# FEDERAL STATE BUDGET EDUCATIONAL INSTITUTION OF HIGHER EDUCATION "ROSTOV STATE MEDICAL UNIVERSITY" MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

Fakulty of foreign students, residents and postgraduates

CONFIRM

Supervisor

educational program

(signature)

/ E.S. Belousova /

(FULL NAME.)

# DISCIPLINE WORKING PROGRAM PHTHISIOLOGY

Speciality 31.05.01 General medicine

Form of education full-time

#### I. GOALS AND OBJECTIVES OF MASTERING THE DISCIPLINE

**Target** mastering the academic discipline "Phthisiology" consists of acquiring knowledge of the theoretical foundations, causes, patterns of spread and mechanisms of development of tuberculosis, as well as the principles of its diagnosis, treatment and prevention; methodological and methodological foundations of clinical thinking and rational actions of a doctor in the differential diagnosis of tuberculosis with other diseases; the role and tasks of the general practitioner in the system of combating tuberculosis, in carrying out anti-tuberculosis measures.

- Tasks:training students in the ability to carry out preventive and anti-epidemic measures aimed at preventing the occurrence of tuberculosis;
- training students in the most important methods for diagnosing tuberculosis, which allows identifying tuberculosis at an early stage;
- teaching students the ability to identify the leading signs, symptoms, syndromes of tuberculosis;
- development students immunological diagnostics (tuberculin diagnostics, "Diaskintest") and fluorographic examinations of the adult population and adolescents and children for the purpose of early detection of tuberculosis and surveillance, with evaluation of their results;
- training students in choosing optimal examination methods patients with tuberculosis and drawing up an algorithm for differential diagnosis;
- teaching students the principles of tuberculosis treatment;
- training students in the principles of conducting rehabilitation measures among the adult population who have suffered tuberculosis;
- developing skills in analyzing scientific literature and official statistical reviews;
- developing communication skills with patients, taking into account ethics and deontology depending on the identified pathology and characterological characteristics of patients.

#### II. REQUIREMENTS FOR THE RESULTS OF MASTERING THE DISCIPLINE

The process of studying the discipline is aimed at forming the following

#### A) professional (PC):

**PK-5**readiness to collect and analyze patient complaints, data from his medical history, examination results, laboratory, instrumental, pathological-anatomical and other studies in order to recognize the condition or establish the presence or absence of the disease

**PK-6**ability to determine the patient's main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International Statistical Classification of Diseases and Related Health Problems, X revision

**PK-8**ability to determine tactics for managing patients with various nosological forms

#### III. THE PLACE OF DISCIPLINE IN THE STRUCTURE OF EP VO

- 3.1. The academic discipline is *basic*
- 3.2. The formation of the above competencies is facilitated by studying the following previous disciplines Microbiology;
- Pharmacology;
- Internal illnesses;
- Epidemiology;
- Pathological physiology.
- 3.3. Discipline creates the prerequisites for the formation of these competencies in disciplines:
- Residency;
- Postgraduate studies

#### IV. CONTENT AND STRUCTURE OF DISCIPLINE

The complexity of the discipline in Z3 hour 108

4.1. Sections of the discipline studied in the \_11\_ semester(s)

		Number of hours					
No. section	Section name	Total	Contact Total Job		SRS		
			L	WITH E	ГС	LR	
	Semester 11						

1	Historical information.  Organization of the fight against tuberculosis. Classification of tuberculosis Etiology tuberculosis.  Epidemiology, reservoir, sources, transmission tuberculosis infection, groups and risk factors, socially dependent disease. Pathogenesis and pathological anatomy of tuberculosis. Immunology of tuberculosis.	9	1	-	4	-	4
2	Early detection, examination methods, diagnosis of tuberculosis.	10	1		5		4
3	Primary tuberculosis Pathogenesis. tuberculosis intoxication. Intrathoracic tuberculosis lymph nodes. Primary tuberculosis complex. Clinic. Diagnostics. Differential diagnostics.	12	2	-	5	-	5
4	Disseminated tuberculosis. Clinic. Diagnostics. Differential diagnostics. Milliary tuberculosis. Differential diagnostics.	12	2	-	5	-	5
5	Focal pulmonary tuberculosis. Infiltrative pulmonary tuberculosis. Caseous pneumonia. Clinic. Diagnostics. Differential diagnostics.	12	2	-	5	-	5
6	Pulmonary tuberculoma. Tuberculoma is stable and progressive. Clinic. Diagnostics. Differential diagnostics. With rounded formations.	10	2	-	4	-	4

7	Cavernous and fibrous- cavernous tuberculosis lungs. Clinic. Diagnostics. Differential diagnostics.	12	2		5	-	5
8	Cirrhotic pulmonary tuberculosis. Tuberculosis pleurisy. Clinic. Diagnostics. Differential diagnostics.	eleven	2	-	5	1	4
9	Extrapulmonary tuberculosis	9	-	-	5	-	4
10	Treatment of patients tuberculosis. Complications of pulmonary tuberculosis. Treatment of complications. Prevention of tuberculosis. Concept of specific and nonspecific prevention.	eleven	2	-	5	-	4
Total:	Total:		16	-	48	-	44
Interim	test						

**SRS**- independent work of students **L**-lectures

**WITH**– seminars (in accordance with the RUP)

**LR** -laboratory work (in accordance with the RUP)

**ETC**– practical classes (in accordance with the RUP, they include clinical practical lessons)

#### 4.2. Contact work

#### Lectures

No. chapter A	<b>No.</b> lectures	Lecture topics	Qty hours		
	Semester11				
1	1	Principles and main directions of anti-tuberculosis work in the Russian Federation.	1		
2	1	Early detection, examination methods, diagnosis of tuberculosis.	1		
3	2	Primary tuberculosis	2		
4	3	Disseminated tuberculosis	2		

5	4	Clinical forms of secondary tuberculosis of the respiratory organs (focal, infiltrative, caseous	2
6	5	Clinical forms of secondary tuberculosis of the respiratory organs: tuberculoma	2
7	6	Clinical forms of secondary tuberculosis of the respiratory organs (cavernous, fibrous-cavernous)	1
8	7	Clinical forms of secondary respiratory tuberculosis: (cirrhotic, pleurisy)	1
10	8	Basic principles of treatment of patients with tuberculosis	1
10	8	Directions prevention V complex anti-tuberculosis measures. Work in the hearth	1
Total hours discipline:		16	

### Seminars, practical work

No. section	No. ETC	Topics of seminars, practical works	Number in hours	Forms current control
		Semester 11		
1	1	Epidemiology of tuberculosis and the system of anti-tuberculosis measures in the Russian Federation. Tuberculosis classification and principles formulating a diagnosis. Etiology of tuberculosis. General pathology and pathogenesis of tuberculosis.	4	Testing, interview
2	2	Early detection, examination methods, diagnosis of tuberculosis.	5	Testing, solution situational tasks
3	3	Primary tuberculosis	5	Testing, solution situational tasks
4	4	Disseminated tuberculosis	5	Testing, solution situational tasks
5	5	Focal pulmonary tuberculosis. Infiltrative pulmonary tuberculosis. Caseous pneumonia.	5	Testing, solution situational tasks

No. section	No. ETC	Topics of seminars, practical works	Number in hours	Forms current control
6	6	Pulmonary tuberculoma	4	Interview, testing,
7	7	Cavernous and fibrous-cavernous pulmonary tuberculosis	5	Interview, testing,
8	8	Cirrhotic tuberculosis. Tuberculous pleurisy	5	Testing, solution situational
9	9	Extrapulmonary tuberculosis	5	Interview, testing,
10	10	Treatment of patients with tuberculosis. Prevention of tuberculosis	5	Testing, solution situational tasks
Total hou	urs discipli	ne:	48	

### 4.3. Independent work of students

No. chapter A	Type of independent work students	Qty hours	Shapes of the current control
	Semester 10		
1	Preparing for the lesson. (Historical information. Organization of the fight against tuberculosis. Classification tuberculosis. Etiology tuberculosis. Epidemiology, storage tank, sources, transmission of tuberculosis infections, groups and risk factors, socially dependent disease. Pathogenesis and pathological anatomy of tuberculosis.	4	Testing, interview
2	Preparing for the lesson.  (Early identification, methods examinations, diagnosis of tuberculosis).	4	Testing, solution situational
3	Preparing for the lesson. (Primary tuberculosis. Pathogenesis. Tuberculosis intoxication. Tuberculosis of the intrathoracic lymph nodes. Primary tuberculosis complex. Clinic. Diagnostics. Differential diagnosis.)	5	Testing, solution situational tasks

No. chapter A	Type of independent work students	Qty hours	Shapes of the current control
4	Preparing for the lesson. (Disseminated tuberculosis. Clinic. Diagnostics. Differential diagnosis. Milliary tuberculosis.	5	Testing, solution situational tasks
5	Preparing for the lesson. (Focal pulmonary tuberculosis. Infiltrative pulmonary tuberculosis. Caseous pneumonia. Clinic. Diagnostics. Differential diagnosis.)	5	Testing, solution situational tasks
6	Preparing for the lesson. (Pulmonary tuberculoma. Stable and progressive tuberculoma. Clinic. Diagnostics. Differential diagnosis with	4	Interview, testing,
7	Preparing for the lesson. (Cavernous and fibrous-cavernous pulmonary tuberculosis. Clinic. Diagnostics. Differential	5	Interview, testing,
8	Preparing for the lesson. (Cirrhotic pulmonary tuberculosis. Tuberculous pleurisy. Clinic. Diagnostics. Differential diagnosis.)	4	Testing, solution situational tasks
9	Preparing for the lesson. (Extrapulmonary tuberculosis)	4	Interview, testing,
10	Preparing for the lesson. (Treatment of patients with tuberculosis. Complications of pulmonary tuberculosis. Treatment of complications. Prevention of tuberculosis. The concept of specific and nonspecific prophylaxis.)	4	Testing, solution situational tasks
Total ho	purs discipline:	44	

## V. ASSESSMENT FUND FOR CURRENT CONTROL, INTERMEDIATE CERTIFICATION

The fund of assessment tools for determining the level of development of competencies as a result of mastering the discipline is an appendix to the work program.

#### VI. **DISCIPLINES**

#### 6.1. Main literature.

- 1. Perelman M.I., Phthisiology [Electronic resource]: textbook / M.I. Perelman, I. V. Bogadelnikova. - 4th ed., revised. and additional - M.: GEOTAR-Media, 2015. - 448 p. – Access from EBS "Student Consultant"
- 2. Yablonsky P.K., Phthisiology. National clinical recommendations [Electronic resource] / ed. PC. Yablonsky - M.: GEOTAR-Media, 2015. - 240 p. - Access from EBS "Student Consultant"

#### **6.2.** Additional literature.

- 1. Koshechkin V.A. Phthisiology: a textbook for university students / V.A. Koshechkin. – M.: GEOTAR-Media, 2016. - 302 p.
- 2. Chuchalin A.G., Respiratory medicine: in 3 volumes. T. 1. [Electronic resource]: manual / ed. A. G. Chuchalina - M.: GEOTAR-Media, 2017. - 640 p. - Access from EBS "Student Consultant"
- 3. Zimina V.N., Tuberculosis and HIV infection in adults [Electronic resource]: manual / V.N. Zimina, V.A. Koshechkin, A.V. Kravchenko - M.: GEOTAR-Media, 2014. - 224 p. - Access from EBS "Student Consultant"
- 4. Koshechkin V.A., Phthisiology [Electronic resource]: textbook / V.A. Koshechkin - M.: GEOTAR-Media, 2016. - 304 p. - Access from EBS "Student Consultant"
- 5. Mishin V.Yu., Phthisiology [Electronic resource]: textbook / V. Yu. Mishin and others - 2nd ed., revised. and additional - M.: GEOTAR-Media, 2016. - 520 p. - Access from EBS "Student Consultant"
- 4. Order of the Ministry of Health of the Russian Federation No. 951 dated December 29, 2014 "On approval of methodological recommendations for improving the diagnosis and treatment of respiratory tuberculosis [Electronic resource]. - Access mode: http:// tbdrugnosele.ru/images/normdok [02/13/2019].
- 5. Resolution of the Chief State Sanitary Doctor of the Russian Federation dated 22 October 2013 No. 60 "On approval of sanitary and epidemiological rules SP 3.1.2.3114-13 "Prevention of tuberculosis" [Electronic resource].
- Access mode: http://docs.cntd.ru/document/499056594 [02/13/2019].
- 6. Order of the Ministry of Health of the Russian Federation No. 109 dated March 21, 2003 "On improving anti-tuberculosis measures in the Russian Federation" [Electronic

Mode

access:

resource]. http://docs.cntd.ru/document/901868614 [13.02.2019]

7. Order of the Ministry of Health of Russia No. 932n dated November 15, 2012 On approval of the Procedure for providing medical care to patients with tuberculosis [Electronic resource]. - Access mode: http://legalacts.ru/doc/ prikazminzdrava-rossii-ot-15112012-n-932n/ [02/13/2019].

- 8. Federal clinical recommendations for prevention, diagnosis and treatment of tuberculosis in patients with HIV infection. Moscow 2016 [Electronic resource].- Access mode: http://roftb.ru/netcat\_files/doks2016/rec2016.pdf [02/13/2019].
- 9. Federal clinical guidelines for diagnosis and treatment respiratory tuberculosis with multiple and extensively drug-resistant pathogens. Approved at the X Congress of the "Russian Society of Phthisiologists" on May 28, 2015 and by the Profile Commission for the specialty "Phthisiology" of the Ministry of Health of Russia on November 13, 2015 [Electronic resource]. Access mode: http://roftb.ru/netcat\_files/doks2016/rec2016.pdf [02/13/2019].
- 10. Federal clinical guidelines for diagnosis and treatment respiratory tuberculosis. Moscow 2014 [Electronic resource]. Access mode: http://roftb.ru/netcat\_files/doks2016/rec2016.pdf [02/13/2019].
- 11. Federal clinical guidelines for diagnosis and treatment respiratory tuberculosis in children. Moscow 2014 [Electronic resource]. Access mode: http://roftb.ru/netcat\_files/doks2016/rec2016.pdf [02/13/2019].
- 12. Clinical guidelines Latent tuberculosis infection (LTBI) in children. Moscow 2016 [Electronic resource]. Access mode: http://roftb.ru/netcat\_files/doks2016/rec2016.pdf [02/13/2019].
- 13. Clinical recommendations. Respiratory tuberculosis in children. Moscow 2016 [Electronic resource]. Access mode: http://roftb.ru/netcat\_files/doks2016/rec2016.pdf [02/13/2019].

#### 6.3. Periodicals

	0.5. I Cilodicals	
No. p/p	Publication name	Information about  ACCESS
1	Tuberculosis and lung diseases	Access from e- library
2	Cytokines and inflammation	Access from e- library
3	Epidemiology and infectious diseases	Access from e- library
4	Antibiotics and chemotherapy	Access from e- library
5	Microbiology	Access from e- library

#### 6.4. Internet resources

	ELECTRONIC	Access
	EDUCATIONAL RESOURCES	to the resource
1.	Electronic library RostSMU. – URL:	Access

		1
	http://109.195.230.156:9080/opacg/	is not limited
2.	<b>Doctor's consultant.</b> Electronic medical library: EBS. – Moscow:	Access
	LLC GC "GEOTAR" URL: http://www.rosmedlib.ru	is not limited
	Consultant Plus: reference legal systemURL: http://	Access from
3.	www.consultant.ru	computers
		university
4.	Scientific electronic library eLIBRARY URL: http://	Open
т.	<u>elibrary.ru</u>	access
		Access from
5.	National Electronic Library URL: <a href="http://neb.rf/">http://neb.rf/</a>	computers
		libraries
6.	<b>Scopus</b> /Elsevier Inc., Reed Elsevier. – Philadelphia: Elsevier BV, PA. – URL:	Access
0.	http://www.scopus.com/ (National project)	is not limited
7.	Web of Science/Clarivate Analytics URL: http://	Access
/.	apps.webofknowledge.com (National project)	is not limited
8.	ScienceDirect. Freedom Collection[magazines] /Elsevier. – URL:	Access
0.	www.sciencedirect.com by IP addresses of RostSMU.(National project)	is not limited
9.	Springer Nature database URL: <a href="http://link.springer.com/">http://link.springer.com/</a> by IP addresses	Access
۶.	of RostSMU.(National project)	is not limited
	Wiley Online Library /John Wiley & Sons URL: http://onlinelibrary.wiley.com	Access from
10.	by IP addresses of RostSMU. (National project)	computers
	by IP addresses of Rostsino.(National project)	university
	Single window of access to information resources URL:	Open
eleven.	http://window.edu.ru/	access
12.	Russian education. Federal educational portal URL: http://	Open
12.	www.edu.ru/index.php	access
13.	Federal Electronic Medical Library of the Russian Ministry of	Open
15.	Health URL: <a href="http://www.femb.ru/feml/">http://feml.scsml.rssi.ru</a>	access
14.	Medline(PubMed, USA). – URL:https://www.ncbi.nlm.nih.gov/pubmed/	Open
	incame(i dolined, 65/t). Cite. https://www.nebi.mm.mm.gov/pabmed/	access
15.	Free Medical Journals URL:http://freemedicaljournals.com	Open
15.	- OKL. Hetp://recinculationinals.com	access
16.	Free Medical Books URL:http://www.freebooks4doctors.com/	Open
10.	Tree incured books . OKE. http://www.neebooks-addetors.com/	access
17.	International Scientific Publications.–URL: https://	Open
17.	www.scientificpublications.net/ru/	access
18.	CyberLeninka: scientific electron. beepURL:http://cyberleninka.ru/	Open
10.		access
19.	Archive of scientific journals / NEIKON URL:	Open
	https://archive.neicon.ru/xmlui/	access
20.	<b>Open access journals in Russian /</b> platformElPub NEICON. – URL:	Open
	https://elpub.ru/	access
21.	Medical Bulletin of the South of Russia URL: https://	Open
۷۱۰	www.medicalherald.ru/jour or from the RostSMU website	access
22.	World Health Organization URL: http://who.int/ru/	Open
۷۷۰		access
23.	<b>Evrika.ru</b> information and educational portal for doctors. –	Open

	URL:https://www.evrika.ru/	access
24.	Med-Edu.ru: medical video portal URL: http://	Open
	www.mededu.ru/	access
25.	<u>Univadis.ru</u> : international honey. portal URL: <u>http://www.univadis.ru/</u>	Open
		access
26.	<b>DoctorSPB.ru</b> : information-reference portal about medicine URL:	Open
	http://doctorspb.ru/	access
27.	<b>Modern problems of science and education</b> : electron. magazine URL:	Open
	http://www.science-education.ru/ru/issue/index	access
28.	Rubricator of clinical recommendationsMinistry of Health of RussiaURL:	Open
	http://cr.rosminzdrav.ru/#!/	access

## 6.4. Guidelines for students on mastering disciplines

Training consists of classroom lessons (64 hours), including lectures and practical exercises, and independent work (44 hours). The main teaching time is allocated to practical work in phthisiology.

At studying educational disciplines (module) necessary formability to navigate various sections of phthisiologyand master practical skills in the field of phthisiology for use in medical practice.

Practical classes are conducted in the form of interviews, demonstrations of x-rays, solving situational problems, and answering test tasks.

In accordance with the requirements of the Federal State Educational Standard for Higher Education and the EP of Higher Education, active and interactive forms of conducting classes (analysis of specific clinical situations) are widely used in the educational process.

Independent work of students involves preparation for classes, current and intermediate control.

Work with educational literature is considered as a type of educational work in the discipline "Phthisiology" and is carried out within the hours allocated for its study.

Each student is provided with access to the library funds of the University and the department.

For each section of the academic discipline, methodological recommendations for students and guidelines for teachers have been developed.

The initial level of knowledge of students is determined by testing, the current control of mastering the subject is determined by an oral survey during

classes, during clinical discussions, when solving typical situational problems and answering test tasks.

At the end of studying an academic discipline, an intermediate control of knowledge is carried out using tests and solving situational problems.

Questions on the academic discipline are included in the Final State Attestation of Graduates.

#### **VII. LOGISTICS**

#### **DISCIPLINES**

#### 7.1. Educational and laboratory equipment.

Logistics for the process include: auditorium, edanation ala'Anitig tuberculosis clinical dispensary", university, 33; Stateo Brotog (et Bly) RO Institution of the Russian Federation "Anti-tuberculosis clinical clinical dispensary" children's department, classroom No. 41 at Universitetsky 33; State Budgetary Institution of the Russian Federation "Anti-tuberculosis clinical dispensary, inpatient department, training room No. 30 at Stanislavsky 132; GKUZ RO "Children's sanatorium Sosnovaya Dacha", educational room No. 1 at Lenin 121). Tables, chairs (60 seats). The classrooms are equipped with stands on the main topics of the discipline. To demonstrate lectures in classrooms, thematic tables, dummies, stands, and radiographs are presented.

#### 7.2. Technical and electronic means.

The departments have multimedia lectures, presentations, videos, thematic tables, posters, dummies, stands, the use of which is provided for by the methodological concept of teaching.