Odessa National Medical University

Department of Occupational Diseases and Functional Diagnostics

International faculty

Syllabus course of selective discipline

Occupational diseases

Volume	Total ECTS hours / credits 45 / 1.5 (lectures 6 hours, practical classes 14 hours, VTS 25 hours)
Semester, year of study	IX-X semesters V year of study
Days, time, place **Forms of study**:	According to the approved schedule of classes of the Department of Occupational Diseases and Functional Diagnostics. full-time.
Teacher (s):	MD, Prof. Ignatiev O.M., Ph.D., Associate Professor Ph.D. Oparina T.P., Associate Professor Ph.D. Panyuta O.I., Associate Professor Ph.D. Zagorodnya L.I., Associate Professor, Ph.D. Yamilova T.M. assistants: Prutiyan T.L., Ilikchieva N.Yu.
Contact phone	(048) 704 78 79
Email	prof.cl.lab@onmedu.ua
Workplace	Department of Occupational Diseases and Functional Diagnostics, Therapeutic Department ORCMC, 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 students 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", "Pediatrics", "Medical-preventive care".

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 and objectives of the discipline:

acquisition / mastery of competencies in occupational pathology**.**

Competences and learning outcomes, the formation of which is facilitated by the discipline (interrelation with the normative content of higher education training, formulated in terms of learning outcomes in the EPP).

In accordance with the requirements of the EPP, the discipline provides acquisition by students

competencies:

- integral:

ability to solve complex problems and problems in a certain field of professional activity or in the learning process, which involves research and / or innovation and is characterized by complexity and uncertainty of conditions and requirements.

- *general*:

GC1. Ability to abstract thinking, analysis and synthesis.

GC2. Ability to know and understand the subject area and professional activity.

GC3. Ability to communicate in the state language.

GC4. Ability to learn and master modern knowledge, use information and communication technologies; ability to search, process and analyze information from various sources.

GC5. Ability to adapt and make an informed decision in a new situation.

GC6. Ability to work in a team.

GC7. Ability to work in an international context, to communicate in a foreign language.

GC8. Ability to evaluate and ensure the quality of work performed.
GC9. Ability to act on the basis of ethical considerations, socially responsible and consciously.
GC10 Ability to be aware of equal opportunities and gender issues, to value and respect diversity and multiculturalism.

- *special* (professional, subject):
SC1. Communication skills and clinical examination of the patient.
SC2. Ability to determine the list of required clinical, laboratory and instrumental studies and evaluate their results.
SC3. Ability to establish a preliminary and clinical diagnosis of the disease.
SC4. The ability to determine the principles of treatment of diseases, the required mode of work and rest and the nature of nutrition.
SC5. Ability to diagnose emergencies.
SC6. Ability to determine tactics and provide emergency medical care.
SC7. Ability to plan and conduct medical and evacuation measures.
SC8. Ability to perform medical manipulations.
SC10. Ability to plan and carry out sanitary and hygienic and preventive measures.
SC11. Ability to determine the tactics of management of persons subject to dispensary supervision.
SC13. Ability to conduct a performance examination/
SC14. Ability to keep medical records.
SC15. Ability to conduct epidemiological and medical-statistical studies of public health; assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.
SC16. Ability to plan, implement and analyze activities for the organization and integration of medical care.

Learning outcomes:

Integrative final program learning outcomes, the formation of which is facilitated by the discipline:

• conduct professional activities in social interaction based on humanistic and ethical principles; identify future professional activities as socially significant for human health;

• apply knowledge of general and professional disciplines in professional activities;

• comply with the norms of sanitary and hygienic regime and safety requirements in carrying out professional activities;

• use the results of independent search, analysis and synthesis of information from various sources to solve typical problems of professional activity;

• argue information for decision-making, be responsible for them in standard and non-standard professional situations; adhere to the principles of deontology and ethics in professional activities;

• to carry out professional communication in modern Ukrainian, to use skills of oral communication in a foreign language, analyzing texts of professional orientation and to translate foreign language information sources;

• adhere to the norms of communication in professional interaction with colleagues, management, work effectively in a team;

• analyze the information obtained as a result of scientific research, summarize, systematize and use it in professional activities.

Program learning outcomes for the discipline:

PLO 1. Have communication skills and clinical examination of the patient. Collect data on patient complaints, medical history, life history.

PLO 2. Evaluate information about the diagnosis using a standard procedure based on the results of laboratory and instrumental studies. Determine the list of necessary clinical, laboratory and instrumental studies and evaluate their results (according to list 4).

PLO3. Highlight the leading clinical symptom or syndrome. Establish a preliminary diagnosis, make a differential diagnosis and determine the clinical diagnosis of the disease (according to list 2).

PLO4. Determine the principles of treatment of diseases, the necessary mode of work and rest, the nature of nutrition (according to list 2).

PLO5. Diagnose emergencies (according to list 3).

PLO6. Define tactics and provide emergency medical care (according to list 3).

PLO7.To plan and carry out medical and evacuation measures among the population and servicemen taking into account the existing system of medical and evacuation support.

PLO8. Perform medical manipulations (according to list 5).

PLO10.Plan and implement sanitary and hygienic and preventive measures.

PLO12. Determine the tactics of management of persons subject to dispensary supervision (children, pregnant women, employees whose professions provide for mandatory dispensary examination).

PLO 13. Carry out an examination of working capacity.

PLO 14. Keep medical records.

PLO 16. Assess the impact of the environment, socio-economic and biological determinants on the health of the individual, family, population.

PLO 17. Plan, implement and analyze activities for the organization and integration of medical care.

PLO 18. Adhere to the requirements of ethics, bioethics and deontology in their professional activities.

COURSE DESCRIPTION

Types of classes: lectures, practical classes, independent work of students.

Thematic plans of lectures, practical classes and independent work reveal the problematic issues of the relevant sections of occupational pathology. The lecture course uses didactic tools (multimedia presentations, educational videos, demonstration of thematic patients).

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

• make the student 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 in the student, 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 CONTENT OF THE PROGRAM

Section 1. Features of diagnostics of occupational diseases.

Topic 1. General issues of occupational pathology

Section 2. Diseases caused by exposure to industrial aerosols

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

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

Section 3. Diseases caused by chemical factors.

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.

Section 4. Diseases caused by the action of physical factors and overexertion of individual organs and systems.

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

THE LIST OF EDUCATIONAL AND METHODOLOGICAL LITERATURE

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

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

6. 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

EVALUATION

Methods of current control: oral control during the survey, conversation, written in the form of control work, practical, test, self-control, etc.

For mastering each topic of the section, the student receives a grade on a 4-point (traditional) scale, taking into account all types of work provided by the methodological development for the study of the topic. At the end of the course, the current performance is calculated as the arithmetic mean of all grades obtained by the student on a traditional scale, rounded to 2 (two) decimal places.

Means of diagnosing learning success: individual tasks, presentations, questions for current control, workbooks, cases, test questions, test tasks, situational tasks, results of laboratory and instrumental research, protocols of clinical analysis of the patient, questions for final control.

Forms and methods of final control: complex testing on paper with manual verification, complex differential test (oral and written).

The discipline is evaluated in accordance with the "Regulations on the organization of the educational process at the Odessa National Medical University."

The final control is carried out in the form of differential credit.

Differential credit is set at the last lesson of the discipline based on the results of the final interview with mandatory implementation student of all types of work provided by the working curriculum and assessed for current educational activities on average not less than 3.00.

The score obtained for the answer on the differential test, and the average score current performance during the study of the discipline used for calculation of the arithmetic mean, which is the total score of discipline.

How will the assessment of knowledge (distribution of points) of applicants higher education?

The grade for the discipline is calculated as follows: 4-point the traditional scale first calculates the average score as an averag earithmetic of two components: the average current score as the arithmetic mean of all current estimates; traditional assessment for differential credit.

The average score for the discipline is translated into the traditional grade of discipline on a 4-point scale and is regarded as the ratio of this arithmetic mean to the percentage of mastery of the required amount of knowledge.

Conversion of a traditional grade from a multi-point discipline scale: performed by the information and computer center of the university.

Average score for the discipline	**The ratio of received student average score for the discipline to the maximum possible sizes this indicator**	**Score from discipline on a 4-point scale (traditional assessment)**
4.45 - 5.0 90	100%	5
3.75 - 4.44	75-89%	4
3.0 - 3.74	60-74%	3

Assessment of individual student tasks

Grades for individual tasks are charged to the student only if they are successfully completed and defended. The grade is added to the current performance.

Assessment of students' independent work

Assessment of educational activities of all students is not mandatory in every practical and seminar session. However, at least 50% of students must be interviewed in a practical lesson.

At the end of the course, the current performance is calculated as the average score of all grades obtained by the student on a traditional scale, rounded to 2 (two) decimal places.

The obtained average score for the discipline allows you to convert to a score on a 200-point scale/

Thus, the student receives two grades: the first - on the traditional 4-point scale and the second on a 200-point system.

According to the scores obtained on a 200-point scale, students are evaluated on the ECTS rating scale.

Ranking with assignments of grades "A", "B", "C", "D", "E" is carried out by deans or other structural subdivisions by the decision of the Academic Council by the educational department for students of this course who study in one specialty and have successfully completed the discipline.

THE PLAN OF PRACTICAL TRAINING

1. Identify the risk factors of occupational diseases.
2. Define criteria for diagnosis "Occupational disease".
3. To assess the severity of the patients according to functional methods.
4. Explain the basic principles of treatment of occupational diseases and determine criteria for recovery.
5. Diagnose and provide emergency medical care in urgent patients.
6. Terms of appointment an antidote therapy in professional poisoning.
7. Demonstrate the ability of medical documentation in occupational diseases clinic.
8. Carry out examination of working capacity of patients with occupational pathology
9. Define the treatment of patients with different clinical manifestations of occupational diseases.
10. Diagnose occupational diseases and complications of their treatment .
11. Carry out preventive measures for the prevention of occupational diseases and their complications.

COURSE POLICY

The policy of the academic discipline is built taking into account the norms of the legislation of Ukraine on academic integrity, the Charter, the provisions of ONMedU and other normative documents.

The discipline is compulsory for students majoring in "222 Medicine". The student is obliged to fully master the knowledge skills, practical skills and competencies in the discipline. At this must take into account the presence and activity of the student during practical classes. You are not allowed to write off, use any kind of software, tips, use a mobile phone, tablet or other electronic gadgets during the lesson.

Students are not allowed to be late for practical classes.

For the period distance learning chats are used Ms Teams, Viber, WhatsApp, Telegram. Online classes at the department are conducted using the distance learning system Ms Teams, ZOOM. Each student must connect to the webinar room in a timely manner. Online classes include on-screen demonstration of teaching

materials and oral dialogue between teacher and students.

Policy on deadlines and rescheduling: absences, sick leave are worked out according to the schedule of work of the department with the permission of the dean's office, in accordance with the regulations of the university. Rearrangement of differential credit with the permission of the dean's office.

Discussed and recommended at the meeting of the Department of Occupational Pathology and Functional Diagnostics, the minutes of "27" August 2021 №1