



SYLLABUS OF THE EDUCATIONAL DISCIPLINE “PHTHISIOLOGY”

1. General information	
Name of the faculty	Dentistry
Educational program (industry, specialty, level of higher education, form of education)	22 Healthcare, 221 Dentistry, second level of higher education (master's degree), full-time
Academic year	2020/2021
Name of discipline, code (<i>e-mail on the website of Danylo Halytskyi LNMU</i>)	Phthiology, OC 36
Department (name, address, telephone, e-mail)	Phthiology and Pulmonology, 79066, Lviv, st. Green 477; (032)236-89-42; kaf_phthiology@meduniv.lviv.ua
Head of the department (contact e-mail)	Prof. Kostyk O.P.
Year of study (year in which the study of the discipline)	4th
Semester (semester in which the study of the discipline is implemented)	8
Type of course / module compulsory / optional)	Required
Teachers (names, surnames, research and development of teachers who teach the discipline, contact e-mail)	Alexander Nevzgodia; Ph.D., Associate Professor; sashko.nev0703@gmail.com Khrystyna Volnytska; Ph.D., Associate Professor; christinka.rud86@gmail.com Zoriana Piskur; Ph.D., assistant; kaf_phthiology@meduniv.lviv.ua
Erasmus yes / no (availability of discipline for students within the program <i>Erasmus+</i>)	No

Person responsible for the syllabus (person to be commented on the syllabus, e-mail)	A.Nevzgodia; Ph.D., Associate Professor sashko.nev0703@gmail.com
Number of credits ECTS	2
Number of hours (<i>lectures / practical classes / self-work of students</i>)	60 hours (10 hours of lectures / 20 hours of practical lessons / 30 hours of self-work)
Language of instruction	Ukrainian /English
Information about consultations	
Address, telephone and rules of operation of the clinical base	KNP ENT “Lviv Regional Phthisio-Pulmonology Clinical Medical and Diagnostic Center”; 79066, Lviv, 477 Green Street; (032) 236-89-00

2. Short annotation to the course

The discipline “Phthisiology” is a mandatory component of the educational and professional training program for masters of medicine. Students study epidemiology, methods of timely detection and diagnosis, clinical and diagnostic signs of tuberculosis, basic principles of treatment of patients with tuberculosis, tuberculosis prevention and infection control measures; study of forms of tuberculosis that occur in dental practice and should be diagnosed in a timely manner by dentists; improve the ability to interview and objectively examine the patient, interpret the data of laboratory and instrumental studies, formulate a clinical diagnosis, prescribe treatment, provide emergency medical care.

3. The purpose and objectives of the course

1. The purpose of teaching the discipline “Phthisiology” is acquisition by students of basic knowledge of tuberculosis, mastering modern diagnostic methods, differential diagnosis, treatment, prevention of tuberculosis, the formation of the ability to use knowledge, skills, abilities to solve various problems of medical practice in health care.
2. The main tasks of studying the discipline “Phthisiology” are:
 - determine the risk factors for tuberculosis;
 - interpret the results of tuberculin tests, bacterioscopic and bacteriological methods of sputum research;
 - determine clinical forms of tuberculosis and formulate a clinical diagnosis according to the classification;
 - make the scheme of examination of the patient with tuberculosis, to analyze the received data;
 - prescribe standard treatment regimens for patients with pulmonary tuberculosis;
 - determine the consequences of treatment of patients with pulmonary tuberculosis;

- diagnose emergency conditions in patients with tuberculosis and provide them with emergency care.

3. Competences and learning outcomes, the formation of which provides the study of the discipline (general and special competencies).

In accordance with the requirements of the Standard of Higher Education, the discipline ensures the acquisition of competencies by students.

Integral competence - the ability to apply the acquired general and professional competencies to solve complex problems of the doctor's professional activity and practical problems in the field of health care in the relevant position, the scope of which is provided by lists of syndromes and symptoms of diseases, emergency conditions and diseases requiring special tactics of patient management; laboratory and instrumental examinations, medical manipulations; issues of labor, forensic and military expertise and / or innovations.

-General:

GC1 – Ability to abstract thinking, analysis and synthesis, ability to learn and master modern knowledge.

GC2 – Ability to apply knowledge in practical situations.

GC3 – Knowledge and understanding of the subject area and understanding of professional activity.

GC4 – Ability to adapt and act in a new situation.

GC5 – Ability to make informed decisions, ability to work in a team.

GC6 – Interpersonal skills.

GC7 – Ability to communicate in the state language both orally and in writing.

GC8 – Ability to communicate in a foreign language.

GC9 – Skills in the use of information and communication technologies.

GC10 – Definiteness and perseverance in terms of tasks and responsibilities.

GC11 – Ability to act socially responsibly and consciously.

GC12 – Ability to act on ethical considerations.

-Special (professional, subject):

SC1 – Skills of interviewing and clinical examination of the patient.

SC2 – Ability to determine the required list of laboratory and instrumental studies and evaluate their results.

SC3 – Ability to establish preliminary and clinical diagnoses of tuberculosis.

SC4 – Ability to determine the required mode of work and rest in the treatment of tuberculosis.

SC5 – Ability to diagnose of emergency conditions.

SC6 – Ability to determine the tactics of emergency medical care.

SC7 – Emergency care skills.

SC8 – Ability to carry out sanitary and hygienic and preventive measures.

SC9 – Ability to plan and carry out preventive and anti-epidemic measures against infectious diseases.

SC10 – Ability to keep medical records.

4. Course details

The student needs basic knowledge and learning outcomes of the following disciplines to successfully study and master the competencies of the discipline “Phthisiology”:

- human anatomy - know the anatomy of the respiratory system;
- physiology - to know the physiology of the respiratory system;
- pathomorphology - to know pathomorphological changes of organs at tuberculosis;
- pathophysiology - to know the pathophysiology of the respiratory system;
- microbiology - to know the morphological structure, properties, pathogenicity and virulence of Mycobacterium tuberculosis, methods of their detection in sputum and other materials, to be able to collect material for bacteriological examination, to evaluate the results;
- pharmacology - to know antimycobacterial drugs, mechanisms of action, side effects, to be able to prescribe them to the patient;
- propaedeutics of internal medicine - to know the method of questioning and objective examination of the patient, to be able to collect medical history and examine the patient, evaluate the data obtained;
- propaedeutics of pediatrics - to know the method of questioning and objective examination of the child, to be able to collect anamnesis and examine the child;
- radiology - to know the radiological features of the chest in normal and pathological conditions, radiological symptoms and syndromes, to be able to detect and interpret radiological events in the lungs;
- internal medicine - to know the clinical manifestations, X-ray semiotics of diseases of the respiratory system, to be able to conduct a differential diagnosis of respiratory diseases;
- hygiene and ecology - to know methods of disease prevention;
- epidemiology - to know the links of the epidemiological process (source of infection, ways of infection transmission, susceptibility of the organism).

5. Program learning outcomes

1. Collect data on patient complaints, medical history, life history, conduct and evaluate the results of physical examination.
2. Evaluate information about the diagnosis in the hospital, using a standard procedure based on the results of laboratory and instrumental studies.
3. Highlight the leading clinical symptom or syndrome. Establish the most probable or syndromic diagnosis of the disease. To carry out differential diagnosis of diseases. To establish the clinical diagnosis according to classification.
4. Determine the necessary mode of work and rest, the nature of nutrition in the treatment of tuberculosis.
5. Determine the principles and nature of treatment (conservative, operative) disease.
6. Determine the tactics of emergency medical care based on the diagnosis of emergency.
7. Provide emergency medical care.

8. Perform medical manipulations.
9. Implement a system of anti-epidemic and preventive measures.
10. Plan measures to prevent the spread of tuberculosis. Carry out anti-epidemic measures in the tuberculosis center.
11. To determine the tactics of examination and prevention of healthy people and patients subject to dispensary supervision.
12. Keep medical records.

List of learning outcomes

Learning outcome code	The content of the learning outcome	Reference to the code of the competence matrix
<i>The code is created when filling the syllabus (category: Kn-knowledge, A-ability, C-competence, AR - autonomy and responsibility)</i>	<i>Learning outcomes determine that the student must know, understand and be able to perform, after completing the discipline. Learning outcomes follow from the set learning goals. To enroll in the discipline, it is necessary to confirm the achievement of each learning outcome.</i>	Symbol of the Program Learning Outcome Code in the Higher Education Standard
<p style="text-align: center;"><i>Kn-1</i></p> <p style="text-align: center;"><i>A-1</i></p> <p style="text-align: center;"><i>C-1</i></p> <p style="text-align: center;"><i>AR-1</i></p>	<p>Know the standard schemes and methods of interviewing, physical examination of the patient.</p> <p>Be able to collect patient complaints, medical history and life, to conduct a general and detailed examination of the patient, to evaluate the data obtained.</p> <p>Effectively form a communication strategy when communicating with the patient and his relatives.</p> <p>Be responsible for the choice of communication method, quality of the examination and clinical evaluation of the obtained data.</p>	<i>PR-1</i>
<p style="text-align: center;"><i>Kn-2</i></p> <p style="text-align: center;"><i>A-2</i></p> <p style="text-align: center;"><i>C-2</i></p>	<p>Know the standard methods of laboratory and instrumental research.</p> <p>Be able to appoint laboratory and instrumental examination of the patient by applying standard methods, analyze the results of laboratory and instrumental studies and on their basis to assess information about the diagnosis of the patient.</p> <p>It is reasonable to appoint and inform the</p>	<i>PR-2</i>

<p><i>AR-2</i></p>	<p>patient and / or his relatives (guardians) about the list of necessary laboratory and instrumental tests. Be responsible for the correct appointment of laboratory and instrumental tests, timely and accurate evaluation of their results.</p>	
<p><i>Kn-3</i> <i>A-3</i> <i>K-3</i> <i>AR-3</i></p>	<p>Know the algorithms for diagnosing diseases, highlighting the leading symptoms or syndromes, establishing preliminary and clinical diagnoses. Be able to make an informed decision about the selection of the leading clinical symptom or syndrome; be able to establish a preliminary and clinical diagnosis. On the basis of normative documents to keep medical documentation of the patient (card of the outpatient / inpatient). Adhering to ethical and legal norms, be responsible for making informed decisions and actions regarding the correctness of the established preliminary and clinical diagnoses.</p>	<p><i>PR-3</i></p>
<p><i>Kn-4</i> <i>A-4</i> <i>C-4</i> <i>AR-4</i></p>	<p>Know the algorithms and standard schemes for determining the mode of work and rest, therapeutic nutrition in tuberculosis. Be able to determine the necessary mode of work and rest, proper nutrition of patients with tuberculosis. To form and convey to the patient and / or his relatives (guardians) conclusions about the necessary mode of work and rest, proper nutrition in tuberculosis. To be responsible for the validity of the appointment of work and rest, nutrition to the patient in the treatment of tuberculosis.</p>	<p><i>PR-4</i></p>
<p><i>Kn-5</i> <i>A-5</i></p>	<p>Have specialized knowledge of algorithms and standard schemes for the treatment of tuberculosis. Be able to determine the principles and nature of treatment of various forms of</p>	<p><i>PR-5</i></p>

<p><i>C-5</i></p> <p><i>AR-5</i></p>	<p>tuberculosis.</p> <p>Form and communicate to the patient and / or his relatives (guardians) their own conclusions about the principles and nature of treatment.</p> <p>Be responsible for deciding on the principles and nature of treatment of the disease.</p>	
<p><i>Kn-6</i></p> <p><i>A-6</i></p> <p><i>C-6</i></p> <p><i>AR-6</i></p>	<p>Know the tactics of emergency medical care in emergencies in tuberculosis.</p> <p>Be able to identify emergencies, principles and tactics of emergency medical care, to carry out organizational and diagnostic measures aimed at saving and saving lives.</p> <p>It is reasonable to inform the patient and / or relatives about the need for emergency care and obtain consent for medical intervention.</p> <p>Be responsible for the correct determination of the emergency condition, its severity and tactics of emergency medical care.</p>	<p><i>PR-6</i></p>
<p><i>Kn-7</i></p> <p><i>A-7</i></p> <p><i>C-7</i></p> <p><i>AR-7</i></p>	<p>Know the algorithms for providing emergency medical care in emergencies.</p> <p>Be able to provide emergency medical care in case of emergency.</p> <p>Explain to the patient and / or relatives about the need and procedure for emergency medical care.</p> <p>Be responsible for the timeliness and quality of emergency medical care.</p>	<p><i>PR-7</i></p>
<p><i>Kn-8</i></p> <p><i>A-8</i></p> <p><i>C-8</i></p> <p><i>AR-8</i></p>	<p>Have specialized knowledge of algorithms for performing medical manipulations.</p> <p>Be able to perform medical manipulations.</p> <p>It is reasonable to form and bring to the patient and / or his relatives (guardians) conclusions about the need for medical manipulations.</p> <p>Be responsible for the quality of medical manipulations.</p>	<p><i>PR-8</i></p>
<p><i>Kn-9</i></p>	<p>Know the types of tuberculosis prevention (vaccination, BCG</p>	<p><i>PR-9</i></p>

<p>A-9</p> <p>C-9</p> <p>AR-9</p>	<p>revaccination, chemoprophylaxis, sanitary prevention).</p> <p>Be able to carry out sanitary and hygienic and preventive measures aimed at preventing infection and tuberculosis of the population.</p> <p>Inform the population about the need for tuberculosis prevention.</p> <p>To be responsible for timely and high-quality tuberculosis prevention.</p>	
<p>Kn-10</p> <p>A-10</p> <p>C-10</p> <p>AR-10</p>	<p>To know the system of anti-epidemic measures of infectious control of tuberculosis.</p> <p>Be able to carry out anti-epidemic measures in the source tuberculosis infection.</p> <p>Inform the population and medical staff about the need for anti-epidemic measures in the center of tuberculosis infection and strict compliance with the requirements of infection control in medical institutions.</p> <p>To be responsible for the timeliness of anti-epidemic measures in the source of tuberculosis infection and strict compliance with the requirements of infection control in medical institutions.</p>	<p>PR-10</p>
<p>Kn-11</p> <p>A-11</p> <p>C-11</p> <p>AR-11</p>	<p>Know the categories and groups of dispensary observation of patients with tuberculosis, the tactics of their examination and the principles of prevention.</p> <p>Be able to select persons who are subject to dispensary supervision.</p> <p>Organize dispensary supervision of sick and healthy people who are subject to dispensary supervision.</p> <p>To be responsible for the quality of the organization of dispensary supervision of certain contingents of persons.</p>	<p>PR-11</p>
<p>Kn-12</p> <p>A-12</p>	<p>Know the system of official document management in the work of a doctor, the basic rules of medical records.</p> <p>Be able to fill out medical documents, in particular using modern computer</p>	<p>PR-12</p>

<i>C-12</i>	information technology. Apply interpersonal skills for quality medical records.	
<i>AR-12</i>	Be responsible for the completeness and quality of medical records.	
6. Course format and scope		
Course format	Eye	
Kind of occupations	Number of hours	Number of groups
Lectures	10	
Practical lessons	20	
Self-work	30	

7. Topics and content of the course

Code type to borrow	Topic	Learning content	Learning outcome code	Teacher
L-1	Tuberculosis as scientific and practical problem. The history of tuberculosis. Epidemiology of tuberculosis. Etiology and pathogenesis of tuberculosis. Tuberculosis immunity.	Tuberculosis as a social, medical and scientific problem. The main stages of development of the doctrine of tuberculosis. The main epidemiological indicators and their dynamics for the last 10-15 years. The causative agent of tuberculosis, morphological structure, properties. Tuberculosis infection, ways of penetration and spread of MBT in the human body. Humoral and cellular immunity are their mechanisms		Nevzgodina A.A.
L-2	Diagnostic of tuberculosis. Special methods of detection and diagnosis of tuberculosis.	Ways and methods of tuberculosis detection. Categories of the population with an increased risk of tuberculosis. Involvement of health workers in detected tuberculosis. Methods of microbiological and radiological diagnostics. Tuberculin diagnosis.	PR-1 PR-2	Nevzgodina A.A.
L-3	Treatment of tuberculosis: basic principles and methods. Prophylaxis of tuberculosis.	General principles of treatment of a patient with tuberculosis. Antimycobacterial drugs. Standard treatment regimens for patients with tuberculosis. Criteria for the treatment of patients with tuberculosis.	PR-4 PR-5	Nevzgodina A.A.
L-4	Primary forms of tuberculosis.	Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis, treatment of primary forms of tuberculosis.	PR-9 PR-10 PR-11	Nevzgodina A.A.
L-5	Secondary forms of tuberculosis. Tuberculosis of the mucous membranes of the oral cavity and maxillofacial bones	Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis, treatment of secondary forms of tuberculosis. The main clinical syndromes of tuberculosis of maxillofacial localization. Diagnosis, differential diagnosis, treatment, consequences.	PR-1 PR-2 PR-3	Nevzgodina A.A.
P-1	Definition of tuberculosis as a	The main epidemiological indicators of tuberculosis	PR-3	Nevzgodina A.A. Volnytska K.I.

	disease. Epidemiology of tuberculosis. The causative agent of tuberculosis, its properties.	(infection, morbidity, mortality). Risk factors for tuberculosis. The causative agent of tuberculosis, morphological structure, properties. Tuberculosis infection, ways of penetration and spread of MBT in the human body. Clinical classification of tuberculosis. Formulation of the diagnosis of tuberculosis according to the classification.		Piskur Z.I.
P-2	Features of clinical examination of a patient with tuberculosis. X-ray diagnosis of tuberculosis. Methods of X-ray examination in a tuberculosis clinic. Radiological syndromes of tuberculosis.	Ways and methods of tuberculosis detection. Categories of the population with an increased risk of tuberculosis: complaints, anamnesis of the disease, course, epidemiological anamnesis, transferred diseases, working and living conditions. Features of clinical examination of a patient with tuberculosis. Methods of microbiological diagnosis of tuberculosis. Methods of X-ray examination of patients. X-ray syndromes. Clinical forms of pulmonary tuberculosis in the X-ray image.	PR-1 PR-2	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
P-3	Microbiological diagnosis of tuberculosis. Tuberculin diagnosis.	Microbiological diagnostics: methods of bacterioscopic, bacteriological and biological detection of MBT, the value of their results for the diagnosis of tuberculosis. Determination of the sensitivity of MBT to anti-TB drugs. Express methods of molecular genetic diagnosis of tuberculosis. The purpose of tuberculin testing. Mantoux test with 2 TU PPD-L.	PR-1 PR-2	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
P-4	Treatment of tuberculosis: basic principles. Anti-TB drugs. Standard drug regimens.	General principles of treatment of a patient with tuberculosis. Antimycobacterial drugs. Standard treatment regimens for patients with tuberculosis. Monitoring the condition of patients with tuberculosis during treatment. Chemoresistant tuberculosis.	PR-4 PR-5 PR-8	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.

		Criteria for the treatment of patients with tuberculosis.		
P-5	Prevention of tuberculosis.	Social prevention. Sanitary prevention is its task. Work in the source of tuberculosis infection on tuberculosis prevention. BCG vaccination and revaccination. Chemoprophylaxis of tuberculosis, indications, methods. Infection control.	PR-9 PR-10 PR-11	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
P-6	Clinical classification of tuberculosis	Principles of construction of classification of tuberculosis. Sections of classification: type of tuberculosis process, main clinical forms, characteristics of tuberculosis process and its complications, clinical and dispensary categories of patient registration, efficiency of treatment of patients with tuberculosis, consequences of tuberculosis. Formulation of the diagnosis of tuberculosis according to the classification.	PR-2 PR-3	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
P-7	Tuberculosis of unknown location. Tuberculosis of intrathoracic lymph nodes. Primary tuberculous complex. Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis, treatment, consequences. Complications of primary forms of tuberculosis.	Morphological basis of tuberculosis of unknown location. Clinical manifestations, course, differential diagnosis, treatment. Clinical and radiological forms of tuberculosis of intrathoracic lymph nodes. Pathogenesis, pathomorphology, clinic, course, diagnosis, differential diagnosis, treatment, consequences. Pathogenesis and pathomorphology of the primary tuberculous complex. Clinical manifestations, course, diagnosis, differential diagnosis, treatment, consequences. Complications of tuberculosis of intrathoracic lymph nodes and primary tuberculous complex.	PR-1 PR-2 PR-3 PR-5 PR-12	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
P-8	Disseminated tuberculosis. Miliary tuberculosis. Tuberculosis of nervous system. Tuberculous	Pathogenesis and pathomorphology of disseminated pulmonary tuberculosis. Clinical variants and their radiological features. Clinic, diagnosis, differential diagnosis, treatment of	PR-1 PR-2 PR-3 PR-5 PR-12	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.

	<p>meningitis. Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis, treatment, consequences.</p>	<p>disseminated tuberculosis. Consequences. Pathogenesis and pathomorphology of miliary tuberculosis. Clinical options, diagnosis, differential diagnosis, treatment, consequences. Pathogenesis and pathomorphology of tuberculous meningitis. Clinic, features of diagnosis and course, differential diagnosis, treatment, consequences.</p>		
P-9	<p>Focal and infiltrative tuberculosis. Caseous pneumonia. Fibrocavernous tuberculosis. Cirrhotic tuberculosis. TB pleuritis and empyema. Pathogenesis, pathomorphology, clinic, diagnosis, differential diagnosis, treatment, consequences.</p>	<p>Pathogenesis and pathomorphology, methods of detection, clinic and course of focal and infiltrative forms of tuberculosis. Features of caseous pneumonia. Causes of fibrocavernous pulmonary tuberculosis. Pathogenesis, pathomorphology, main clinical syndromes, radiological signs of fibrocavernous and cirrhotic pulmonary tuberculosis. Differential diagnosis, treatment, consequences.</p>	<p>PR-1 PR-2 PR-3 PR-5 PR-12</p>	<p>Nevzgodina A.A. Volnytska K.I. Piskur Z.I.</p>
P-10	<p>Tuberculosis of the maxillofacial localization. Clinic, diagnosis. Features of treatment of patients with tuberculosis of the mucous membrane of the oral cavity and maxillofacial bones. Complications of secondary tuberculosis: hemoptysis, hemorrhage, spontaneous pneumothorax, chronic cor pulmonale,</p>	<p>Pathogenesis, pathomorphology and classification of tuberculous maxillofacial localization. The main clinical syndromes of tuberculosis of maxillofacial localization. Diagnosis, differential diagnosis, treatment, consequences. Features of treatment of patients with tuberculosis of the mucous membrane of the oral cavity and maxillofacial bones. Pathogenesis, clinic, diagnosis and principles of treatment of hemoptysis, pulmonary hemorrhage, spontaneous pneumothorax, chronic pulmonary heart disease and amyloidosis. Providing emergency care for pulmonary hemorrhage,</p>	<p>PR-1 PR-2 PR-3 PR-6 PR-7 PR-8</p>	<p>Nevzgodina A.A. Volnytska K.I. Piskur Z.I.</p>

	amyloidosis of internal organs.	spontaneous pneumothorax.		
SW-1	The causative agent of tuberculosis, its types and forms of existence. The concept of persistence and reversion of mycobacteria tuberculosis. Chemist-resistant MBT and their clinical value.	The causative agent of tuberculosis, morphological structure, properties. Tuberculosis infection, ways of penetration and spread of MBT in the human body.	PR-2 PR-3	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
SW-2	The main epidemiological indicators of tuberculosis and their rating.	The main epidemiological indicators of tuberculosis (infection, morbidity, mortality).	PR-1 PR-2 PR-3	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
SW-3	The concept of timely, untimely and late detection tuberculosis. Decreed contingents of the population. High risk groups for tuberculosis.	Risk factors for tuberculosis. Methods of microbiological and radiological diagnostics.	PR-1 PR-2 PR-3	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
SW-4	Nonspecific therapy of tuberculosis. Surgical treatment. Facilities in sanatoria and health resorts.	Hygiene-dietary regimen, pathogenetic and symptomatic treatment. Methods of surgical treatment of tuberculosis. Indications for surgery for tuberculosis. Facilities in sanatoria and health resorts.	PR-4 PR-5	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
SW-5	Surgical methods of tuberculosis treatment.		PR-1 PR-2	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
SW-6	Pulmonary tuberculoma. Clinic, diagnosis, treatment.	Pathogenesis and pathomorphology, methods of detection, clinic and course of tuberculoma. Classification of tuberculomas.	PR-2 PR-3 PR-5	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
SW-7	Tuberculosis of the peri-pheral lymphatic nodes. Bone and joints tuberculosis.	Pathogenesis, pathomorphology, clinical forms of tuberculosis of peripheral lymph nodes. Diagnosis, treatment. Clinic of tuberculosis of bones and joints. Diagnosis, treatment.	PR-1 PR-2 PR-3 PR-4	Nevzgodina A.A. Volnytska K.I. Piskur Z.I.
SW-8	Tuberculosis and	Development of tuberculosis in	PR-1	Nevzgodina A.A.

	pregnancy.	pregnant women. Clinic, diagnosis of tuberculosis during pregnancy. Features of treatment.	PR-2 PR-3	Volnytska K.I. Piskur Z.I.
SW-9	Tuberculosis in HIV/AIDS patients. Clinic, diagnosis, features of the course and treatment.	Detection of tuberculosis in HIV-infected and AIDS patients. Features of tuberculosis in HIV-infected and AIDS patients. Treatment and prevention of tuberculosis in HIV-infected and AIDS patients.	PR-1 PR-2 PR-3 PR-5	Nevzgod A.A. Volnytska K.I. Piskur Z.I.
SW-10	Categories and groups of dispensary observation of patients of tuberculosis.	Categories of the population with an increased risk of tuberculosis. Involvement of health workers in detected tuberculosis.	PR-1 PR-2 PR-3	Nevzgod A.A. Volnytska K.I. Piskur Z.I.

Teaching methods

Verbal - explanations, briefings, educational discussion.

Visual - illustrations (tables, radiographs, test results and other methods of examination);

- demonstration (diagnostic and therapeutic manipulations).

Practical - the formation of skills and abilities of clinical examination of patients, the implementation of the medical manipulations provided by the program, the provision of emergency care.

Interactive - which involve working in small groups to perform a specific set of tasks; modeling of clinical situations.

8. Verification of learning outcomes

Current control

is carried out during classes and aims to verify the assimilation of students' learning material. Control is carried out by a comprehensive assessment of theoretical and practical training of the student on the basis of oral examination, test control, solving clinical situational problems, demonstration of practical skills and abilities. The final grade for the current educational activity is set on a 4-point (national) scale with subsequent conversion into a multi-point scale.

Evaluation criteria

Assessment of the student's oral response

«perfectly»	«good»	«satisfactorily»	«unsatisfactorily»
The student has deeply and firmly mastered the material; consistently, competently and logically teaches it, closely connects theory with practice, freely copes with issues.	The student firmly knows the material, competently and essentially answers, does not make significant mistakes in answering questions.	The student has knowledge of the basic material, but has not mastered its details, makes mistakes, breaks the sequence in the presentation of the material.	The student does not know the program material, makes significant mistakes, is unsure of the answer.

Evaluation of solving test tasks

«perfectly»	«good»	«satisfactorily»	«unsatisfactorily»
100-91%	90-76%	75-51%	50% or less

Evaluation of the solution of a clinical situational problem

«perfectly»	«good»	«satisfactorily»	«unsatisfactorily»
The clinical diagnosis of the patient is precisely formulated and fully substantiated and the treatment plan	Accurately formulated and partially substantiated clinical diagnosis of the patient, inaccuracies	There were difficulties in substantiating the clinical diagnosis, drawing up a treatment plan for	No answer to the problem is given.

is made.	in the treatment plan.	the patient.	
<u>Assessment of practical skills demonstration</u>			
«perfectly»	«good»	«satisfactorily»	«unsatisfactorily»
The student has mastered the practical skills provided by the program.	The student performs practical skills, but does not make fundamental mistakes.	The student made serious mistakes in the process of performing practical skills.	The student has not developed practical skills; did not form the skills provided by the program.

Distribution of points received by students

Types of control - current and final.

The form of final control in accordance with the curriculum is an exam.

Current control is carried out during the training sessions and is aimed at verifying students' learning of the material.

Estimation of the current educational activity. When assessing the mastering of each topic in the course of the current educational activity, the student is assessed on a 4- point (traditional) scale, taking into account the criteria for assessing the discipline. It takes into account all types of works provided for by the curriculum. A student receives an assessment from each topic. Forms of assessment of the current academic activity are standardized and include the control of theoretical and practical training. Shown on a traditional scale of evaluation are converted to points.

The maximum number of points a student can score for the current semester entrance exam for the entrance exam is 120 points. **The minimum number of points** that a student must score for the current study activity per semester for admission to the exam is 72 points.

The calculation of the number of points is based on the student's assessment of the traditional scale during the study of discipline, by calculating the average arithmetic (AA), rounded to two decimal places. The resulting value is converted to a score on a multi-scale scale.

The calculation of the number of points is based on the student's score on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (AM), rounded to two decimal places. The resulting value is converted into points on a multi-point scale as follows: $x = \frac{AM \times 120}{4}$

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Determination of the number of points the student got from the discipline

An assessment from the discipline that completes the exam is defined as the sum of points for the current educational activity (not less than 72) and the marks for the exam (not less than 50).

Disciplines are independently converted into both the ECTS and 4-point scale. The ECTS scores on the 4-point scale are not converted and vice versa.

Points of students studying in one specialty, taking into account the number of points scored from the discipline, are ranked on the ECTS scale as follows:

Assessment of ECTS	The statistical indicator
A	The best 10% of students
B	The next 25% of students
C	The next 30% of students
D	The next 25% of students
E	The last 10% of students

Score points for students who have successfully completed the program are converted to the traditional 4-point scale by the absolute criteria listed in the table below:

Score points	Score on the 4- score
From 170 to 200 points	5
From 140 to 169 points	4
From 139 points to the minimum number of points a student should	3
Below is the minimum number of points that the student should	2

The ECTS mark on a traditional scale is not converted because the ECTS scale and the four-point scale are independent.

Objectivity of assessment of students' educational activity is checked by statistical methods (correlation coefficient between ECTS assessment and national scale assessment).

9. Course policy

The policy of the discipline is determined by the system of requirements for the student in the study of "Phthisiology" and is based on the principles of academic integrity. Students are explained the value of acquiring new knowledge; academic standards to be followed; why they are important; what is academic integrity, what are its values and functions; the essence and reasons for the inadmissibility of academic plagiarism; encourage applicants for higher education to independently perform educational tasks, correctly rely on sources of information in the case of borrowing ideas, statements, information.

Applicants for higher education must develop clinical thinking, fundamental and specialized knowledge, skills on the basic patterns of disease development, diagnosis and treatment.

The discipline "Phthisiology" is mandatory for students majoring in 222 "Medicine". The student is obliged to fully master the knowledge, skills, practical skills and competencies in this discipline.

Policy on adherence to the principles of academic integrity of higher education students:

- independent performance of educational tasks of current and final controls without the use of external sources of information, except as permitted by the teacher;
- independent performance of individual tasks and correct registration of references to sources of information in case of borrowing of ideas, statements, information.

Policy on adherence to the principles and norms of ethics and deontology by higher education students:

- to act from the standpoint of academic integrity, professional ethics and deontology in educational and professional situations;
- follow the rules of the internal regulations of the clinical base of the department, be tolerant, friendly and balanced in communication with students and teachers, patients, medical staff of the health care institution.

Attendance policy for higher education students:

- Attendance at all practical classes is mandatory (except in cases of absence for a good reason).

Policy of rearranging topics and working off missed classes by higher education students:

- practice of missed classes is according to the schedule of practice
- recomposition of the topic of the lesson, for which the student received a negative grade, is carried out at a convenient time for the teacher and the student.

10. Literature

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2. Crofton J., Horne N., Miller F. Clinical tuberculosis. 1995. 210 p.
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5. П'ятночка І.Т., Корнага С.І., П'ятночка В.І. Фтизіатрія: Навчальний посібник українською та англійською мовами. – Тернопіль: Укрмедкнига, 2002.- 260 с.
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7. Phthysiology. nats textbook / edited by V. I. Petrenko., - Kyiv.: VVV "Medicine", 2015. - 472 p.
8. Infectious diseases with the basics of phthysiopulmonology. Training manual / Il'nitsky I. G., Chornovil AV, Gritsko R. Yu., Kostik O. P., Sichkoriz O. Ye., Rudnitskaya H. I.- Lviv, 2009.- 404 p.
9. Phthysiology. Educational manual / edited by V.P. Melnik, I.G.Ilnitsky. - Kyiv - Lviv: Atlas, 2008. - 304s.
10. Phthysiology. Textbook / Ed. acad. AND I. Tsyganenko, prof. SI. Zaitseva - X.: Fakty, 2004. 390s.
11. Savula MM, Ladny O.Ya. Tuberculosis. Textbook. Ternopil: "UkrmedkNiga", 1999. - 323 p.

Information resources

1. State institution "Ukrainian Center for the control of social diseases of the Ministry of Health of Ukraine": <http://ucdc.gov.ua>
2. The site of the National Institute of Phthysiology and Pulmonology named after FG Yanovsky: <http://www.ifp.kiev.ua/doc>
3. Tuberculosis, pulmonary diseases, HIV infection. Ukrainian Scientific and Practical Journal www.tubvil.com.ua
4. USAID "Strengthening TB Control in Ukraine" Website: <http://www.stbcu.com.ua>

11. Equipment, logistics and software of the discipline / course

- Work-study program of the discipline;
- Thematic plans of lectures, practical lessons and self-work of students;
- Methodical instructions for practical lessons for students;
- Indicative maps for the organization of self-work of students;
- Test and control tasks for practical lessons;
- Methodical support of the final control:
 - database of test tasks
 - list of theoretical issues submitted for final control
 - situational tasks
 - sets of educational radiographs and tomograms.

12. Additional Information

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There is a scientific circle at the department, the head is prof. Kostyk Olga Petrovna,
kaf_phthiology@meduniv.lviv.ua

Practical classes are held on the basis of KNP ENT “Lviv Regional Phthiopulmonology
Clinical Medical and Diagnostic Center” (477 Green Street).

Students need to have bathrobes, hats, masks, their own stethoscopes.

Syllable stacker Alexander Nevzgod; Ph.D., Associate Professor

Chief of Department



Prof. Kostyk O.P.