MINISTRY OF HEALTH OF UKRAINE ODESA NATIONAL MEDICAL UNIVERSITY

Faculty of international

Department of occupational diseases

and functional diagnostics and

phthisiopulmonology

Syllabus of the educational discipline "Phthisiology"

Scope of the academic discipline Contact Information	Total number of hours per discipline: 90 hours, 3 credits. Semesters: IX-X. 5th year of study.
Days, time, place of educational discipline	According to the schedule of classes. Department of occupational diseases and functional diagnostics and phthisiopulmonology. Odesa, str. French boulevard 40. State institution specialized (special) sanatorium "Arkadia" of the Ministry of Health of Ukraine.
Teacher(s)	Matsegora N.A., doctor of medicine, professor of the department. Docent: Ph.D. Spota O.E., Ph.D. Kaprosh A.V. Assistants: Omelyan L.P., Zaitsev A.S.
Contact Information	Help by phone: Shpota Olena Evgenivna, responsible for international work at the department, 0685326315 Zaitsev Andrii Serhiiyovych, 093-144-81-06 E-mail: kaftub@onmedu.edu.ua Face-to-face consultations: from 2:00 p.m. to 5:00 p.m. every Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday Online consultations: from 3:00 p.m. to 4:00 p.m. every Thursday, from 9:00 a.m. to 2:00 p.m. every Saturday. The link to the online consultation is provided to each group during classes separately.

COMMUNICATION

Communication with applicants will be conducted in the classroom (face-to-face).

During distance learning, communication is carried out through the Microsoft Teams platform, as well as through e-mail correspondence, Viber messengers (through groups created in Viber for each group, separately through the head of the group).

ABSTRACT OF THE EDUCATIONAL DISCIPLINE

The subject of the study of the discipline is measures for the organization of detection, diagnosis, differential diagnosis, treatment and prevention of tuberculosis.

Prerequisites and post-requisites of the discipline (place of the discipline in the educational program):

Prerequisites: Ukrainian language (by professional direction), foreign language (by professional

direction), Latin language and medical terminology, medical biology, medical and biological physics, biological and bioorganic chemistry, human anatomy, histology, cytology and embryology, physiology, microbiology, virology and immunology; basics of bioethics and biosafety, pathomorphology, pathophysiology, radiology, pharmacology, propaedeutics of internal medicine, propaedeutics of pediatrics, radiology, hygiene and ecology.

Postrequisites: internal medicine (pulmonology, endocrinology), surgery, otolaryngology, neurology, infectious diseases, epidemiology, pediatrics, childhood infections, general practice (family medicine).

Purpose: The student's acquisition of knowledge and the formation of elements of professional competences in the field of phthisiology and improvement of skills and competences acquired during the study of previous disciplines.

Task:

1. Learning the algorithm of actions of doctors of institutions of the general medical network regarding the detection of tuberculosis when patients seek help;

2. Mastering the main preventive measures in centers of tuberculosis infection;

3. Acquisition of skills and abilities to examine a patient with tuberculosis and record the results in the relevant medical documentation;

4. Acquisition of skills and abilities for diagnosis and differential diagnosis of tuberculosis;

5. Formation of moral, ethical and deontological qualities during professional communication with the patient.

Expected results:

As a result of studying the academic discipline, the applicant must:

Know: Etiology, pathogenesis, clinic, diagnosis, differential diagnosis, treatment, prevention of tuberculosis.

Be able:

- Collect data on patient complaints, medical history, life history of tuberculosis patients

- Evaluate information about the diagnosis, using a standard procedure, based on the results of laboratory and instrumental studies. Determine the list of necessary clinical and laboratory and instrumental studies and evaluate their results.

- Identify the leading clinical symptom or syndrome, establish a preliminary diagnosis, perform differential diagnosis and determine the clinical diagnosis of tuberculosis

- Diagnose emergency conditions.

- Plan and carry out preventive and anti-epidemic measures regarding tuberculosis.

- Determine the management tactics of persons subject to dispensary supervision (children, pregnant women, workers whose professions require mandatory dispensary examination).

DESCRIPTION OF THE EDUCATIONAL DISCIPLINE

Forms and methods of education

The discipline will be taught in the form of lectures (6 hours), practical (54 hours), organization of students' independent work (30 hours).

Teaching methods:

Lectures: reveal problematic issues of the relevant subdivisions of the discipline. Lecturers can use such variants of lectures as educational, informative, lecture-visualization, lecture-discussion, lecture-consultation.

Practical classes: oral and written interviews, solving clinical situational problems, practicing patient examination skills, solving test tasks.

Independent work: independent work with the recommended basic and additional literature, with electronic information resources, independent work with the bank of Step-2 test tasks, independent solution of clinical tasks.

The content of the educational discipline

Theme 1. Definition of tuberculosis as a scientific and practical problem. History of phthisiology. Tuberculosis epidemiology. Etiology, pathogenesis of tuberculosis. Immunity in tuberculosis. Clinical classification of tuberculosis.

Theme 2. Organization of detection and diagnosis of tuberculosis in primary care institutions. Curation of patients.

Theme 3. Organization of detection and diagnosis of tuberculosis in secondary care institutions. Curation of patients.

Theme 4. General principles of treatment. Antimycobacterial drugs. Adverse reactions to antimycobacterial drugs. Standard treatment regimens for patients with tuberculosis. Treatment criteria. Treatment of patients.

Theme 5. Prophylaxis of tuberculosis. Dispensary observation. Curation of the patients.

Theme 6. Tuberculosis of the non-detection localization Tuberculosis of the intrathoracic lymph nodes. Primary tuberculosis complex. Pathogenesis, pathomorphology, clinical course, diagnostics, differential diagnostics. Complication. Modern scheme of the treatment. Peculiarity of tuberculosis course in children and adolescents. Curation of the patients.

Theme 7. Generalized (miliary tuberculosis). Tuberculous meningitis. Pathogenesis, pathomorphology, clinical course, diagnostics, differential diagnostics. Modern scheme of the treatment. Curation of the patients.

Theme 8. Subacute and chronic disseminated pulmonary tuberculosis. Focal and infiltrative lung tuberculosis. Caseous pneumonia. Tuberculoma of the lungs. Fibrous- cavernous and cirrhotic tuberculosis of the lungs. Pathogenesis, pathomorphology, clinical course, diagnostics, differential diagnostics. Modern scheme of the treatment. Complications of secondary tuberculosis. Urgent help in pulmonary bleeding.

Theme 9. Report of the history case. Training to Krok-2.

Theme 10. Features of incurable patients with tuberculosis. Tuberculosis in association with HIV/AIDS, viral hepatitis B or C. The use of palliative treatment.

Theme 11. Extrapulmonary tuberculosis: tuberculous pleurisy (including of empiema). tuberculosis of lymph nodes, tuberculosis of skeletal system.. Clinical picture. Diagnostics. Peculiarity of the clinical course and treatment. Modern scheme of the treatment. Curation of the patients.

LIST OF RECOMMENDED LITERATURE:

Basic:

- 1. Phthisiology: textbook / V.I. Petrenko, L.D. Todoriko, L.A. Hryshchuk, N.A. Matsegora [etc.]; under the editorship V. I. Petrenko. Kyiv: Medicine, 2018. 471 p.
- 2. Practical training in phthisiology: study guide / O.K. Asmolov, O. A. Baburina, N. A. Gerasimova. Odesa: ONMedU, 2010. 46 p. (eBook).
- 3. Tuberculosis of bones and joints: method. recommendations for students and doctors of interns of VNMZ IV level of accreditation / N. A. Matsegora, A. Ya. Lekan, L. P. Omelyan [and others]. Odessa: ONMedU, 2018.24 p.

Additional:

- 1. BCG vaccines: WHO position paper. February 2018. URL: https://www.who.int/immunization/policy/position_papers/bcg/en/
- 2. Latent TB Infection: Updated and consolidated guidelines for programmatic management (WHO/CDS/TB/2018.4). Geneva, World Health Organization. 2018 (http://apps.who.int/ iris/bitstream/handle/10665/260233/9789241550239-eng.pdf)
- 3. WHO guidelines on tuberculosis infection prevention and control. 2019 URL: https://apps.who.int/iris/bitstream/handle/10665/311259/9789241550512-eng.pdf
- 4. Guidelines for treatment of drug-susceptible tuberculosis and patient care, WHO. 2017. URL: <u>https://apps.who.int/iris/bitstream/handle/10665/255052/ 9789241550000-eng.pdf</u>
- Biochemical Value Dynamics in Patients with Multidrug-Resistant Tuberculosis / HIV with CD4 + Lymphocyte Cells below 50 Cells / μCLandits Variability in the Application of Adjuvant Immunoglobulin Therapy / N. A. Matsegora, A.V. Kaprosh, P. B. Antonenko // International Journal of Mycobacteriology. 2019; 8 (4): 374 - 380. (SCOPUS).
- Extrapulmonary and miliary tuberculosis in patients with TB / HIV coinfection / V. I. Petrenko, M. G. Dolinskaya, A. N. Raznatovska - M. 2015 DKS Center - 112 p. URL: <u>http://tb.ucdc.gov.ua/uploads/files/usaid 170x240 fp new.pdf</u>
- 7. Global tuberculosis report 2019 (WHO/CDS/TB/2019.15). Geneva, World Health Organization.

2019 URL: https://apps.who.int/iris/bitstream/handle/10665/329368/ 9789241565714-eng.pdf.

8. Global Laboratory Initiative model TB diagnostic algorithms. 2018. URL: http://www.stoptb.org/wg/gli/assets/documents/GLI_algorithms.pdf

EVALUATION

Forms and methods of current control: oral questioning, testing, solving situational clinical tasks,

assessing activity in class, the ability to correctly conduct patient care, prescribe and interpret the results of laboratory and instrumental examination, substantiate the diagnosis based on the analysis of clinical and auxiliary methods of examination.

Criteria of ongoing assessment at the practical class

«5»	The student is fluent in the material, takes an active part in the discussion and solution of the situational clinical problem, confidently demonstrates practical skills when examining a sick child and interpreting data from clinical, laboratory and instrumental studies, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
«4»	The student has a good command of the material, takes part in the discussion and solution of the situational clinical problem, demonstrates practical skills when examining a sick child and interpreting the data of clinical, laboratory and instrumental studies with some errors, expresses his opinion on the topic of the lesson, demonstrates clinical thinking.
«3»	The student does not have sufficient knowledge of the material, he takes part in the discussion and solution of the situational clinical problem, demonstrates practical skills when examining a sick child and interpreting data from clinical, laboratory and instrumental studies with significant errors.
«2»	The student does not own the material, does not take part in the discussion and solution of the situational clinical problem, does not demonstrate practical skills when examining a sick child and interpreting data from clinical, laboratory and instrumental studies.

Forms and methods of final control:

The final control is carried out in the form of a grading test.

Grading test is carried out upon completion of the study of all topics of the discipline. To grading test only those students who have completed all types of work provided for in the curriculum (have no gaps) and their average score for the current educational activity is 3.00 or more are allowed to be counted.

Grading test is carried out in the last lesson by means of an oral survey, which is conducted by the head of the department together with an associate professor, or two associate professors.

The maximum score is 5.0.

Grading test is considered passed if the student received a grade of at least 3.0.

The entire base for self-preparation for the diff. credit is available for processing on the information resource of the department.

The results of compiling the grading test are evaluated on a 4-point national scale ("excellent", "good", "satisfactory", "unsatisfactory") and 200-point scale, and are entered into the student's examination and credit information and credit book.

The grades "good" and "satisfactory" obtained by the student during the final examination (grading test) are not recalculated.

INDEPENDENT WORK OF HIGHER EDUCATION ACQUIRES

Independent work involves preparation for each practical lesson and grading test.

EDUCATIONAL DISCIPLINE POLICY

Deadlines and Rescheduling Policy:

• Absences of classes for non-respectable reasons are worked out according to the schedule of the teacher on duty.

• Absences due to valid reasons are processed 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, students may be held to the following academic responsibility:

• a decrease in the results of assessment of control work, assessment in class, credit, etc.;

• retaking the assessment (control work, credit, etc.);

• appointment of additional control measures (additional individual tasks, control works, tests,

• conducting an additional inspection of other works authored by the violator.

Attendance and Tardiness Policy:

Uniform: a medical gown that completely covers the outer clothing, or medical pajamas, a cap, a mask, and a change of shoes.

Equipment: notebook, pen, phonendoscope.

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

A student 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.

Use of mobile devices:

etc.);

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

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 Odessa National Medical University.