

**ODESA NATIONAL MEDICAL UNIVERSITY**  
**International Faculty**  
**Department of Phthisiopulmonology**

**Syllabus course**  
**Phthisiology**

<b>Content</b>	<b>Total of hours:</b> credit ECTS – 3, hours – 90, from it – lectures – 10 hours, practical classes – 30 hours, individual work 50 hours
<b>Semester, year of study</b>	IX-Xsemester , 5 course
<b>Days, time, place</b>	According to the timetable
<b>Teacher (-s)</b>	Teachers of the Department of Phthisiopulmonology
<b>Contact phone</b>	-
<b>E-mail</b>	<a href="mailto:kaftub@ukr.net">kaftub@ukr.net</a>
<b>Workplace</b>	Department of Phthisiopulmonology, stading rooms
<b>Consultations</b>	consultations: Wednesday 14.00-15.00 Online consultations: Tuesday, Thursday 14.00-15.00

### **COMMUNICATION**

Communication with students will be by e-mail, Microsoft Teams and Skype, by phone, in the classroom on schedule.

### **COURSE ANNOTATION**

The measures to organize the detection, diagnosis, differential diagnosis, treatment and prevention of tuberculosis are the subject of study of the discipline "Tuberculosis."

#### **Prerequisites.**

The basis for mastering the discipline is knowledge, skills and abilities obtained in the process of studying such disciplines as anatomy, physiology, histology, microbiology, virology and immunology, pathophysiology, pathomorphology, radiology, pharmacology, propaedeutics of internal medicine, propaedeutics of pediatrics, radiology, hygiene and ecology.

#### **Postrequisites.**

Phthisiology as an academic discipline provides for the study of the relationship with the following disciplines: internal medicine (pulmonology, endocrinology), surgery, otolaryngology, neurology, infectious diseases, epidemiology, pediatrics, children's infections, oncology.

#### **Course purpose:**

- 1) Mastering systematic knowledge on the organization of care for patients with tuberculosis;
- 2) Mastering the ability to diagnose various clinical forms of tuberculosis;
- 3) Formation of practical skills in the examination of a patient with tuberculosis;

- 4) Mastering the knowledge of treatment and prevention of tuberculosis;
- 5) Acquisition of knowledge on the organization of infection control in medical institutions.

**Tasks of the discipline:**

- 1) mastering the algorithm of actions of doctors of the general medical network to detect tuberculosis when patients seek help;
- 2) mastering the basic preventive measures in the centers of tuberculosis infection;
- 3) acquisition of skills and abilities for examination of a patient with tuberculosis and registration of results in the relevant medical documentation;
- 4) acquisition of skills and abilities for diagnosis and differential diagnosis of tuberculosis;
- 5) the formation of moral, ethical and deontological qualities in professional communication with the patient.

**Expected results.**

As a result of studying the discipline "Phthisiology", the student must:

**To know:**

- main epidemiological indicators of tuberculosis disease;
- objectives and options for tactical actions for the institutions of the general network in the detection of tuberculosis;
- categories of the population with an increased risk of tuberculosis;
- organizing the detection of tuberculosis among the population;
- symptom complexes requiring compulsory examination for tuberculosis;
- compulsory and additional methods of examination of patients with tuberculosis;
- general approaches and standard regimens of treatment of patients with tuberculosis;
- criteria for cure of patients with tuberculosis;
- urgent medical measures that are used for threatening conditions in the clinic of tuberculosis: pulmonary hemorrhage, spontaneous pneumothorax;
- general approaches to the prevention of tuberculosis;
- classification and complex of preventive measures in the foci of tuberculosis infection.

**be able to:**

- identify risk factors for tuberculosis;
- plan a scheme for examining a patient with tuberculosis, analyze the data obtained and determine the treatment regimens for patients with various clinical forms of tuberculosis;
- determine the clinical forms of tuberculosis and formulate a clinical diagnosis according to the classification;
- explain the basic principles of treatment of patients with tuberculosis and determine the criteria for their cure;
- use the principles of clinical examination of persons at risk of tuberculosis and the principles of prevention of tuberculosis;

- demonstrate the ability to maintain medical records in a phthisiology clinic;
- diagnose and provide emergency care in case of emergency conditions in patients with tuberculosis;
- to classify foci of tuberculosis infection and use the principles of carrying out anti-tuberculosis measures in them.

## **COURSE DESCRIPTION**

The course presents in the form of lectures (10 hours), practical (30 hours), organization of independent work of students (50 hours).

### **Forms and methods of studing**

*1) Lectures* (the topics of the lecture course reveal problematic issues of the corresponding sections of the discipline. Lecturers can use such options for conducting lectures as educational, informational, lecture-visualization, lecture-discussion, lecture-consultation).

*2) Practical exercises* (when conducting a practical lesson, an oral and written questioning, solving test tasks, solving situational problems are supposed).

*3) Independent work (IWS) with the active consultation of the teacher* (during independent work, students master the educational material of the next practical lesson. At the consultations, the student can get answers to complex questions of the topic).

## **CONTENT OF THE COURSE**

### **Part 1. General questions of Phtisiology.**

**Topic 1.** Definition of tuberculosis as a scientific and practical problem. History of tuberculosis. Epidemiology of tuberculosis. Etiology, pathogenesis of tuberculosis. Immunity in tuberculosis. Clinical classification of tuberculosis.

### **Part 2. Organization of medical care for patients with tuberculosis: detection, diagnosis, treatment, prevention, dispensary supervision.**

**Topic 2.** Organization of detection and diagnosis of tuberculosis in primary care facilities. Diagnosis of tuberculosis in institutions providing secondary care. Curation of patients.

**Topic 3.** General principles of treatment. Antimycobacterial drugs. Standard treatment regimens for patients with tuberculosis. Nonspecific therapy of patients with tuberculosis (hygienic-dietary regime, pathogenetic, symptomatic treatment). Surgical treatment. Spa treatment.

**Topic 4.** Tuberculosis prevention. Dispensary supervision.

### **Part 3. Clinical forms of tuberculosis: primary, secondary, extrapulmonary, in combination with other diseases.**

**Topic 5.** Tuberculosis of unknown location. Tuberculosis of intrathoracic lymph nodes. Primary tuberculosis complex. Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis. Complication. Modern treatment schemes. Features of tuberculosis in children and adolescents. Curation of patients.

**Topic 6.** Generalized (miliary) tuberculosis. Tuberculosis of the nervous system and meninges. Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis. Modern treatment schemes. Curation of patients.

**Topic 7.** Subacute disseminated pulmonary tuberculosis. Focal and infiltrative pulmonary tuberculosis. Caseous pneumonia. Pulmonary tuberculoma. Fibrous-cavernous pulmonary tuberculosis. Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis. Modern treatment schemes. Complications of secondary forms of tuberculosis. First aid for pulmonary hemorrhage. Curation of patients.

**Topic 8.** Report of the history case. Training for Step 2.

**Topic 9.** Features of management of intractable patients with tuberculosis, as well as in combination with pneumoconiosis, HIV infection, viral hepatitis B or C. The use of palliative treatments.

**Topic 10.** Extrapulmonary tuberculosis: tuberculous pleurisy (including empyema), tuberculosis of peripheral lymph nodes, tuberculosis of bones and joints. Clinic. Diagnosis. Modern treatment schemes. Curation of patients.

## LITERATURE

1. Phthisiology: textbook / V. I. Petrenko, L. D. Todoriko, L. A. Grischuk [and others]; ed. V. I. Petrenko. Kiev : Medicine. 2015. 471 p.

2. Prevention of tuberculosis. Textbook for students and doctors of interns of VNMZ IV level of accreditation and doctors / V. I. Petrenko, M. G. Dolinskaya, A. V. Alexandrin, V. V. Petrenko. M. : 2 Print, 2017 . 88 p. URL: <http://tb.ucdc.gov.ua/uploads/files/prophilaktica.pdf>.

3. BCG vaccines: WHO position paper. February 2018. URL: [https://www.who.int/immunization/policy/position\\_papers/bcg/en/](https://www.who.int/immunization/policy/position_papers/bcg/en/)

4. WHO guidelines on tuberculosis infection prevention and control. 2019 URL: <https://apps.who.int/iris/bitstream/handle/10665/311259/9789241550512-eng.pdf>

5. Guidelines for treatment of drug-susceptible tuberculosis and patient care, WHO. 2017. URL: <https://apps.who.int/iris/bitstream/handle/10665/255052/9789241550000-eng.pdf>

6. Biochemical Value Dynamics in Patients with Multidrug-Resistant Tuberculosis / HIV with CD4 + Lymphocyte Cells below 50 Cells /  $\mu$ CLandits 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).

7. 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: [http://tb.ucdc.gov.ua/uploads/files/usaaid\\_170x240\\_fp\\_new.pdf](http://tb.ucdc.gov.ua/uploads/files/usaaid_170x240_fp_new.pdf)

8. 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. Omelian [and others]. - Odessa: ONMedU, 2018. 24 p.

9. Global Laboratory Initiative model TB diagnostic algorithms. 2018. URL: [http://www.stoptb.org/wg/gli/assets/documents/GLI\\_algorithms.pdf](http://www.stoptb.org/wg/gli/assets/documents/GLI_algorithms.pdf)

10. Text of the lectures; lecture presentations, methodical recommendations for the practical lessons.

**- informational resources:**

1. Site of the Public Health Center of the Ministry of Health of Ukraine. URL: <http://phc.org.ua/>

2. Questions of tuberculosis on the WHO website. URL: <http://www.who.int/tb/en/>

3. National Tuberculosis Resource Center. URL: <http://tb.ucdc.gov.ua/>

## EVALUATION

### Methods of current control:

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 studying 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.

### Forms and methods of final control:

Final control is carried out in the form of a differential test. and evaluated for current educational activities on average not less than 3.00.

The grade obtained for the answer in the differential test and the score of the average current performance during the study of the discipline are used to calculate the arithmetic mean, which is the overall grade for the discipline.

### How will the assessment of knowledge (distribution of points) of higher education students be carried out?

The grade for the discipline is calculated as follows: on a 4-point traditional scale, the arithmetic mean is first calculated as the arithmetic mean of the two components.

The average grade for the discipline is translated into the traditional grade from the 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 in this subject.

**Conversion of the traditional assessment of the discipline on a multi-point scale:** performed by the information and computer center of the university.

Average score for the discipline	The ratio of the student's average score for the discipline to the maximum possible value of this indicator	Grade from on a 4-point scale (traditional grade)
4,45 – 5,0	90-100%	5
3,75 – 4,44	75-89%	4
3,0 – 3,74	60-74%	3

### **Independent work of students.**

Tasks for independent work:

- 1) preparation for practical exercises (theoretical preparation, work with indicative maps, performing test tasks, virishuvannya situational tasks)
- 2) development of a topic that is not included in the classroom plan: "Non-specific therapy for patients with tuberculosis (hygiene and dietary regimen, pathogenetic, symptomatic treatment). Surgery. Spa treatment".
- 3) preparation for differential offset.

Assessment of independent work, which is provided in the topic next to the classroom work, is carried out during the current control on the topic at the corresponding classroom. Assessment topics that are not included in the classroom activities are carried out while protecting the medical history.

### **COURSE POLITIC**

**Deadline and recompilation politic:** for working off missed lectures and practical classes (more than 1 day), the permission of the dean's office is required. Practicing is carried out daily after classes (no more than one space) and on Saturday (three passes). After working off the passes, the student composes a differential. credit by oral questioning conducted by the head of the department together with an associate professor, or two associate professors.

**Academic Integrity Policy:** Cheating during the ongoing quiz and differential credit is prohibited (including using mobile devices).

**Attendance policy:** attending lectures and practical classes is mandatory, points for attending lectures are not awarded, but unworked lectures during the cycle, the student is not allowed to pass the differential credit. Illness is considered a good reason for absence from classes, confirmed by a certificate from the dean's office.

**Mobile devices:** not used in class.

