

**TASHKENT MEDICAL ACADEMY
SYLLABUS
ON PHTHISIOLOGY**

Subject:	PHTHISIOLOGY
Subject Type:	Required
Subject code:	FT1704
Duration:	2023/2024
Semester:	7-8
Direction of education:	5510100-General medicine
Form of classes and hours allocated for the semester:	180
Lectures	12
Practical work	60
Laboratory works	-
Seminar	36
Independent education	72
Amount of credits:	5
Evaluation method:	Check-out
Subject language:	English

Purpose of the subject (PI)	
PI1	<p>To teach students the theoretical and practical knowledge necessary for the correct interpretation of tuberculosis of organs and systems of the body, to see the primacy of physical changes based on the processes of occurrence of various diseases in the organs and tissues of the body - to show.</p> <p>The goal of the module is to train highly qualified specialists - general practitioners, who should have the knowledge, skills and practical skills necessary for the field of phthisiology: early diagnosis and comparative diagnosis of tuberculosis, prevention and treatment of tuberculosis, keeping regulatory documents. , to know the main epidemiological indicators of tuberculosis</p>

Basic knowledge required to master the subject	
1.	Normal and pathological anatomy
2.	Normal and pathological physiology
3.	Microbiology and immunology
4.	Propaedeutics of internal medicine
5.	Medical radiology

Educational results (ER)	
	By knowledge:
ER 1	epidemiological situation of tuberculosis, etiology, pathogenesis, clinical forms of pulmonary and extrapulmonary tuberculosis, drug-resistant tuberculosis and HIV-TB problems;
ER 2	on the basis of the main syndromes of tuberculosis of the lungs and extrapulmonary organs, tactics, diagnosis, comparative diagnosis, principles of early detection of tuberculosis, methods of prevention, control of infection according to the instructions of WHO;
ER 3	a plan for examination of patients suspected of tuberculosis, conduct a clinical screening for tuberculosis, determine the type of patients and treatment category, make a treatment plan, determine the consequences of pulmonary and extrapulmonary tuberculosis;
ER 4	to have an idea about checking the center of tuberculosis infection, making plans against the epidemic and improving the literacy of the population on tuberculosis and changing their attitude towards this infection;
ER 5	patient survey, objective examination, comparison of clinical and biochemical laboratory results, results of microscopic, bacteriological and molecular-genetic examination of MBT.
	By skills:
ER 6	the methods of tuberculosis prevention (special, chemoprophylaxis, sanitary and social prevention);
ER 7	Mantoux test with 2 TU;
ER 8	BCG vaccination and revaccination;
ER 9	Chest X-ray evaluation;
ER10	Examination of the center of tuberculosis infection to have qualifications

Subject content:	
Form of teaching: lecture (L)	
L1	The history of the development of the doctrine about tuberculosis. Etiology, epidemiology, pathogenesis and immunity of tuberculosis
L2	Methods and general principles of tuberculosis detection.
L3	Clinical classification of tuberculosis. Primary tuberculosis. Disseminated tuberculosis.
L4	Focal and inflamed tuberculosis of the lungs and pulmonary tuberculosis.
L5	Cavernous, fibro-cavernous and cirrhotic tuberculosis of the lungs.
L6	Organizing the fight against tuberculosis in Uzbekistan. Place of GTF. Principles of tuberculosis prevention and treatment.

Form of training: practical classes (P)	
P1	Infection control in tuberculosis clinic. Decontamination of environmental objects using new methods and tools.
P2	Tuberculosis diagnosis: objective and clinical-laboratory examination methods. Tuberculin tests, functional testing methods, X-ray diagnostics and bronchoscopy.
P3	Character of cough in various clinical forms of tuberculosis and chronic non-specific lung diseases. Comparative diagnosis of cough in pulmonary tuberculosis and chronic non-specific lung diseases.
P4	Character of fever in various clinical forms of tuberculosis and chronic non-specific lung diseases. Comparative diagnosis of fever in pulmonary tuberculosis and chronic non-specific lung diseases.
P5	Clinical classification of tuberculosis. Completing the examination and medical history of patients with pulmonary tuberculosis by students.
P6	Primary tuberculosis. Early diagnosis of clinical forms of primary tuberculosis and residual changes.
P7	Diffuse pulmonary tuberculosis. Miliary tuberculosis. Clinical features, diagnosis, course, complications, consequences.
P8	Focal and inflamed tuberculosis of the lungs. Pulmonary tuberculosis. Clinical features, diagnosis, course, complications, consequences.
P9	Destructive forms of tuberculosis - cavernous, fibro-cavernous and cirrhotic pulmonary tuberculosis. Clinical features, diagnosis, course, complications, consequences.
P10	Pulmonary infiltrates. Clinical-radiological and morphological characteristics of infiltrates of different genesis. Comparative diagnosis of lung infiltrates.
P11	Lymphadenopathy. Tuberculosis of lymph nodes. Clinic, comparative diagnosis, characteristics of the course, complications, consequences, methods of treatment.
P12	The mechanism of fluid accumulation in the pleural cavity. Tuberculous pleurisy. Comparative diagnosis of pleurisy of different etiologies. Therapeutic, surgical treatment methods.
P13	Clinical forms of pulmonary tuberculosis with shortness of breath, their comparative diagnosis. Rehabilitation of patients in TBD conditions.
P14	Complications of tuberculosis requiring emergency medical care: spontaneous pneumothorax, hemoptysis and bleeding from the lungs, shortness of breath.
P15	Tuberculosis and related diseases: Tuberculosis and diabetes, tuberculosis and lung cancer, tuberculosis and diseases of the gastrointestinal tract.
P16	Tuberculosis and co-morbidities: Tuberculosis and pregnancy, Tuberculosis and alcoholism, Tuberculosis and mental illness, TB and HIV/AIDS, TB and COVID-19.
P17	Methods of treatment of tuberculosis. Monitoring and evaluation of the

	treatment results according to the instruction of WHO. Drug-resistant type of tuberculosis and treatment tactics. (MDR-TB). Use of natural remedies in the treatment of tuberculosis.
P18	Anti-tuberculosis institutions. The plan of measures against the epidemic in the center of tuberculosis infection. Tuberculosis prevention methods. Promotion of a healthy lifestyle. The role of general treatment facility in the fight against tuberculosis.

Independent education (IE)		hour
1	Embryonic development and anatomy of the respiratory system.	4
2	Functional morphology of lungs. Morphological appearance of pulmonary tuberculosis in modern conditions.	4
3	Etiology of tuberculosis. Drug-resistant type of mycobacterium tuberculosis.	4
4	Methods of testing the function of external breathing and cardiovascular system.	4
5	Pathogenesis of tuberculosis. Immunological and genetic aspects of tuberculosis inflammation.	4
6	X-ray and light diagnosis of tuberculosis of extrapulmonary organs.	4
7	Tuberculosis classification according to ICD-10 according to the recommendation of WHO	4
8	The main methods of comparative diagnosis of tuberculosis clinical forms.	4
9	Coexistence of tuberculosis with other diseases. Tuberculosis and diseases of internal organs.	5
10	Complications of pulmonary tuberculosis. Shortness of breath in patients with tuberculosis.	5
11	National program to combat tuberculosis in Uzbekistan.	5
12	Schemes of treatment and follow-up of tuberculosis patients according to the recommendation of WHO.	5
13	Evaluation of the epidemiological situation of tuberculosis in Uzbekistan.	5
14	Infection control in anti-tuberculosis institutions.	5
15	The influence of environmental factors on the incidence of tuberculosis.	5
16	Fundamentals of medical counseling for patients with tuberculosis.	5

Basic literature:	
1	Koshechkin V.A., Ivanova Z.A. Tuberculosis: Text book in English – M.: Publishing house of People friendship Univ. 2006, 276p.
2	Timothy D. McHugh. Tuberculosis: Laboratory diagnosis and treatment strategies - University College London, UK, 2013, 270 p.
3	TUBERCULOSIS: Clinical diagnosis and management of tuberculosis, and measures for its prevention and control the National Collaborating Centre for Chronic Conditions funded to produce guidelines for the NHS by NICE Published, 2013, 215 p.
Additional literature	
1	Mario C. Raviglione. Tuberculosis: The Essentials, Fourth Edition. 2010, 408p.
2	Questions and Answers About Tuberculosis 2021, U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES Centers for Disease Control and Prevention National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention Division of Tuberculosis Elimination
3	Davies Barnes, SB Gordon, Clinical Tuberculosis, Hodder education Publishers, 2008,576 p.
Internet sites:	
1	https://www.tma.uz
2	https:// www.stoptb.org
3	https:// www.iuatld.org
4	https:// www.medicalstudent.com

**In monitoring students' mastery of the subject
It is recommended to use the following criteria:**

Point	ECTS Grade	Definition of ECTS		Grade	Definition
90-100	A	"Great"	<p>have systematic, complete and deep knowledge of all sections of the module program, be able to substantiate them with the necessary evidence;</p> <p>can clearly and appropriately use medical terminology (including scientific, foreign), can answer questions logically, clearly and concisely; выявить проблемные вопросы, обосновать your point of view in scientific and practical language;</p> <p>know the basic concepts of the module and be able to effectively apply it when solving scientific and practical problems in a short time;</p> <p>able to demonstrate the ability to independently and creatively solve problems in non-routine situations;</p> <p>is able to fully independently perform practical skills (in terms of quality and established quantity) and fully acquire competencies;</p> <p>solving practical problems briefly, reasonably and rationally;</p> <p>demonstrate in practical classes a very good knowledge of physical laws, be able to correctly (always rationally) apply this knowledge in new situations, be able to independently formalize the results of the work performed;</p> <p>complete and in-depth mastery of basic and additional literature recommended in the module program;</p> <p>understand the essence of the theories, concepts and directions of the module, give them a critical assessment and be able to apply the scientific achievements of other modules;</p> <p>must creatively and independently participate in theoretical and practical</p>	5	Great

			classes throughout the semester, be active in group discussions, and have a high level of culture in completing assignments;		
85-89	B+	"Very good"	<p>have systematic, complete and deep knowledge of all sections of the module program, be able to substantiate them with the necessary evidence;</p> <p>can clearly and correctly use medical terminology (including scientific and foreign), can answer questions logically and accurately;</p> <p>способен самостоятельно eliminate ambiguities that arise when proving your opinion or explaining other theoretical material;</p> <p>know the basic concepts of the module, set scientific and professional tasks in a short period of time and effectively use it in solving them;</p> <p>is able to independently solve problems in standard situations within the framework of the curriculum;</p> <p>is able to fully independently perform practical skills (in terms of quality and established quantity) and fully acquire competencies;</p> <p>demonstrate good knowledge of physical laws in practical classes, be able to correctly (but not always rationally) apply this knowledge in new situations, be able to adequately formalize the results of the work performed;</p> <p>mastering the basic literature recommended in the module program;</p> <p>be able to understand the essence of the theories, concepts and trends of the module being studied and give them a critical assessment;</p> <p>must creatively and independently participate in theoretical and practical classes throughout the semester, be active in group discussions, have a very good level of culture in completing</p>	4	Good

			assignments;		
71-84	B	«good »	<p>have a systematic, complete and in-depth knowledge of all sections of the module program, be able to justify it with the necessary evidence, but with some shortcomings;</p> <p>can clearly and correctly use medical terminology (including scientific and foreign), can answer questions logically;</p> <p>is able to independently eliminate ambiguities that arise when proving his opinion or explaining other theoretical material;</p> <p>know the basic concepts of the module, set scientific and professional tasks in a short period of time and effectively use it in solving them;</p> <p>is able to independently solve problems in standard situations within the framework of the curriculum;</p> <p>is able to independently perform practical skills (in terms of quality and established quantity) and acquire competencies, but with some shortcomings;</p> <p>demonstrate good knowledge of physical laws in practical classes, be able to correctly (but not always rationally) apply this knowledge in new situations, without being able to sufficiently independently formalize the results of the work performed;</p> <p>mastering the basic literature recommended in the module program;</p> <p>be able to understand the essence of the theories, concepts and directions of the module being studied;</p> <p>must creatively and independently participate in theoretical and practical classes throughout the semester, be active in group discussions, and have a good level of assignment completion;</p>	3,5	
60-70	C	“satisfactory” - unsatisfactory result, with	<p>have sufficient knowledge within the module program;</p> <p>use medical terminology, correctly</p>	3	satisfactory

		gross defects.	<p>explain answers to questions, but make mistakes;</p> <p>demonstrate a basic understanding of the module when difficult to answer, or demonstrate some specific skills;</p> <p>is able to perform practical skills (in terms of quality and quantity given) independently, but completely with errors;</p> <p>acquiring competencies independently, but with errors;</p> <p>have partial knowledge of the general concepts of the module and be able to apply it when solving standard (model) situations;</p> <p>be able to solve standard situations with the help of a teacher;</p> <p>understand the essence of the main theories, concepts and directions of the module being studied;</p> <p>it is necessary to participate in theoretical and practical classes under the guidance of a teacher, to have a sufficient level of culture in completing tasks;</p>		
0-59	F	"unsatisfied"	<p>if he has only fragmentary knowledge within the framework of the module program;</p> <p>does not use medical terms or makes serious and gross logical errors when answering questions or does not answer at all;</p> <p>if he passively participates in theoretical and practical classes and has a low level of culture in completing tasks or does not perform them at all;</p> <p>if he does not have practical skills and competencies, if he cannot correct his mistakes even with the help of the recommendations of the teaching staff.</p>	2	unsatisfied

Information about the subject teacher

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This syllabus was approved by the minutes of the meeting of the TTA Educational and Methodological Council 2023.

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Compiled by



(Handwritten signatures of F.Kh. Azizova, J.Kh. Tursunov, N.N. Parpieva, K.S. Mukhamedov, and F.B. Abdugapparov)

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