

SYLLABUS

INTERNATIONAL EUROPEAN
UNIVERSITY



SCHOOL OF
MEDICINE

LABOUR PROTECTION IN THE
INDUSTRY

2023




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Discipline 

 LABOUR PROTECTION IN THE INDUSTRY

Teacher(s) 


 Candidate of Biological Sciences, Associate Professor Kovalenko Viktoriia Volodymyrivna

Profile of the teacher(s) 


 <https://medicine.ieu.edu.ua/proyemsh/kafedry/kafedra-fundamentalnykh-dystsyplin>

Consultations

Face-to-face consultations

 Fourth Tuesday of the month 15:00-16:00

Online consultations

 Second Tuesday of the month 15:00- 16:00


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Discipline page 

 <https://medicine.ieu.edu.ua/proyemsh/kafedry/kafedra-fundamentalnykh-dystsyplin>

Form of final control

test	differentiated test	exam
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1 Brief summary of the discipline

The discipline "Occupational Health and Safety in the Industry" provides a study of the system of legal, socio-economic, organisational, technical, sanitary, hygienic and medical preventive measures organisational, technical, sanitary and hygienic, medical and preventive measures and means aimed at preserving the life, health and working capacity of healthcare workers in the course of their work.

2 Prerequisite for the course

The discipline "Occupational Health and Safety in Industry" has interdisciplinary links with the following disciplines: :

"Medical and biological physics. Medical Informatics", "Medical Chemistry", "Medical Biology", "Physiology. The knowledge gained is necessary in the study of clinical professional and practical disciplines, as well as in further professional activities.

3 Purpose and objectives of the discipline

The purpose of teaching the discipline "Occupational Health and Safety in the Healthcare Industry" is:

- formation of knowledge, skills and competences in future specialists to ensure effective management of occupational safety and health in the medical industry;
- creation of favourable conditions for the production environment and labour safety in the industry in accordance with current legislation and other regulations.

The main objectives of the discipline "Occupational Health and Safety in the Healthcare Industry" are:

- Ensuring the preservation of life, health and working capacity of healthcare workers in the workplace.
- Fostering moral and ethical values aimed at preventing occupational injuries and the occurrence of occupational and work-related diseases.
- Developing and implementing a set of legislative, organisational, engineering, sanitary and hygienic, medical and preventive and other measures.
- Creation of favourable conditions for the production environment and labour safety in accordance with applicable laws and regulations.

4 Learning outcomes

PLO 1	Have a thorough knowledge of the structure of professional activity. Be able to carry out professional activities that require updating and integration of knowledge. Be responsible for professional development, the ability to further professional training with a high level of autonomy
PLO 2	Understanding and knowledge of basic and clinical biomedical sciences, at a level sufficient to solve professional problems 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 thinking of problems in the field of medicine and related interdisciplinary issues.
PLO 10	To define necessary terms of employment, leisure and nutrition based on the final clinical diagnosis, complying with appropriate ethical and legal standards, by making a reasoned decision according to the current algorithms and standard patterns.
PLO 21	Find necessary information in professional literature and databases of other sources, analyze, evaluate and apply this information.
PLO 22	To apply cutting-edge digital technologies, specialized software and statistical methods of data analysis to solve complicated healthcare problems.



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PLO 24	To organize the required level of individual safety (your own and persons you care for) in case of common dangerous situations occurring in the individual activity area.
PLO 25	To render your knowledge, conclusions and arguments about health and related issues to specialists and non-specialists in a clear and unambiguous manner.
PLO 27	To talk fluently in a state language and in English both orally and in written form to discuss professional activities, research and projects.

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ECTS Credits

3 ECTS credits / 90 academic hours, of which lectures - 16, practical work - 16, independent work - 58 hours.

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Structure of the discipline

Titles of content sections and topics	Number of hours			
	total	Among them		
		l	p	i
Section 1. General issues of labour protection				
Content section 1. General issues of labour protection				
Topic 1: Legal and organisational basis of labour protection.	9	2	2	5
Topic 2. Organisation of labour protection in medical institutions and higher medical education institutions.	10	2	2	6
Topic 3. Hygiene and physiology of work, importance for creating and physiology of work, importance for creating safe working conditions.	10	2	2	6
Section II. Peculiarities of working conditions in the medical sector				
Content Section 2: Peculiarities of working conditions in the healthcare sector				
Topic 4. Occupational hazards in the performance of functional duties of medical workers.	10	2	2	6
Topic 5. Hygienic characteristics of working conditions and health status of medical workers.	8		2	6
Topic 6. Accidents and incidents in health care facilities, their investigation and recording.	10	2	2	6
Section III. Special issues of occupational safety and health in the healthcare sector				
Content section 3. Special issues of labour protection in the healthcare sector				
Topic 7. Occupational health and safety in medical institutions.	8		2	6
Topic 8: Occupational safety and health in certain structural units of health care facilities and higher medical education institutions	10	2	2	6
Topic 9: Dangerous infectious diseases in the work of healthcare professionals in the work of medical workers.	8	2		6
Topic 10. Fundamentals of occupational safety of healthcare workers.	10	2	2	6
TOTAL IN THE DISCIPLINE	90	16	16	58



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List of mandatory tasks

1. Basic terms and definitions in the field of labour protection: labour protection, working conditions, harmful production factor, hazardous production factor, safe working conditions, workplace, safety, etc.
2. Subjects and objects of labour protection.
3. The current state of labour protection in Ukraine and abroad.
4. General issues of labour protection in medicine.
5. Acts on labour protection in force in the organisation, their composition and structure. Labour protection instructions. Development and approval of labour protection acts in force in the organisation.
6. Responsibility of officials and employees for violation of labour protection legislation.
7. Social partnership as a principle of legislative and regulatory support for labour protection. Social dialogue in the European Union.
8. State Labour Service of Ukraine, its structure and functions.
9. Risk-oriented approach in assessing the potential and real danger of harmful effects of factors of the production environment on human health.
10. Identification, assessment and reduction of risks of hazardous events, quality management and formation of a safety culture.
11. Collective and labour agreements as a reflection of labour protection legislation. The Law of Ukraine "On Collective Bargaining Agreements and Agreements" and its content. The Order of the Ministry of Labour and Social Policy of Ukraine "On Approval of the Form of Employment Agreement between Employees and an Individual". Conclusion of an employment agreement based on the specifics of the type of work and functional duties. Regulation of labour protection issues in a collective agreement. Employment under a contract.
12. Liability of officials and employees for violation of labour protection legislation.
13. Sectoral programmes to improve occupational safety, health and the working environment. Regulations on the organisation of the occupational health and safety management system in the industry. Order of the Ministry of Health of Ukraine No. 268 of 30.09.94 "On the Labour Protection Service of the Ministry of Health".
14. Structure, main functions and tasks of occupational health and safety management in medical institutions. The occupational health and safety service of a health care facility (HCF), its structure, number of employees, main tasks and functions. Rights and obligations of employees of the occupational health and safety service.
15. Commission on labour protection in medical institutions, main tasks and rights. Industrial safety and labour protection offices, main tasks and areas of work.
16. Planning of labour protection measures. Identification, assessment and reduction of risks of dangerous events, quality management and safety culture. Accounting and analysis of labour protection indicators. Plans for localisation and elimination of emergencies and accidents.
17. Principles of organisation, types of training and testing of knowledge on occupational health and safety. Instruction on labour protection, their types. Stimulation of labour protection.
18. Hygiene and physiology of work - definition, purpose, objectives, research methods.
19. Classification of dangerous and harmful production factors.
20. The main physiological signs of physical and mental labour. Physiological changes that occur in the organs and systems of the human body during work.
21. Human performance, dynamics and causes of its change during the working day.
22. Physiological essence of fatigue, existing theories and modern understanding of the mechanism of its occurrence.
23. Ways to prevent the development of fatigue. Methods of developing rational modes of work and rest.
24. Classification of labour of medical workers.
25. Psychophysiological harmful and dangerous factors of the working environment and their impact on the health of health workers.
26. Physical harmful and dangerous factors of the working environment and their impact on the health of healthcare workers.



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Перелік обов'язкових завдань

27. Chemical harmful and hazardous factors of the working environment and their impact on the health of healthcare workers.
28. Biological harmful and dangerous factors of the working environment and their impact on the health of healthcare workers.
29. Hygienic features of working conditions and health status of doctors of different profiles (surgical, therapeutic, dental, etc.).
30. Peculiarities of occupational and industrial morbidity of healthcare workers.
31. Classification of labour of medical workers.
32. Psychophysiological harmful and dangerous factors of the working environment and their impact on the health of health workers.
33. Safety requirements for the operation of basic medical equipment.
34. Measures to reduce the physical and neuropsychological overload of health workers. Scientific organisation of labour in health care facilities. Rational organisation of the workplace and furniture. The main ways to prevent fatigue.
35. Measures to reduce the adverse effects of physical factors on the body of healthcare workers. Requirements for microclimate.
36. Measures to reduce the adverse effects of noise, vibration, ultrasound.
37. Requirements for industrial lighting of workplaces of healthcare workers.
38. Requirements for ultraviolet radiation, electromagnetic fields of radio frequencies and laser radiation at the workplaces of healthcare workers.
39. Electrical safety. Classification of premises according to the degree of danger of electric shock.
40. Conditions of human electric shock. Safe operation of electrical installations: electrical protective equipment and measures.
41. Fundamentals of fire safety. State fire supervision. Fire prevention in the design and operation of medical institutions and medical equipment.
42. Indicators of explosive and fire hazardous properties of materials and substances. Categories of premises by explosion and fire hazard. Classification of explosive and fire hazardous premises and areas. Fire resistance of building structures and materials.
43. Basic means and measures to ensure fire safety of an industrial facility. Fire alarm system. Fire extinguishing equipment.
44. 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 in fire safety rules for employees of health care facilities.
45. Socio-economic prerequisites for the use of women, adolescents and older people in health care facilities.
46. The main physiological and anatomical features of the body of women, adolescents and older people, which cause increased sensitivity to harmful factors of the production environment.
47. Influence of factors of the production environment on the body of women. The difference between the sensitivity of the female and male organism to harmful factors of the production environment. Long-term effects of exposure to harmful factors of the production environment.
48. Features of the health status of women, adolescents and older people in health care facilities.
49. Definition
50. Trends in occupational injuries and occupational morbidity in domestic health care facilities.

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Вибіркові завдання

1. Create situational test tasks
2. Creating multimedia presentations on the topics of practical classes
4. Creating biological crosswords on the topics of practical classes
5. Participation in student scientific and practical conferences
6. Organising and visiting thematic museums
7. Publication of abstracts of scientific conference reports in co-authorship with a teacher



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Signs of discipline

Term of Teaching	Semester	International disciplinary integration	Course (year of study)	Cycles: general training/ vocational training/ free choice
1 semesters	III	Yes	2st	General training

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Grading System and Requirements

The current performance of students is assessed on a 4-point scale (2; 3; 4; 5) at each practical, taking into account the approved assessment criteria for the relevant discipline. The student must receive a grade for each topic for further conversion of grades into points on a multi-point (200-point) scale.

Assessment criteria for current learning activities:

Excellent ("5") - the student answered 90-100% of the questions correctly. Solves situational problems of increased complexity, is able to summarise the material.

Good ("4") - the student answered 70-89% of the questions correctly. Possesses the necessary practical skills and techniques to perform them to an extent that exceeds the required minimum.

Satisfactory ("3") - the student answered 50-69% of the questions correctly. He/she has only the mandatory minimum of research methods.

Unsatisfactory ("2") - the student answered 50% of the questions correctly. When answering and demonstrating practical skills, he/she makes significant, gross mistakes.

Evaluation of students' independent work in preparation for classroom practical classes is carried out during the current control of the topic at the relevant classroom.

The semester credit is assessed on a two-point scale (passed/not passed) and a 200-point scale by determining the arithmetic mean of the current grades for each practical lesson on a 4-point scale and its subsequent conversion to 200-point scale. The minimum number of points that a student must score is 120.

The final control of knowledge in the discipline "Bioethics and Medical Communications" is carried out in the form of a test.

<https://ieu.edu.ua/docs/rate-of-study.pdf>

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Conditions for admission to the final control

A condition for student admission to the final control is the absence of missed or completed practical classes, as well as an average current grade of at least 3 points on a 4-point scale / 120 points on a 200-point scale.

<https://ieu.edu.ua/docs/rate-of-study.pdf>

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Discipline policy

The study of the discipline "Occupational Health and Safety in the Industry" requires compliance with the rules that ensure effective mastery of the subject, both in theory and in practice, namely

- regular, without absences, attendance at lectures and practical classes
- the presence of the teacher and students in the classroom in accordance with the schedule and the established time regulations of classes
- the teacher and students attend classes neatly dressed in appropriate clothing, namely a white coat
- full presentation of the course by the teacher in accordance with the curriculum
- students keep lecture notes and notes on practical classes
- the study of the discipline is based on collegiality, cooperation and solidarity between the teacher and students
- Discussion of educational issues takes place in the form of a discussion between the teacher and students,



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12 Discipline policy

and students among themselves

- lectures and practical classes, with the exception of the final control of knowledge, involve independent work of students using information technology and means of processing, storing and transmitting information, including computers, personal gadgets and other electronic devices, as well as textbooks, manuals, methodological developments, etc.
- scientific search and research work of students is encouraged
- writing essays on the topics specified in the list of compulsory assignments is a part of the study
- writing essays on the list of topics of optional assignments is desirable and mandatory if a student wants to improve his or her grade
- the topics of the discipline are considered in terms of their practical application and bioethical capacity
- the mutual behaviour of the teacher and students, and students among themselves in the classroom and out of class time complies with generally accepted norms and role models of behaviour that provide for mutual respect and collegiality of relationships, and exclude religious, racial, ethnic, cultural, age, gender, social, political and other prejudices and prejudices, as well as bullying, sexual harassment, and other manifestations and forms of intolerance and humiliation of human dignity
- any manifestations of corruption in the educational process, both on the part of the teacher and students, are unacceptable.

13 Policy on absences and late assignments

A student who, for valid reasons, confirmed by documentary evidence, was not subject to current control has the right to pass the current control within two weeks after returning to study.

A student who was absent from classes without valid reasons, did not participate in the current control activities, did not eliminate academic debt, is not allowed to take the final semester control of knowledge in this discipline, and on the day of the exam, the academic staff member gives the grade "not admitted" in the examination record.

Repeated passing of a differentiated test in the discipline is assigned subject to the completion of all types of educational, independent (individual) work provided for by the working curriculum of the discipline and is carried out in accordance with the schedule of liquidation of academic debt approved by the directorate.

<https://ieu.edu.ua/docs/050.pdf>

14 Academic integrity policy

Participants in the educational process are guided by the principles of academic integrity

<https://ieu.edu.ua/docs/011.pdf>

15 Recommended sources of information

Main literature:

1. Occupational safety in the medical field: a study guide / O.P. Yavorovsky, M.I. Veremei, V.I. Zenkina et al. 208 c.
2. Safety of life, basics of labour protection: textbook / O.P. Yavorovsky, V.M. Shevtsova, V.I. Zenkina et al.
3. Labour protection in health care facilities. Safety of life: a textbook. B.C. Tarasiuk, G.B. Kuchanska - K.: VSV "Medicine", 2015. - 520 p.
4. Occupational health and safety of healthcare workers: textbook for students of higher medical (pharmaceutical) educational institutions of I-III accreditation levels / N.M. Kasevych, K.I. Shapoval - 3rd ed.
5. Berezutskyi V.V. Hazardous industrial risks and reliability: a textbook / V.V. Berezutskyi, M.I. Adamenko; Kharkiv Polytechnic Institute, National Technical University - Kharkiv: Panov A.M., 2016. 385 p.



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Recommended sources of information

Further reading

1. Hygiene and labour protection of medical workers. Textbook / Edited by V.F. Moskalenko, O.P. Yavorovsky - K.: "Medicine", 2009. - P.6-56.
2. Hygiene and labour protection of medical workers. Study
3. manual / Edited by V.F. Moskalenko, O.P. Yavorovsky - K.: "Medicine", 2009. - 4. 176 c.
5. Aladysheva L. On psychological expertise as a tool for reducing occupational traumatism // Labour protection. - 2015.- № 7. - C. 44-46.
6. Andriushchenko K. Compulsory state social insurance against accidents at work in the context of European integration // Public Law. - 2015. - № 4. - C. 229-235.
7. Labour protection. Terms and definitions of basic concepts: DSTU 2293: 2014 / National Standard of Ukraine. - Entered into force 2015-05-01 // To help the labour protection specialist. - 2015. - № 10. - C. 41-49.
8. Constitution of Ukraine. Basic Law of 28.06.1996.
9. Code of Labour Laws of Ukraine. Law No. 322-VIII of 10.12.71.
10. Law of Ukraine "On Labour Protection" of 14.10.92.
11. Law of Ukraine "On Ensuring Sanitary and Epidemiological Welfare of the Population" No. 4004-XII of 24.02.94.
12. Law of Ukraine "On Collective Bargaining and Agreements" No. 1874 of 24.12.95.
13. Law of Ukraine "On Insurance Tariffs for Compulsory State Social Insurance against Industrial Accidents and Occupational Diseases that Caused Disability" No. 1423 of 13.09.2000.
14. Law of Ukraine "On Administrative Violations" No. 8074-10 of 07.12.84.
15. Fundamentals of the Legislation of Ukraine on Health Care No. 2802-XII of 19.11.92.

Information resources:

1. Official website of the President of Ukraine <http://www.president.gov.ua/>.
2. Verkhovna Rada of Ukraine <http://www.rada.gov.ua/>.
3. Cabinet of Ministers of Ukraine <http://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 Ukraine <http://www.dsns.gov.ua/>.
8. State Labour Service of Ukraine <http://dsp.gov.ua/>.
9. World Health Organisation <http://www.who.int/en/>.
10. International Labour Organization <http://www.ilo.org/global/lang--en/index.htm>.
11. Dokterhoe website and app for health workers (Dutch language). <https://www.dokterhoe.nl/>. Accessed 10 Oct 2016.

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Tips for successful studying on the course

- Attendance at classes;
- Dialogue with the teacher on all issues of the curriculum; Completion of assignments in accordance with the programme;
- Writing essays on the topics of the programme;
- Discussion of topics and tasks in groups outside of class time;
- Use of Internet resources.