knowledge and skills necessary for their further professional activity on legal and organizational issues of labor protection, and mastering the methods and means of creating safe working conditions for maintaining the health and working capacity of personnel in the industrial production of medicinal products.

*Expected results.*

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

*Know*

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

*be able to*

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

## **DESCRIPTION OF THE EDUCATIONAL DISCIPLINE**

*Forms and methods of education.* The discipline will be taught in the form of lectures (10 hours) and practical classes (30 hours), organization of students' independent work (50 hours).

Teaching methods:

- Verbal: lectures (problematic, visualization lectures, lectures with analysis of specific situations), discussions;
- Face-to-face: multimedia presentations, demonstration, method of direct observation, presentation of the results of own research;
- Practical: exercises; training exercises; solving calculation problems; surveys using blackboards in online format, testing.

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When conducting practical classes, teaching methods are used: verbal, visual, practical; explanatory and illustrative, reproductive, problem-based teaching, partially research, research; independent work of applicants to understand and assimilate new work material on the application of knowledge in practice and the development of skills and abilities, methods of organization and implementation of educational and cognitive activities; stimulation and motivation of learning, control, self-control.

*Content of the academic discipline*

- Topic 1. Main legislative and regulatory acts. Organizational issues of labor protection.
- Topic 2. Accidents, occupational diseases of pharmacy employees, their investigation and accounting.
- Topic 3. Occupational safety in pharmaceutical establishments.
- Topic 4. Occupational safety when working with PPE.
- Topic 5. Air requirements for the working area.
- Topic 6. Sanitary and hygienic regulation of air pollution in production.
- Topic 7. General safety requirements for technological equipment.
- Topic 8. Working conditions and their analysis.
- Topic 9. Electrical safety.
- Topic 10. Radiation.
- Topic 11. Safety techniques and personal hygiene of staff when working in pharmacies.
- Topic 12. Instructions on labor protection by professions and types of work.
- Topic 13. Personal protective equipment.
- Topic 14. Legislative and regulatory framework for occupational health and safety in pharmaceutical establishments.
- Topic 15. Requirements for the location and composition of premises of pharmacy establishments.
- Topic 16. Basics of fire safety.
- Topic 17. Fire safety requirements in pharmacy establishments.

*List of recommended literature:*

*Basic literature:*

1. L. M. Unhurian, O. I. Belyaeva, I. V. Vyshnytska, O. O. Aleksandrova. Texts of lectures on the discipline "Occupational safety in the industry". Odessa: ONMedU, 2019. 111 p.
2. The author's team, general editing Sokurenko V. V Life safety and labor protection: Textbook Kharkiv National University of Internal Affairs, 2021. 305 p.
3. M. Veremiy, V. Zenkina, O. Yavorivskyi. Labor protection in the medical field: Education. method. manual 2017. 208 p.
4. Kerb L. P. Basics of labor protection: Teaching method. self-help manual studied disc. K.: KNEU, 2017. 252 p.
5. Department of health and human services Centers for Disease Control and Prevention National Institute for Occupational Safety and Health "Procedures for Developing the NIOSH List of Hazardous Drugs in Healthcare Settings" 2023.26 p.
6. Handziuk M.P., Zhelibo E.P. Basics of labor protection: Textbook for students of higher educational institutions. K.: Caravela, 2019. 352 p.
7. Reese, Charles D. Occupational Safety and Health: fundamental principles and

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philosophies. Crc Press, 2017. 403 p.

8. 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.
9. Pedro M. Arezes, João S. Baptista, Mónica P. Barroso. Occupational and Environmental Safety and Health. Springer International Publishing, 2019. 765 p.
10. Thomas P Fuller. Global Occupational Safety and Health Management Handbook. CRC Press, 2019. 359 p.
11. Karl HE Kroemer. Fitting the human introduction to ergonomics. Human factors engineering. Boca Raton: CRC Press, 2017. 480 p.

*Additional literature:*

1. Law of Ukraine "On Labor Protection" No. 2694-XII. dated 14.10.1992 (with changes)
2. Law of Ukraine "Basics of Ukrainian legislation on health care" No. 2801-XII dated November 19, 1992 (with amendments)
3. The Law of Ukraine "On the Public Health System" {Amended by Law No. 3302-IX of 08/09/2023 }
4. Law of Ukraine "On Basic Principles of State Supervision of Business Entities" No. 877-V of April 5, 2007 (as amended)
5. Civil Protection Code of Ukraine No. 5403-VI dated October 2, 2012 (as amended)
6. Resolution of the Cabinet of Ministers of Ukraine "On the procedure for attestation of workplaces according to working conditions" No. 442 dated 01.08.92. (with changes)
7. Resolution of the Cabinet of Ministers of Ukraine No. 337 of April 17, 2019 "On approval of the Procedure for investigation and registration of accidents, occupational diseases and accidents at work"
8. Resolution of the Cabinet of Ministers of Ukraine No. 431 of June 23, 1994. "On the procedure for state examination (inspection) of technological, design, and technical documentation for the production of means of production for compliance with their regulatory acts"
9. Resolution of the Cabinet of Ministers of Ukraine dated March 25, 2015 No. 267 "On approval of the Regulation on the Ministry of Health of Ukraine"
10. Resolution of the CMU dated August 12, 2015 No. 647 "On approval of the Regulation on the State Service of Ukraine for medicinal products and drug control"
11. Order of the Ministry of Health of Ukraine No. 275 dated May 15, 2006. "On the approval of the instructions on the sanitary and anti-epidemic regime of pharmacies."
12. Resolution of the CMU dated May 20, 2020 No. 383 "On approval of criteria for assessing the degree of risk from economic activity and determining the periodicity of planned state supervision (control) measures for compliance with legislation in the fields of labor protection, industrial safety, occupational hygiene, handling with

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explosive materials for industrial purposes, labor, employment of the population, employment and employment of persons with disabilities, implementation of state mining supervision by the State Labor Service"

13. Resolution of the Cabinet of Ministers of Ukraine "On Approval of Licensing Conditions for Conducting Economic Activities for the Production of Medicines, Wholesale and Retail Trade of Medicines, Import of Medicines (except for Active Pharmaceutical Ingredients)" No. 929 dated November 30, 2016.
14. Tarasyuk BC, Kuchanska GB. Occupational health and safety in medical and preventive institutions. Life safety: Textbook. Kyiv: Medicine, 2010. 488 p.
15. Danuta Koradecka: Handbook Occupational Safety and Health 2010. 664 p.
16. Zhukovina O.V., O.I. Zaitsev., O.I. Zhukovin., G.A. Greek Occupational health and safety in the pharmaceutical industry: Study guide. K.: Medicine, 2009. 432 p.
17. Best Practices for the Safe Handling of Hazardous Drugs 2015. 73 p.
18. 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.

*Electronic information resources*

1. FDA [E-resource]. - Access: <https://www.fda.gov>
2. Occupational Safety and Health Administration <https://www.osha.gov/workers>
3. The official web portal of the Parliament of Ukraine - <https://zakon.rada.gov.ua/>
4. Scientific and industrial journal "Ohorona prazi" - <http://ohoronapraci.kiev.ua/>
5. DNAOP legislative base - <https://dnaop.com/398/2428/>
6. Magazine "Occupational safety and fire safety" - <http://oppb.com.ua/>
7. The official resource of the World Health Organization - <https://www.who.int>

## **EVALUATION**

Control measures include current control. The current educational activity of the applicants is monitored in practical classes. The teacher assesses the quality of performances, reports, activity in discussions, the ability to formulate answers to questions, solve problems and defend one's position, etc. by students of higher education.

*Independent work of the acquirer*, which is provided for in the program, is controlled and evaluated during the current control: defense of the essay at the seminar class; production of teaching aids (visual aids - presentations, stands, etc.).

Final control is not provided by the program.

As a result of studying this discipline, the applicant receives a "credit" that is issued based on the current educational activity of the applicant under the following conditions: absence of missed classes or timely completion of them, an average score

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for current educational activity of at least 3.00. The credit is given at the end of the study of the discipline on the basis of current grades in the form of an average score (ie, the arithmetic average of all received grades on a traditional scale, rounded to 2 (two) decimal places). The obtained arithmetic mean of the discipline allows conversion to a 200-point grade for further ranking on the rating scale (ECTS). According to of the obtained points on a 200-point scale, the winners are evaluated on the ECTS rating scale.

*Evaluation of the current educational activity in a practical session:*

1. Evaluation of theoretical knowledge on the subject of the lesson:
  - methods: survey, performance assessment
  - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.
2. Assessment of practical skills on the topic of the lesson:
  - methods: assessment of the correctness of the performance of practical skills
  - the maximum score is 5, the minimum score is 3, the unsatisfactory score is 2.

The grade for one practical 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 evaluation criteria in practical training*

Rating	Evaluation criteria
"5"	Getter free owns material, takes active participation in discussion of problematic issues on the topic of the lesson, expresses his opinion on the topic of the lesson
"4"	Getter fine owns material, takes participation in discussed problematic questions on the topic of the lesson, expresses your opinion on the subject of the lesson.
"3"	The applicant does not have sufficient knowledge of the material, is unsure of participating in the discussion of problematic issues on the subject of the lesson, demonstrates essential errors.
"2"	Getter not owns material, not takes participation in discussed problematic issues, does not demonstrate knowledge of the topic of the lesson

## **INDEPENDENT WORK OF HIGHER EDUCATION ACQUIRES**

*Independent work of the acquirer*, which is provided for in the program, is controlled and evaluated during the current control and during the differential assessment.

## **EDUCATIONAL DISCIPLINE POLICY**

*Deadlines and Rescheduling Policy* corresponds to the general rules of ONMedU. Absences of classes for non-respectable reasons will be worked out according to the schedule of the teacher on duty. Absences for valid reasons are worked out according to an individual schedule with the permission of the dean's office.

*Adherence to academic integrity* education seekers provide: independent performance of educational tasks. The use of prohibited auxiliary materials or technical means during control measures is unacceptable in educational activities for participants of the educational process. For violations of academic integrity, students may be held academically liable: reduction of assessment results; retaking the assessment.

### *Attendance and Tardiness Policy:*

Uniform: medical gown. Equipment: notebook, pen.

State of health: applicants suffering from acute infectious diseases, including respiratory diseases, are not allowed to attend classes.

A student who is late for class can attend it, but if the teacher has put "nb" in the journal, he must complete it in the general order.

### *Use of mobile devices:*

Mobile devices may be used by students with the permission of the instructor if they are needed for the assignment.

### *Behavior in the audience:*

The behavior of applicants and teachers in the classrooms should be working and calm, strictly comply with the rules established in accordance with Code of Academic Ethics and Relations of the Odesa University Community National Medical University