Документ подписан простой электронной подписью

Информация о владельце:

ФИО: Ястребов Олег Александрович Federal State Autonomous Educational Institution of Higher Education

ca953a0120d891083f939673078ef1a989dae18a

## Дата подписания: 07.06.2023 17:43:25 PEOPLES FRIENDSHIP UNIVERSITY OF RUSSIA **RUDN University**

#### **Institute of Medicine**

educational division (faculty/institute/academy) as higher education programme developer

#### **COURSE SYLLABUS**

#### **PHTISIOLOGY**

course title

#### Recommended by the Didactic Council for the Education Field of:

#### 31.05.01 General Medicine

field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

#### **General Medicine**

higher education programme profile/specialisation title

#### 1. COURSE GOAL(s)

The goal of the course "**Phthisiology**" is to equip of modern with basic theoretical and practical knowledge in the field of phthisiology (science about tuberculosis) at medical students. Each graduate of medical faculty is expected to know the diagnostics principles of tuberculosis and methods of its treatment. Irrespective of the chosen medical specialty, he/she is obliged to timely suspect tuberculosis in the patient, to carry out correct diagnostics and to send the patient to the antituberculosis specialized institution.

#### 2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) "Phthisiology" is aimed at the development of the following competences /competences in part: GC-1. (GC-1.1., GC-1.2.), SPC-5. (SPC-5.2., SPC-5.6., SPC-5.7., SPC-5.8., SPC-5.9., SPC-5.11.

Table 2.1. List of competences that students acquire through the course study

Competence code	Competence descriptor	Competence formation indicators (within this course)
GC-1	Able to perform critical analysis of the problematic situations based on	GC-1.1. Analyses scientific-technical references and documentation of medical organisations.
	systematic concept, build up a strategy	GC-1.2. Critically assesses reliability of the information sources, works with contradictory information from different sources.
SPC-5		PC-5.2. Able to organize and control vaccination against infectious diseases in adults in accordance with the existing normative of the healthcare, clinical guidelines (treatment protocols) taking into account standards of the healthcare.
	Able to perform and control of the efficacy of measures in prevention and healthy lifestyle formation and sanitary-hygienic education of people	PC-5.6. Able to control measures for prevention.
		PC-5.7. Able to decide about the medical indications for restrictive measures (quarantine) and indications for specialist's consultation in case of infectious (parasitic) diseases.
		PC-5.8. Able to complete and send to the responsible authorities emergent notification in case of detection of the infectious or professional disease.

PC-5.9. Able to perform antiepidemiological measures in case of the infection spread, including quarantine measures for dangerous (quarantine) infectious diseases.
PC-5.11. Able to assess the efficacy of prophylactic measures for patients.

#### 3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the <u>core</u>/variable/elective\* component of (B1) block of the higher educational programme curriculum.

\* - Underline whatever applicable.

Within the higher education programme students also master other (modules) and / or internships that contribute to the achievement of the expected learning outcomes as results of the course study.

Table 3.1. The list of the higher education programme components/disciplines that contribute to the achievement of the expected learning outcomes as the course study results

Compete nce code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
GC-1.	Ways of performing the critical analysis of the problematic situations based on the systematic approach, work out the strategy	Biology, Immunology, Pathophysiology, Epidemiology, Infectious diseases	Hospital therapy, Clinical pharmacology
SPC-5.	Ability to control the efficacy of preventive measures, healthy life style building and sanitary education of the population	Histology, embryology, cytology, Microbiology, Virology, Epidemiology, Infectious diseases	Hospital therapy, Clinical pharmacology

<sup>\*</sup> To be filled in according to the competence matrix of the higher education programme.

#### 4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course "Phtisiology" is 5 credits (180 academic hours).

Table 4.1. Types of academic activities during the periods of higher education programme mastering (full-time training)\*

Type of academic activities	Total academic	Semesters/training modules		
	hours	11	12	
Contact academic hours	82	36	46	
including:				
Lectures (LC)	12	6	6	

Lab work (LW)	-	_	-	
Seminars (workshops/tutorials) (S)	70	30	40	
Self-studies	64	34	30	
Evaluation and assessment (exam/pas grade)	34	12	22	
Course workload academic hours_		180		
	credits	5		

<sup>\*</sup> To be filled in regarding the higher education programme correspondence training mode.

### 5. COURSE CONTENTS

Table 5.1. Course contents and academic activities types

Course module title	Course module contents (topics)	Academic activities types
Course module 1	<b>Topic 1.1.</b> History of tuberculosis studies.	LC, S
Introduction to the	Current epidemiological situation worldwide	,
speciality	and in the Russian Federation. TB etiology,	
	species properties of mycobacteria	
	<b>Topic 1.2.</b> TB pathogenesis. Idea of active TB	LC, S
	and latent TB infection. Pathological anatomy	
	of tuberculosis	
Course module 2 TB	<b>Topic 2.1.</b> Social prevention of TB	LC, S
prevention.	<b>Topic 2.2.</b> Immunization for TB. Anti-TB	LC, S
	immunity properties.	
	<b>Topic 2.3.</b> Contact tracing. Treatment of latent	LC, S
	TB infection.	·
	<b>Topic 2.4.</b> Anti-TB infection control	LC,S
Course module 3	<b>Topic 3.1</b> Measures for early TB detection in	S
Early TB detection	adults.	
	<b>Topic 3.2</b> Measures for early TB detection in	S
	children and adolescents.	
Course module 4 TB	<b>Topic 4.1</b> Clinical manifestation of TB,	S
diagnostics	peculiarities of respiratory and intoxication	
	syndromes.	
	Microbiological diagnostics of TB.	
	<b>Topic 4.2</b> Radiological diagnostics of	S
	pulmonary TB. Laboratory and instrumental	
	methods for TB diagnostics. Diagnostic	
	algorithm.	
	Immunological tests (tuberculin skin test,	
	IGRA-tests).	
Course module 5 TB	<b>Topic 5.1</b> Outpatient TB department: aims and	LC, S
healthcare. Treatment	functions.	
of TB	<b>Topic 5.2</b> Contact tracing. Epidemiological	LC, S
	measures for prevention of TB spreading.	
	<b>Topic 5.3</b> TB treatment: ani-TB drugs,	LC, S
	treatment regimens.	

Course module title	Course module contents (topics)	Academic activities types
Course module 6 TB	<b>Topic 6.1</b> TB classification (Russian, WHO,	LC, S
classification. Primary	ICD-10). Primary TB in children: clinical	
TB in children and	forms, peculiarities of diagnostics and	
adolescents. Post-	manifestation.	
primary pulmonary	<b>Topic 6.2</b> Clinical-radiological features of	LC, S
TB	small forms of TB.	
	<b>Topic 6.3</b> Clinical-radiological features of	LC, S
	infiltrative TB.	
	<b>Topic 6.4</b> Clinical-radiological features of	S
	disseminated TB.	
	<b>Topic 6.5</b> Clinical-radiological features of big	S
	forms of TB.	
	<b>Topic 6.6</b> Clinical-radiological features of	S
	chronic forms of TB.	
Course module 7	<b>Topic 7.1</b> Pathogenesis of extrapulmonary	S
Extrapulmonary TB	TB.	
	TB meningoencephalitis.	
	<b>Topic 7.2</b> TB of urogenitary tract. TB of	S
	bones and joints.	
	<b>Topic 7.3</b> Abdominal TB. TB of peripheral	S
	lymph nodes.	
Course module 8 TB	<b>Topic 8.1</b> Clinical and radiological	S
in special groups of	peculiarities of TB in HIV-positive patients	
patients	depending on the degree of	
	immunosuppression. Specific features of TB	
	diagnostics in HIV-positive patients	
	<b>Topic 8.2</b> TB in pregnant women:	S
	peculiarities of manifestation, diagnostics and	
	treatment.	
	<b>Topic 8.3</b> TB and diabetes mellitus	S
	<b>Topic 8.4</b> TB in patients receiving	S
	immunosuppressive treatment.	

<sup>\* -</sup> to be filled in only for <u>full</u> -time training: *LC* - *lectures*; *LW* - *lab work*; *S* - *seminars*.

## 6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

Table 6.1. Classroom equipment and technology support requirements

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
Lecture	Lecture classroom, equipped with	Teaching auditorium for
	the set of specialized furniture;	lectures and practical
	whiteboard (screen) and technical	trainings, group and personal

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	devices for multimedia presentations.	consultations, current and interim assessment.  The set of specialized furniture; whiteboard; a set of devices includes portable multimedia projector, laptop, projection screen, stable wireless Internet connection. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype
Seminar	Seminars classroom for group and personal consultations, current and interim assessment, equipped with the set of specialized furniture and technical devices for multimedia presentations.	The set of specialized furniture; technical devices: multimedia projector, laptop, stable wireless Internet connection. Software: Microsoft Windows, MS Office / Office 365, MS Teams, Chrome (latest stable release), Skype
Self-studies	Self-studies classroom (may be used for seminars and consultations), equipped with the set of special furniture and access to the EIES.	The set of specialized furniture; technical devices: multimedia projector, laptop, stable wireless Internet connection

<sup>\*</sup> The premises for students' self-studies are subject to MANDATORY mention

#### 7. RESOURCES RECOMMENDED FOR COURSE STUDY

#### Main readings:

- 1. Phthisiatry: textbook / V.A. Koshechkin. Книга на английском языке. Moscow: GEOTAR-Media, 2019. 256 с. ISBN 978-5-9704-5302-5
- 2. Madhukar Pai. Let's talk TB 3d edition. 2018, 119p. <a href="http://www.letstalktb.org/">http://www.letstalktb.org/</a>
- 3. Toman's tuberculosis: case detection, treatment and monitoring: questions and answers (2nd edition). 2004. <a href="https://apps.who.int/iris/handle/10665/42701">https://apps.who.int/iris/handle/10665/42701</a>
- 4. Tuberculosis: Current Issues in Diagnosis and Management <a href="http://www.e-booksdirectory.com/details.php?ebook=8772">http://www.e-booksdirectory.com/details.php?ebook=8772</a>
  - 5. Treatment of tuberculosis: guidelines 4th ed. WHO/HTM/TB/2009, 420 p.

#### Additional readings:

#### Printed editions:

- 1. C.L. Daley, M.B. Gotway, R.M. Jasmer. Radiographic manifestation of tuberculosis 2nd edition. Curry International Tuberculosis Centre. 2011, 111p.
- 2. Ermolitskiy N.M. Radiology. Teaching workbook for 3rd year students of the Faculty of preparation of experts for foreign countries of medical higher educational institutions Gomel, GomSMU, 2016. p. 1. 108 p.
- 3. D.Heemskerk, M.Caws, B.Marais, J.Farrar. Tuberculosis in adults and children. SpringerOpen. 2015, 63p. <a href="https://link.springer.com/book/10.1007/978-3-319-19132-4">https://link.springer.com/book/10.1007/978-3-319-19132-4</a>
- 4. WHO guidelines (and associated standards) on tuberculosis http://www.who.int/publications/guidelines/tuberculosis/en/

#### Internet-based sources:

- 1. Electronic libraries with access for RUDN students:
- Electronic library system RUDN ELS RUDN http://lib.rudn.ru/MegaPro/Web
- ELS «University library online » <a href="http://www.biblioclub.ru">http://www.biblioclub.ru</a>
- ELS Urait http://www.biblio-online.ru
- ELS «Student's consultant» www.studentlibrary.ru
- ELS «Lan» http://e.lanbook.com/
- 2. Databases and search engines:
- Stop TB site https://www.stoptb.org/resources/publications
- searching system Yandex https://www.yandex.ru/
- searching system Google https://www.google.ru/
- SCOPUS database http://www.elsevierscience.ru/products/scopus/

*Training toolkit for self- studies to master the course \*:* 

- 1. The set of lectures on the course "Phtisiology"
- 2. The laboratory workshop (if any).on the course "Phtisiology"
- 3. The guidelines for writing a course paper / project (if any) on the course "Phtisiology".

4.												
т.	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠

\* The training toolkit for self- studies to master the course is placed on the course page in the university telecommunication training and information system under the set procedure.

# 8. ASSESSMENT TOOLKIT AND GRADING SYSTEM\* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL UPON COURSE COMPLETION

The assessment toolkit and the grading system\* to evaluate the competences formation level (GC-1. (GC-1.1., GC-1.2.), SPC-5. (SPC-5.2., SPC-5.6., SPC-5.7., SPC-5.8., SPC-5.9., SPC-5.11.) upon the course study completion are specified in the Appendix to the course syllabus.

<sup>\*</sup> The assessment toolkit and the grading system are formed on the basis of the requirements of the relevant local normative act of RUDN University (regulations / order).

<b>DEVELOPERS:</b>		
Professor of the department of infectious diseases with the courses of epidemiology and phthisiology		V.N. Zimina
position, department	signature	name and surname
Associate professor of the department of infectious diseases with the courses of epidemiology and phthisiology		S.L. Voznesenskiy
position, department	signature	name and surname
Department of infectious diseases with the courses of epidemiology and phthisiology		G.M. Kozhevnikova
name of department	signature	name and surname
HEAD OF HIGHER EDUCATION PROGRA The first vice-director of the	AMME:	I.V. Radish
MI in the educational work	signature	name and surname
position, department	signature	name and surname