

**Odesa national medical university**  
**Faculty – international (“Pharmacy”)**  
**Department of organization and economics in pharmacy**

**SYLLABUS**

**Labor protection in industry**

<b>The number of hours</b>	90 hours / 3 ECTS credits
<b>Year of studying, semester</b>	4 <sup>th</sup> /8 <sup>th</sup> semester
<b>Days, time, place</b>	According to the schedule
<b>Teacher</b>	Prof.Unhurian Liana Mikhailivna As.Aleksandrova Olena Oleksandrivna
<b>Contact number:</b>	+380631612116
<b>E-mail</b>	olena.alexandrova@onmedu.edu.ua
<b>Work place</b>	Odesa, Malynovs'koho str., 37, 2 <sup>nd</sup> floor, department of organization and economics in pharmacy
<b>Consultations</b>	Consultations are held on Tuesdays from 14:30 to 16:00 and Saturdays from 9:00 to 13:00 according to the approved schedule

**COMMUNICATION**

tel: +380631612116, e-mail: olena.alexandrova@onmedu.edu.ua Microsoft Teams, Zoom, Viber, Telergram, WhatsApp.

**COURSE ANNOTATION**

***Subject of discipline***

The subject of normative discipline is the study of factors of the production environment, organizational, technical and sanitary-hygienic conditions in which human labor is carried out, as well as a system of legal measures to comply with the rules of safety and industrial sanitation.

***Course re-requisites and post-requisites:***

The discipline "Occupational Health in the industry" is closely related to such disciplines as human anatomy and physiology, general surgery, propaedeutics of internal medicine, hygiene and ecology, social medicine and health care organization.

The discipline lays the foundations of theoretical knowledge and practical skills on the basic valeological principles of a healthy lifestyle and the basics of safe work of a health worker.

***Purpose of the course***

The purpose of teaching the discipline "Occupational Safety" in the formation of future professionals necessary in their further professional activities level of knowledge and skills on legal and organizational issues of occupational safety, and

mastering the methods and means of creating safe working conditions to maintain health and efficiency of staff. industrial production of medicines

***Tasks of the discipline:***

The main task of studying the discipline "Occupational Safety in the industry" is to gain knowledge to ensure safe working conditions in the receipt, transportation, storage and sale of medicines.

***Expected results:***

*Program learning outcomes for the discipline:*

PLO 1. Carry out professional activities in social interaction based on humanistic and ethical principles; identify future professional activity as socially significant for human health.

PLO 5. Position your professional activity and personal qualities in the pharmaceutical labor market; to formulate the purposes of own activity taking into account public and industrial interests.

PLO 7. Perform professional activities using creative methods and approaches.

PLO 8. Carry out professional communication in the state language, use the skills of oral communication in a foreign language, analyzing texts of professional orientation and translate foreign language information sources.

PLO 11. Use methods for assessing performance indicators; identify reserves to increase labor efficiency.

PLO 12. Analyze the information obtained as a result of scientific research, summarize, systematize and use it in professional activities.

PLO 15. Provide home care to patients in emergencies and victims in extreme situations.

PLO 16. To determine the influence of factors influencing the processes of absorption, distribution, deposition, metabolism and excretion of the drug and due to the condition, features of the human body and physicochemical properties of drugs.

PLO 28. Organize and conduct rational procurement of medicinal plant raw materials. Develop and implement measures for the protection, reproduction and rational use of wild species of medicinal plants.

## **COURSE DESCRIPTION**

***Forms and methods of teaching***

The training course consists of lectures (10 hours) practical lessons (30 hours) and individual work of students (50 hours. Problem-based presentation, case studies, discussions, electronic (review, problem) lectures, presentations, business games, classes with the use of computer technology (situational tasks, test tasks) are used as teaching methods.

***The content of the discipline***

SECTION 1. LEGAL AND ORGANIZATIONAL BASES OF THE LABOR PROTECTION. BASICS OF PHYSIOLOGY, OCCUPATIONAL HYGIENE. WORKPLACE SAFETY BASICS. FIRE SAFETY.

Topic 1. Basic laws and regulations. The organizational issues of The labor protection

Topic 2. Occupational accidents and diseases in pharmaceutical establishments, its investigation and recording.

Topic 3. Occupational safety in pharmaceutical establishments.

Topic 4. Occupational safety for handling highly hazardous chemical

Topic 5. Requirements to workplace air.

Topic 6. Regulation of environmental sanitation and air pollution in production enterprise.

Topic 7. Radiations.

Topic 8. General safety requirements for technological equipment

Topic 9. Working conditions and its analysis.

Topic 10. Electrical safety.

SECTION 2. THE LABOR PROTECTION MANAGEMENT. OCCUPATIONAL SAFETY AND INDUSTRIAL SANITATION OF PHARMACEUTICAL ESTABLISHMENT. FIRE SAFETY IN PHARMACEUTICAL ESTABLISHMENTS.

Topic 11. Safety and personal hygiene of staff in working process in pharmacies.

Topic 12. Instructions on labor protection by professions and types of work.

Topic 13. Personal protective equipment.

Topic 14. Basic principles of Employment protection regulations and organization in pharmaceutical establishment.

Topic 15. Premises requirements of pharmaceutical establishments.

Topic 16. Fundamentals of fire safety.

Topic 17. Fire safety requirements in pharmaceutical establishments.

### *List of recommended literature*

#### *Main:*

1. Unguryan 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. Unguryan 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. Unguryan 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:*

10. Law of Ukraine "On labor protection" No. 2694-XII. dated 14.10.1992 (as amended)
11. Law of Ukraine "Fundamentals of Ukrainian legislation on healthcare" No. 2801-XII of 19.11.1992. (As amended)
12. Law of Ukraine "On ensuring sanitary and epidemic well-being of the population" No. 4004-XII dated February 24, 1994 (As amended)
13. Law of Ukraine "On Compulsory State Social Insurance" No. 1105-XIV of 23.09.1999 (As amended)
14. Law of Ukraine "On the basic principles of state supervision of business entities" No. 877-V dated 05.04.2007. (As amended)
15. Code of Civil Protection of Ukraine No. 5403-VI dated 02.10.2012 (As amended)
16. Resolution of the Cabinet of Ministers of Ukraine "On the procedure for certification of workplaces for working conditions" No. 442 dated 1.08.92r. (With changes)
17. 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
18. 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"
19. Regulations on the Ministry of Health of Ukraine Approved by the Decree of the President of Ukraine dated March 25, 2015 No. 267.
20. 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.
21. 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
22. 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."
23. 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)."

24. 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
25. 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".
27. NAPB A.01.001-2004. Fire safety rules in Ukraine.
28. Aslan, I., & Morsunbul, D. Preferences for job life quality and motivation in healthcare. Marketing and Management of Innovations. №2. P. 79-93.
29. 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.
30. Mark A. Friend, James P. Kohn. Fundamentals of Occupational Safety and Health. Lanham, Toronto, Plymouth: The Scarecrow Press 2007. 506 p.

*Electronic resources:*

31. <https://zakon.rada.gov.ua/> - Database "Legislation of Ukraine"
32. <http://ohoronapraci.kiev.ua/> - Site of the scientific and production monthly magazine "Labor Protection"
33. <http://oppb.com.ua/> - Site of the monthly magazine "Labor protection and fire safety"
34. <https://www.sop.com.ua/> - Site of the magazine "Labor Protection Service"
35. <https://esop.m CFR.ua/> - Site of the magazine "Handbook of labor protection specialist"
36. <https://www.dsns.gov.ua/> - Site of the State Emergency Service of Ukraine

## EVALUATION

There are various forms of control for classes (oral, written, combined, testing, practical skills, etc.). The results of the academic progress for students exhibited in the form of evaluation on a national scale, 200-point scale, ECTS and have standardized generic assessment criteria:

### **Criteria for assessing the student's current learning activity**

**grade "excellent" ("5")** grade "excellent" ("5") is given to a student who systematically worked during the term, has showed versatile and deep knowledge of the program content during the exam, is able to successfully complete the tasks provided for by the program, has mastered the content of the main and additional literature, realized the relationship of individual sections of the discipline, their importance for the future profession, identified creative ability to understand and use

educational and program materials, showed the ability to independently replenish and update knowledge; high level of competence (creative)
<b>grade "good" ("4")</b> is given to a student who has revealed complete knowledge of the educational and program materials, successfully completes the tasks provided for by the program, has mastered the basic literature recommended by the program, has shown a sufficient level of knowledge in the discipline and is capable of independently updating and replenishing them in the course of further education and professional activity; the level of competence is sufficient (constructive - variation)
<b>grade "satisfactory" ("3")</b> is given to a student who has revealed knowledge of the basic educational and program materials in the amount necessary for further training and subsequent work in the profession, copes with the tasks provided for by the program, made some mistakes in the answers on the exam and when performing the exam tasks, but has the necessary knowledge to overcome mistakes made under the guidance of a scientific and pedagogical worker; the level of competence is medium (reproductive).
<b>grade "unsatisfactory" ("2")</b> is given to a student who did not reveal sufficient knowledge of the basic educational and program materials, made fundamental mistakes in performing the tasks provided for in the program, cannot use knowledge in further training without the help of a teacher, could not master the skills of independent work, the level of competence is low (reciprocal-productive).

### **Current control**

Current control is carried out at each practical class through oral questioning or written control. After studying each section, based on the control of theoretical knowledge, practical skills and abilities, the control of the acquisition of practical skills is carried out. The student's current educational activity is assessed in a practical class on a 4-point (traditional) scale.

### **Final control**

The final control in the form of tests is assessed on a two-point scale:

- the mark "passed" is given to a student who has completed the curriculum of the discipline and has no academic debt; the level of competence is high (creative).

- the mark "not passed" is given to a student who has not completed the curriculum of the discipline, has academic debt (average score below 3.0 and / or missing classes), the level of competence is low (receptive-productive). In the student's record book, the teacher enters the grade for the discipline on the traditional and 200-point scale.

A multi-point scale characterizes the actual progress of each student in mastering the academic discipline. The conversion of the traditional grade in the discipline into a 200-point grade is carried out by the information and computing center of the university by the "Contingent" program according to the formula:

$$\text{grade point average (current / by discipline) x 40}$$

national grade	points
«5»	185-200
«4»	151-184
«3»	120-150

### **ECTS scale**

The ECTS rating scale evaluates the achievements of students in the discipline who study in one course of one specialty, according to the points they received, by ranking, namely:

ECTS score	Statistical indicator
"A"	top 10% of students
"B"	next 25% of students
"C"	next 30% of students
"D"	next 25% of students
"E"	the remaining 10% of students

The ECTS scale establishes the student's belonging to the group of the best or worst among the reference group of fellow students (faculty, specialty), that is his rating. When converting from a multi-point scale, as a rule, the boundaries of grades "A", "B", "C", "D", "E" do not coincide with the boundaries of grades "5", "4", "3" on the traditional scale. The "A" grade on the ECTS scale cannot be equal to the "excellent" grade, and the "B" grade - the "good" grade, etc.

Students who have received grades "FX" and "F" ("2") are not included in the list of ranking students. Such students, after retaking, automatically receive an "E" score.

The mark "FX" is given to students who have scored the minimum number of points for the current educational activity, but who are not credited with the final control. Grade "F" is given to students, attended all classroom lessons in the discipline, but did not score an average score (3.00) for the current educational activity and were not admitted to the final control.

### **Independent work of students.**

Independent work of students.

Independent work in the study of the discipline is provided by methodological developments for the independent work of students, visual teaching aids (presentations, educational films etc.), the information resource of the department, the topic of independent tasks for each task, algorithms for the implementation of practical skills, algorithms for self- and mutual control of knowledge and skills, test tasks for each practical class.

Independent work of students, which is provided by the topic of the class along with classroom work, is assessed during the current control of the topic in the

corresponding practical class. The assimilation of topics that are taken out only for independent work is checked during a test.

## **COURSE POLICY**

### ***Deadline and retake policy***

Students for education are expected to attend all lectures and practical classes. If they missed classes, it is necessary to make-up them (according to the schedule posted on the information stand of the department and according to the permission of the dean's office, if necessary).

The retake of the control of the acquisition of practical skills is carried out during the semester on an individual basis with the determination of the time of the training.

Retake of unsatisfactory grades is carried out during the term of studying the discipline, provided that the average score for the current educational activity is less than 3.00 (carried out according to the schedule posted on the information stand of the department).

### ***Academic Virtue Policy***

Respect for academic virtue by education seekers includes:

- independent fulfillment of educational tasks, tasks of current and final control (current controls and discipline exam) of learning outcomes (for persons with special educational needs, this requirement is applied taking into account their individual needs and capabilities);

- links to sources of information when using ideas, developments, statements, information;

- provision of reliable information about the results of their own (scientific, creative) activities, the research methods used and sources of information.

It is unacceptable in educational activities for participants in the educational process to use prohibited auxiliary materials or technical means (crib notes, earpieces, phones, smartphones, tablets, etc.) during control events.

For violation of academic virtue, education seekers may be held liable for such academic responsibility

- decrease in the results of assessment (control work, exam);
- re-passing the assessment (test, exam);
- appointment of additional control measures (additional individual tasks, control works, tests, etc.).

### ***Attendance policy***

Attendance at lectures and practical classes is compulsory. If you are more than 15 minutes late, the lesson is considered missed and requires working out.

### ***Mobile devices***

During practical exercises, the use of a smartphone, tablet or other device for storing and processing information is allowed only with the permission of the tutor.

When conducting any form of control, the use of mobile devices and their accessories is strictly prohibited.

### ***Audience behavior***



During the classes it is allowed: to leave the audience for a short time, if necessary and with the permission of the teacher; photograph presentation slides; actively participate in the class.

During the lessons it is prohibited: to eat (except for persons whose special medical condition requires another - in this case, medical confirmation is required), smoking, drinking alcoholic and low-alcohol drinks or drugs; use obscene language or use words that offend the honor and dignity of colleagues and faculty; gamble; damage the material and technical base of the university (spoil inventory, equipment; furniture, walls, floors, litter premises and territories), make noise, shout or listen to loud music in classrooms and even in the corridors during classes.