Odessa National Medical University

Department of Occupational Diseases, Clinical Laboratory and Functional Diagnostics

International faculty

Syllabus

of discipline Occupational diseases

Volume	Total ECTS hours / credits 90 / 3.0 (practical classes 54 hours, individual work 36 hours)
Semester, year of study	XI-XII semesters VI year of study
Days, time, place **Forms of study**:	According to the approved schedule of classes of the Department of Occupational Diseases, Clinical Laboratory and Functional Diagnostics. full-time.
Teacher (s):	MD, Prof. Ignatiev O.M., Ph.D., Associate Professor Oparina T.P., Ph.D., Associate Professor Zagorodnya L.I., Ph.D., Associate Professor Yamilova T.M., PhD, Associate Professor Volyanskaya V.S.
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Workplace	Department of Occupational Diseases, Clinical Laboratory and Functional Diagnostics, Therapeutic Department of Odessa Regional Clinics Medical Center, Odessa, Sudnobudivna str., 1
Consultations	Consultations are conducted in accordance with the schedule of consultations approved by the head of the department

COMMUNICATION Communication with applicants 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 6 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 speciality: "Medicine".

Required training components (prerequisites and postrequisites):

- *prerequisites*: 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 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 (54 hours), independent work of applicants of higher education (36 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 applicants, doctors, other participants in the process of providing medical care;

• to form in 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

Content module 1. General issues of occupational pathology. Research methods in occupational pathology. Diseases caused by exposure to industrial aerosols

Topic 1. General issues of occupational pathology. Medical examinations.

Topic 2. Research methods in occupational pathology.

Topic 3. Diseases caused by exposure to industrial aerosols. Pneumoconiosis.

Topic 4. Dust bronchitis. Occupational bronchial asthma.

Topic 5. Occupational tuberculosis.

Content module 2. Diseases caused by the influence of chemical factors. Occupational diseases are associated with the action of biological factors.

Topic 6. Diseases caused by the action of chemical factors. Intoxication with lead, tetraethyl lead**.**

Topic 7. Occupational neurotoxicoses**.** Characteristics of neurotropic poisons (mercury, manganese, arsenic).

Topic 8. Occupational intoxications with benzene, amino-, nitro compounds of benzene. Occupational toxic hepatitis. Occupational toxic nephropathy.

Topic 9. Occupational intoxication with compounds used in agricultural work.

Topic 10. Ammonia poisoning. Carbon monoxide poisoning. Carbon disulfide poisoning. Arsenic hydrogen intoxication**.**

Topic 11. Occupational poisoning with polymeric materials.

Topic 12. Occupational diseases are associated with the action of a biological factor: infectious (COVID-19); parasitic

Content module 3. Diseases caused by physical factors and overstrain of individual organs and systems.

Topic 13. Occupational diseases associated with the action of physical factors. Vibration disease.

Topic 14. Sensorineural hearing loss.

Topic 15. Altitude and caisson diseases.

Topic 16. Radiation sickness.

Topic 17. Occupational diseases caused by exposure to electromagnetic radiation and ultrasound, laser radiation.

Topic 18. Diseases caused by the action of adverse factors of the production microclimate.

Topic 19. Diseases associated with overstrain of individual organs and systems**.**

Topic 20. Occupational cancer. Emergency care in occupational pathology.

List of recommended literature

Main (basic):

1. Ignatyev O.M., Matsegora.N.A., Oparina T.P. Occupational diseases. Odessa. Odessa State Medical University, 2009, 251 p.

2. 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.

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

4. Ignatyev O., Oparina T, Panuuta O., Zagorodnaya L.,Yamilova T., Prutian T.,Volyanska V. PRACTICUM for independent training of higher education applicants from the academic discipline "Occupational diseases".- Odessa. Odessa National Medical University, 2024.- 47 p.

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

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

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

8.https://info.odmu.edu.ua/chair/occupational diseases, clinical laboratory 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 session

rating	Evaluation criteria
«5»	The applicant of higher education has a fluent command of 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.

Final control

The study of the academic discipline ends with a credit. Credit will be given to applicants of higher education who have not missed practical classes or completed missed classroom classes and have an average score of at least "3".

Independent work includes preparation for practical classes and preparation for final control.

EDUCATIONAL DISCIPLINE POLICY

Deadlines and Rescheduling Policy:

• absences from classes due to non-respectable reasons are made up according to the schedule of the teacher on duty.

• absences due to valid reasons are made up 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 assessment of control work, assessment in class, credit, etc.;

• retaking the assessment (test, credit, etc.);

• assignment 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

Uniform: medical gown, cap, protective mask, change of shoes.

Equipment: notebook, pen.

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

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

Online classes at the department are conducted using the Microsoft Teams distance learning system. Online classes include on-screen and oral demonstrations of learning materials dialogue between the teacher and applicant.

Use of mobile devices

Copying, use of various software tools, hints, use of a mobile phone, tablet or other electronic gadgets during class are not allowed.

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

Behavior in the audience

The behavior of applicants and teachers in the classrooms must 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 students of higher education, scientists and teachers of Odesa National Medical University.