Federal State Autonomous Educational Institution of Higher Education
PEOPLES' FRIENDSHIP UNIVERSITY OF RUSSIA
NAMED AFTER PATRICE LUMUMBA
RUDN University
Institute of Medicine

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

COURSE SYLLABUS

PHTHISIOLOGY

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

2025

1. COURSE GOAL(s)

The aim of teaching the **"Phthisiology"** course is considered to master of modern basic theoretical and practical knowledge in the field of phthisiology (science about tuberculosis) among 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, PC-5.

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.	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy	GC-1.1. Analysing scientific and technical literature and regulatory documents of medical institutions.
		GC-1.2. Assessing in a critical way the reliability of information sources, working with contradictory information from different sources.
PC-5	Being able to carry out preventive measures and measures to promote a healthy lifestyle and sanitary and hygiene education among population and monitor their effectiveness	PC-5.2. Being able to organize and monitor the immunization of the adult population against infectious diseases in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the standards of medical care.
		PC-5.6. Being able to monitor observing preventive measures.
		PC-5.7. Being able to determine medical indications to introduce restrictive measures (quarantine) and indications for referral to a medical specialist in the event of infectious (parasitic) diseases.
		PC-5.8. Being able to issue and send an emergency notification to the territorial body of the Federal Service for Surveillance on Consumer Rights Protection and Human Wellbeing when an infectious or occupational disease is detected.
		PC-5.9. Being able to carry out anti-epidemic

| | | measures in the event of the occurrence of a focus of infection, including quarantine measures when especially dangerous (quarantine) infectious diseases are detected. |
| | | PC-5.11. Being able to assess the effectiveness of preventive patient care. |

3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE

The course refers to the core/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

Competence code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
GC-1.	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy	Biology, Immunology, Pathophysiology, Hygiene	Internal medicine, Public health
PC-5.	Being able to carry out preventive measures and measures to promote a healthy lifestyle and sanitary and hygiene education among population and monitor their effectiveness	Histology, Embryology, Cytology, Microbiology, Virology	Advanced Course in Internal Medicine, Clinical pharmacology,

* 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 **"Phthisiology"** 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

	hours	modules	
		11	12
Contact academic hours	*96*	*36*	*60*
Including:			
Lectures (LC)	12	6	6
Lab work (LW)	-	-	-
Seminars (workshops/tutorials) (S)	84	30	54
Self-studies, academic hours:	*84*	*34*	*50*
Evaluation and assessment (exam/passing/failing grade)			
Course workload — academic hours	**180**	**70**	**110**
credits	**5**	**2**	**3**

* 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
Module 1 Introduction to the speciality	**1.1.** History of tuberculosis studies. Current epidemiological situation worldwide and in the Russian Federation. TB etiology, species properties of mycobacteria	**LC, S**
	1.2. TB pathogenesis. Idea of active TB and latent TB infection. Pathological anatomy of tuberculosis	**LC, S**
Module 2 TB prevention.	**2.1.** Social prevention of TB	**LC, S**
	2.2. Immunization for TB. Anti-TB immunity properties.	**LC, S**
	2.3. Contact tracing. Treatment of latent TB infection.	**LC, S**
	2.4. Anti-TB infection control	**LC, S**
Module 3 Early TB detection	**3.1** Measures for early TB detection in adults.	**S**
	3.2 Measures for early TB detection in children and adolescents.	**S**
Module 4 TB diagnostics	**4.1** Clinical manifestation of TB, peculiarities of respiratory and intoxication syndromes. Microbiological diagnostics of TB.	**S**
	4.2 Radiological diagnostics of pulmonary TB. Laboratory and instrumental methods for TB diagnostics. Diagnostic algorithm. Immunological tests (tuberculin skin test, IGRA-tests).	**S**
Module 5 TB healthcare. Treatment of TB	**5.1** Outpatient TB department: aims and functions.	**LC, S**
	5.2 Contact tracing. Epidemiological measures for prevention of TB spreading.	**LC, S**
	5.3 TB treatment: ani-TB drugs, treatment regimens.	**LC, S**
Module 6 TB	**6.1** TB classification (Russian, WHO, ICD-10).	**LC, S**

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

* - to be filled in only for **full** -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 the set of specialized furniture; whiteboard (screen) and technical devices for multimedia presentations.	Teaching auditorium for lectures and practical trainings, group and personal 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	The set of specialized furniture; technical devices: multimedia

Type of academic activities	Classroom equipment	Specialised educational / laboratory equipment, software, and materials for course study (if necessary)
	interim assessment, equipped with the set of specialized furniture and technical devices for multimedia presentations.	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

* 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 c. - ISBN 978-5-9704-5302-5
2.   WHO consolidated guidelines on tuberculosis (Module 1-4). WHO 2020-2022 https://www.ncbi.nlm.nih.gov/books/NBK554956/

3.   Madhukar Pai. Let's talk TB – 3d edition. 2018, 119p. http://www.letstalktb.org/
4.   Toman's tuberculosis: case detection, treatment and monitoring: questions and answers (2nd edition). 2004. https://apps.who.int/iris/handle/10665/42701
5.   Tuberculosis: Current Issues in Diagnosis and Management http://www.e-booksdirectory.com/details.php?ebook=8772

Additional readings:
*Printed publicationss***:**
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. https://link.springer.com/book/10.1007/978-3-319-19132-4

Internet-based sources:
1. ELS RUDN and external ELS with access for RUDN students on the basis of concluded agreements:
- Electronic library system RUDN – ELS RUDN http://lib.rudn.ru/MegaPro/Web
- ELS «University library online » http://www.biblioclub.ru
- ELS Urait http://www.biblio-online.ru
- ELS «Student's consultant» www.studentlibrary.ru
- ELS «Lan» http://e.lanbook.com/
- ELS «Troitsky bridge»

2. Databases and search engines:

- Electronic fund of legal and normative-technical documentation http://docs.cntd.ru/
- 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 "Phthisiology"

2. The laboratory workshop (if any) on the course "Phthisiology"

3. The guidelines for writing a course paper / project (if any) on the course "Phthisiology".

4. …………

* 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, PC-5) upon the course study completion are specified in the Appendix to the course syllabus.

* 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).

DEVELOPERS:

Professor of the Department of Infectious Diseases with the Courses of Epidemiology and Phthisiology		S.L. Voznesenskiy
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Head of the Higher Education Program:

First Deputy Director of MI for Academic Affairs		I.V. Radysh
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