

**MINISTRY OF HEALTH OF UKRAINE**

**ODESA NATIONAL MEDICAL UNIVERSITY**

**Department of Occupational Diseases and Functional Diagnostics and  
Phthisiopulmonology**

**International faculty**

**Syllabus course of elective discipline**

**Occupational diseases**

<b>Volume</b>	Total ECTS hours / credits 90 / 3.0 ( practical classes 30 hours, independent work 60 hours)
<b>Semester, year of study</b>	IX-X semesters V year of study
<b>Days, time, place</b>	According to the approved schedule.
<b>Forms of study:</b>	full-time.
<b>Teacher (s):</b>	Ph.D., Associate Professor Oparina T.P., Ph.D., Associate Professor Zagorodnya L.I., Ph.D., Associate Professor Yamilova T.M., PhD, Associate Professor Prutiian T.L.
<b>Contact phone</b>	(048) 704 78 79
<b>Email</b>	<a href="mailto:prof.cl.lab@onmedu.ua">prof.cl.lab@onmedu.ua</a>
<b>Workplace</b>	Department of Occupational Diseases and Functional Diagnostics and Phthisiopulmonology, Therapeutic Department Odessa Regional Clinical Medical Center, Odessa, Sudnobudivna str., 1
<b>Consultations</b>	Consultations are conducted in accordance with the schedule of consultations approved by the head of the department

**COMMUNICATION** Communication with student of higher education will be carried out in person and using the social network Internet, Telegram, WhatsApp

**Language of instruction:** English

**COURSE ANNOTATION**

The program on "Occupational Diseases" in the 5th year provides for the study of the basics of occupational medicine in its main sections (organization of occupational care for the working population, diseases caused by industrial aerosols, chemical, physical factors, overstrain of certain organs and systems). etiology, pathogenesis, clinic, diagnosis, treatment and prevention of major and most common diseases of the working population.

**The subject of the discipline** is theoretical knowledge and practical skills in public health in the field of occupational pathology; prevention, diagnosis and treatment of

occupational diseases, necessary for the professional activities of a specialist in the specialties: "Medicine".

**Required training components (prerequisites and postrequisites):**

- *prerequisites*: Ukrainian language (for professional fields), foreign language (for professional fields), medical chemistry, biological and bioorganic chemistry, medical and biological physics, pathophysiology, pathomorphology, pharmacology, hygiene and ecology, social medicine, organization and economics of health care, propaedeutics of internal medicine, internal medicine, tuberculosis, dermatology, psychiatry, narcology, otorhinolaryngology, neurology, traumatology and orthopedics

- *postrequisites*: internal medicine, tuberculosis, infectious diseases, otorhinolaryngology, epidemiology, neurology, dermatology, occupational diseases, oncology, clinical pharmacology, health care organization, traumatology and orthopedics, allergology, emergency and emergency care.

**The purpose** of the course is for the learner to acquire knowledge and to form elements of professional competences in occupational pathology, to improve the skills and competences acquired during the study of previous disciplines.

**Tasks of the elective discipline:**

1. Providing the applicant of higher education with basic theoretical knowledge on the organization of professional pathological care for the working population, diseases caused by exposure to industrial aerosols, the action of chemical, physical, biological factors, overstrain of individual organs and systems;

2. Providing knowledge on the analysis of the results of the sanitary and hygienic characteristics of working conditions with the solution of the question of the occupational etiology of the disease;

3. Acquisition of theoretical knowledge and practical skills of clinical examination of patients, establishment of a preliminary diagnosis and determination of tactics of management of patients with the most common occupational diseases;

4. Carrying out differential diagnosis between professional and non-professional diseases that have common clinical signs, and formulating a clinical diagnosis;

5. To draw up plans for treatment measures for acute and chronic occupational diseases in accordance with approved industry clinical guidelines and protocols for the provision of medical care;

6. Provision of knowledge on sanitary-hygienic and medical-prophylactic measures aimed at preventing the development of occupational diseases and their progression; examinations of working capacity.

**EXPECTED LEARNING OUTCOMES:**

As a result of studying the academic discipline, the applicant of higher education **should know**:

- the importance of harmful factors of the industrial environment in the occurrence of occupational diseases;
- mechanisms of development of occupational diseases;
- diagnostic criteria of occupational diseases;
- principles of treatment, prevention and rehabilitation of patients with occupational diseases;
- principles of examination of work capacity of patients with occupational diseases.

**be able:**

- determine the importance of harmful factors of the production environment in the occurrence of occupational diseases;
  - analyze the data of sanitary and hygienic characteristics to determine the connection between the disease and the working conditions of the patient;
  - to resolve issues of preliminary and periodic medical examinations;
  - to formulate a preliminary diagnosis in the case of an occupational disease caused by the influence of the factors of the industrial environment;
  - carry out differential diagnosis between professional and non-professional diseases that have similar clinical symptoms;
  - provide recommendations on issues of rehabilitation, employment, treatment of patients with occupational pathology;
    - to detect the degree of loss of work capacity due to occupational diseases, to select rational types of work for occupational patients;
    - draw up a dispensary follow-up plan for a patient with an occupational disease.

## **COURSE DESCRIPTION**

**Types of classes:** practical classes (30 hours), independent work of applicants of higher education (60 hours).

Practical classes are held on the clinical base of the department. The method of organizing practical classes on occupational pathology requires:

- make the applicant a participant in the process of providing medical care to patients from the moment of their hospitalization, examination, diagnosis, treatment to determine professional suitability;
- master professional practical skills; skills of teamwork of students, doctors, other participants in the process of providing medical care;
- to form at the applicant, as a future specialist, an understanding of responsibility for the level of their training, its improvement during training and professional activities.

**Practical classes are held with the inclusion of:**

1. control of the level of knowledge with the help of test questions and checking workbooks;
2. examination of patients with diseases relevant to the subject of the lesson, followed by discussion of diagnosis, differential diagnosis and treatment with the use of evidence-based medicine, in accordance with National and European guidelines and protocols;

3. analysis of the results of laboratory and instrumental research methods provided by the topic of practical training;

**Teaching methods:** verbal, explanatory-demonstration, practical, visual, work with a book, video method, group work, discussions, solving situational problems, cases, application of methods for modeling clinical situations, problem-oriented learning. etc.

## **THE COURSE CONTENT**

**Topic 1.** General issues of occupational pathology

**Topic 2.** Pneumoconiosis. Silicosis. Silicatosis. Carboconiosis.  
Metallconiosis. Hypersensitive pneumonitis.

**Topic 3.** Chronic bronchitis and chronic obstructive pulmonary disease of dust etiology.

**Topic 4.** Occupational benzene intoxication.

**Topic 5.** Occupational intoxications with amino, nitro compounds of benzene, carbon monoxide. Respiratory diseases of toxic-chemical etiology.

**Topic 6.** Occupational neurotoxicosis. Occupational toxic hepatitis and toxic nephropathy.

**Topic 7.** Occupational intoxication used in agricultural work.

**Topic 8.** Vibration disease and neurosensory deafness. Altitude and caisson diseases.

**Topic 9.** Occupational diseases caused by exposure to electromagnetic radiation and ultrasound, the action of adverse factors of the industrial microclimate

**Topic 10.** Diseases associated with overexertion of individual organs and systems.

**Topic 11.** Occupational bronchial asthma and exogenous alveolitis

**Topic 12.** Occupational cancer

### **List of recommended literature**

Main (basic):

1. Occupational diseases / V. A. Kapustnik, I. F. Kostyuk, H. O. Bondarenko et al.; edited by V. A. Kapustnik, I. F. Kostyuk. – Kyiv : AUS Medicine Publishing, 2018. – 496 p.

2. Ignatyev O.M., Yarmula K.A., Oparina T.P., Mitsova N.Y. Occupational diseases. Manual for independent students work. - Odessa. Odessa National Medical University, 2017, 78 p.

3. Friis R.H. Occupational health and safety for the 21<sup>st</sup> century/R.H.Friis.- Jones&Bartlett Learning, 2015.-452p.

4. Tolman W.H. Safety methods for preventing occupational and other accidents and disease/W.H.Tolman,L.B.Kendall.-Andesite Press,2015.-510p.

5. Shen S.C., House R.A. Hand-arm vibration syndrome // Can Fam Physician. 2017. 63(3). P. 206-210; 3. K

7. [https://info.odmu.edu.ua/chair/occupational diseases and functional diagnostics /files/en](https://info.odmu.edu.ua/chair/occupational_diseases_and_functional_diagnostics/files/en)

## EVALUATION

Forms and methods of current control: oral control, survey, practical, test, self-control, etc.

### Current assessment criteria at the practical class

rating	Evaluation criteria
«5»	The applicant of higher education freely uses the material, takes an active part in discussing and solving a situational clinical problem, confidently demonstrates knowledge during the interpretation of laboratory research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
«4»	The applicant of higher education has a good command of the material, participates in the discussion and solution of a situational clinical problem, makes some mistakes during the interpretation of laboratory research data, expresses his opinion on the subject of the lesson, demonstrates clinical thinking.
«3»	The applicant of higher education does not have sufficient knowledge of the material, is unsure of participating in the discussion and solution of the situational clinical problem, makes significant mistakes during the interpretation of laboratory research data.
«2»	The applicant of higher education does not have a good command of the material, does not participate in the discussion and solution of the situational clinical problem, in the interpretation of laboratory research data.

**Forms and methods of final control:** credit test, issued to the applicant who has completed all sections of the educational program of the selected discipline, actively participated in practical classes, has an average current grade of at least 3.0 and has no academic debt.

**Conditions for obtaining additional (bonus) points.** Possibility and conditions of obtaining additional (bonus) points: not provided.

**Independent work.** The evaluation of the independent work of the applicants of higher education, which is provided for in the topic along with the classroom work, is carried out during the current control of the topic in the corresponding classroom session, as well as at the final control.

## COURSE POLICY

### *Deadlines and Rescheduling Policy.*

Missing classes for unimportant reasons will be made up 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.

*Academic Integrity Policy.* Applicants must observe academic integrity, namely:

- independent performance of all types of work, tasks, forms of control provided for by the work program of this educational discipline;
  - references to sources of information in the case of using ideas, developments, statements, information;
  - compliance with the legislation on copyright and related rights;
  - provision of reliable information about the results of one's own educational (scientific) activity, used research methods and sources of information.
- Unacceptable in educational activities for participants of the educational process are:
- using family or official ties to obtain a positive or higher grade during any form of control of learning outcomes or academic performance;
  - use of prohibited auxiliary materials or technical means (cheat sheets, notes, micro-earphones, telephones, smartphones, tablets, etc.) during control measures;
  - passing procedures for control of training results by fake persons.

For violation of academic integrity, applicants may be held to the following academic responsibility:

- decrease in the results of evaluation of control work, evaluations on employment, credits, etc.;
- retaking the assessment (test, final exam, etc.);
- appointment of additional control measures (additional individual tasks, control works, tests, etc.);
- conducting an additional inspection of other works authored by the violator.

*Attendance and Tardiness Policy.* Attendance and work at classroom classes is mandatory for obtaining a satisfactory grade. The applicant of higher education 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.

*Mobile devices.* It is permissible to use mobile devices during the lesson with the teacher's permission.

*Behavior in the audience.* The behavior of applicant and teachers in the classrooms should be working and calm, strictly comply with the rules established by the Regulations on academic integrity and ethics of academic relations at Odessa

National Medical University, in accordance with the Code of Academic Ethics and University Community Relations of Odessa National Medical University, Regulations on Prevention and detection of academic plagiarism in the research and educational work of applicants of higher education, scientists and teachers of Odessa National Medical University.