

***Federal State Autonomous Educational Institution for Higher Education  
"Peoples' Friendship University of Russia (RUDN UNIVERSITY)***

***Medical Institute***

**COURSE PROGRAM**

**Name of the discipline**

**INFECTIOUS DISEASES, PHTHISIOLOGY**

Recommended for the field of

31.05.03 «Dentistry»

Qualification (degree) graduate

«Specialist»

Specialist title

Dentistry

## 1. Purpose and objective of the discipline:

**Purpose of the discipline:** Knowledge acquisition of infectious diseases, the principles of diagnosis, treatment and prevention of infectious diseases cases related to "Dentistry".

### **Objectives of the discipline:**

- study the etiology and pathogenesis of infectious diseases;
- study nosological forms of infectious diseases;
- study the most important clinical syndromes diagnosis of infectious diseases;
- recognize infectious disease during examination of the patient
- recognize the definition of severity of infection;
- study to make a choice of optimal methods laboratory and instrumental examination in infectious diseases;
- study to create an algorithm of differential diagnostic;
- study to provide first medical aid in the event of the emergency conditions to patients with infectious diseases;
- study to determine indications for hospitalization of the patient with infectious disease;
- study to choose optimal schemes of etiotropic and pathogenetic treatment of major nosological forms of infectious diseases;
- formation of the skills to study scientific literature and official statistical surveys;
- study of the safety technique when students are working with infectious patients;
- formation of communication skills with patients in the subject of ethical and deontological factors of infectious disease;
- formation of social and communication skills of student with team.

## 2. Course discipline in the accordance with the Educational Program (EP) for Higher Education (HE):

The Discipline (Infectious Diseases, Phthisiology) belongs to the basic part of block I of the curriculum.

Table 1 shows the previous and subsequent disciplines aimed at the formation of discipline competencies in accordance with the competence matrix of **EP HE**.

**Table 1. Prior and subsequent disciplines aimed at the formation of competencies**

№	Code and name of competence	Previous discipline	Subsequent discipline (group of discipline)
<b>Universal competencies</b>			
1	UC-8. Being able to create and maintain safe conditions in everyday life and professional activity to protect natural environment, ensure sustainable development of society, including in the event of a threat and occurrence of emergencies and military conflicts.	Medical informatics, Biology, Hygiene	Public health
<b>Professional competence</b>			

2	PC-2. Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	Immunology, Microbiology, Pathological physiology	Internal medicine, Clinical pharmacology, Public health
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**Necessary requirements:** the student must have knowledge, skills and competencies obtained in the study of medical informatics, biology, immunology, microbiology, pathological physiology, and hygiene.

### 3. Requirements for results of development of the discipline:

**Table2.**

#### Developed competencies

Competencies	Name of competencies	Indicators for achieving competencies
UC-8	Being able to create and maintain safe conditions in everyday life and professional activity to protect natural environment, ensure sustainable development of society, including in the event of a threat and occurrence of emergencies and military conflicts.	UC-8.3. Solving problems related to unsafe behaviour and participating in activities to prevent emergencies in the workplace. UC-8.4. Observing and explaining the rules of behaviour in case of emergencies of natural and man-made origin; providing first aid; participating in recovery activities.
PC-2	Being able to prescribe, monitor the efficacy and safety of non-drug and drug treatment	PC-2.8. Observing and treating diseases of the oral mucosa, lips, with the exception of a specialized appointment for the treatment of precancers of the oral mucosa and lips, and treatment of children with manifestations of viral, bacterial, allergic and other pediatric infections in the oral cavity. PC-2.10. Providing medical care in emergency and urgent forms, eliminating foci of infection and intoxication.

As a result of the development of the discipline, the student must:

#### **Know:**

- the structure of the infectious diseases service, principles of a structure, organization of the work of the infectious hospitals, departments;
- principles of interaction of macro-and micro-organism and factors which contribute to the occurrence of an infectious disease;
- the etiology, pathogenesis and pathologic morphology of studied infectious diseases;
- the clinical picture, features of current and potential complications of infectious diseases occur in the typical form of the different age groups;
- the main methods of laboratory and instrumental diagnostics used in infectology (indications, the interpretation of the results), the rules of the sampling of the pathological material from the patient;
- criteria for the diagnosis of studied infectious diseases;
- modern classification of infectious diseases, rules of the wording diagnosis;

- indications for hospitalization and outpatient treatment of infectious patients;
- transportation regulations of infectious patients to a hospital, isolation rules on admission of infectious patients;
- main principles of treatment of infectious diseases, rational choice of medications for the treatment of infectious diseases;
- regulations of clinical supervision and rehabilitation of patients with studied infectious diseases;
- specific and nonspecific prevention of studied infectious diseases;
- management of standard recording and reporting of medical records in medical institutions in case of infectious diseases;
- fundamentals of medical and physician ethics, and deontology, in working with both patients and medical staff and colleagues.

**Be able to:**

- suspect infectious disease patients;
- conduct questioning the patient and/or family (accompanying persons) in order to collect medical history (including the history of the present illness, life, epidemiological history);
- examine the infectious patient (inspection, palpation, percussion, auscultation);
- plan laboratory and instrumental examination of the patient;
- interpret the results of laboratory and instrumental examination of the patient;
- highlight leading clinical and clinical-laboratory syndromes;
- estimate the differential-diagnostic value of existing symptoms and syndromes;
- conduct a differential diagnosis between diseases with similar clinical symptoms;
- estimate the severity of infectious disease;
- predict the course and outcome of infectious disease;
- diagnose of infectious patients in emergencies and provide immediate (emergency) and the first medical assistance, as well as determine further medical tactics by threatening conditions;
- identify the indications for hospitalization and outpatient infectious disease;
- define indications to consult other specialists;
- conduct a complex of medical and preventive care at the pre-hospital stage;
- implement the clinical observation for convalescent and rehabilitation according to the severity of the disease and pathological conditions.

**To possess:**

- general clinical examination methods (questioning, inspection, palpation, percussion, auscultation) for diagnosis and differential diagnosis of major clinical syndromes of infectious diseases;
- the algorithm of laboratory and instrumental examination for suspected presumed infectious pathology;
- the interpretation of the results of laboratory and instrumental methods of diagnosis when dealing with infectious patients;
- the algorithm setting the preliminary diagnosis of patients with suspected infectious pathology;
- the algorithm of setting the expanded clinical diagnosis in infectious pathology;
- the technique of formalization of medical history (patient card) outlining it all main sections, justify clinical diagnosis, evaluation and treatment plan, as well as diaries and landmark epicrisis when working with infectious patients; proper conduct of other medical documentation when working with infectious patients;
- skills in diagnosing infectious patients with emergency conditions and the first medical assistance in emergency and life-threatening conditions.

#### 4. Content of the discipline and types of study

Estimate score of the discipline consist of 3 credits.

Study of phthysiology takes place at the department of tuberculosis (labour consist of 1 credit)

Study of **infectious diseases** takes place at the department of infectious diseases with course of epidemiology (**labour consist of 3 credits**).

	Types of study	Total hours	Semester
			VII
1.	<b>Auditorium classes (academical hours)</b>	48	48
	Including:	-	-
1.1.	Lectures		
1.2.	Other classes	-	-
	<i>Including:</i>	-	-
1.2.1.	<i>Practical clinical studies (PS)</i>	48	48
1.2.2.	<i>Seminars (S)</i>	-	-
1.2.3.	<i>Laboratory work (LW)</i>	-	-
	Self-study (TOTAL)	60	60
	Total	108	108
	hours	3	3
	credits		

#### 5. Content of the discipline

##### 5.1. Content of the discipline by courses

№ b/o	Name of the course	Content of the course
1.	General part	Modern state of the problem of infectious diseases. Properties of the causative agents of infectious diseases. Modern methods of laboratory diagnostics of infectious diseases. Principles of treatment of infectious diseases. Tactics of a dentist if infectious disease is suspected in patient.
2.	Bacterioses	Diphtheria. Etiology. Sources and routes of infection. Pathogenesis. Oral lesions. Outcomes. Differential diagnosis. Laboratory diagnosis. Principles of treatment. Prevention. Sepsis. Pathogenesis basis of prevention, diagnosis and treatment. Odontogenic sepsis, causes, prevention, diagnosis and treatment. Chlamydial infections. The clinic, diagnosis, treatment. Streptococcal infection: acute tonsillitis (angina), erysipelas of face, scarlet fever. Epidemiology. Pathogenesis. Clinic. Laboratory diagnosis. Complications. Principles of treatment. Tetanus. Etiology. Epidemiology. Pathogenesis. Clinical manifestations. Laboratory diagnosis. Treatment. Prevention.

		<p>Etiology and pathogenesis of tuberculosis. Methods of diagnosis of tuberculosis. Clinical manifestations of tuberculosis. Extra pulmonary tuberculosis (tuberculosis of other organs and systems). Treatment of tuberculosis. Tuberculosis and related diseases. The fight against tuberculosis in the Russian Federation.</p>
3.	Virus diseases	<p>Influenza, adenovirus infection and other acute viral respiratory disease. Etiology. The source of infection, the ways of distribution. Pathogenesis. The clinical course. Oral complications. Specific rapid diagnosis. Principles of treatment. Prevention.</p> <p>Herpesvirus disease. Classification. Etiology. Sources of infection. Mechanism of infection. Pathogenesis. The persistence of the pathogen. Clinical manifestations. Lesions of the oral mucosa. Complications. Treatment.</p> <p>Immunotherapy. Epstein-Barr viral infection. The clinic, diagnosis, treatment.</p> <p>Mumps infection (epidemic mumps). Etiology. Epidemiology. Pathogenesis. Clinical manifestations. Symptoms lesions of the salivary glands. Complications. Treatment. Prevention.</p> <p>Infection caused by the human immunodeficiency virus (HIV) infection. Etiology. Sources and routes of transmission. Pathogenesis. Clinical manifestations at different stages of the disease. Manifestations of HIV infection from the oral mucosa. Laboratory diagnosis. Measures to prevent HIV infections in dental practice patients.</p> <p>Viral hepatitis with parenteral route of infection. The etiology of hepatitis B, C, D. The mechanism of transmission. Pathogenesis. Clinical course. Complications. Outcomes. Approach to the Patient. Preventing nosocomial infection when working with patients with hepatitis. Prevention.</p> <p>Enteric viral hepatitis (A, E). Clinic, diagnostic, treatment.</p> <p>Measles. Etiology. Epidemiology. Pathogenesis. The main symptoms of measles in different periods of the disease in adults. Complications. Treatment. Preventive measures.</p> <p>Rubella. Etiology. Epidemiology. Pathogenesis. Clinical symptoms in adults rubella. Laboratory diagnosis. Complications. Principles of treatment. Preventive measures. Rubella in pregnant women.</p>
	<p>Etiopathogenesis. Etiology of tuberculosis.</p>	<p>Taxonomic characteristics of the MBT, its features and basic species qualities. Pathogenesis of tuberculosis. Pathomorphology of tuberculous inflammation. Ways and methods of TB infection. Primary and secondary TB.</p>

Diagnosis of tuberculosis	Classification of tuberculosis. Clinical manifestations of tuberculosis of the respiratory system. Physical features of pulmonary tuberculosis. Methods of diagnosing tuberculosis. The rules for sputum collection and the frequency of study in a patient with suspected tuberculosis. Methods for identifying the MBT, their diagnostic sensitivity, specificity, disadvantages and advantages. Classification of tuberculosis according to ICD-10. Clinical classification of tuberculosis. Primary tuberculosis (primary tuberculosis complex, tuberculosis of intrathoracic lymph nodes). Secondary tuberculosis (focal, infiltrative, disseminated, caseous pneumonia, tuberculoma, cavernous, fibrous-cavernous, cirrhotic). Tuberculous pleurisy / empyema
Tuberculosis in dentist practice.	Infectious anti-TB control in a medical institution. Oral tuberculosis. Tuberculosis (TB) Precautions for Outpatient Dental Settings
Organization of prevention of tuberculosis	Logistics of health care delivery to tuberculosis patients in the Russian Federation. Regulations of health care for tuberculosis patients in the medical organizations. Antitubercular dispensary. Specific prevention of tuberculosis. Vaccination. Chemoprophylaxis. Social and sanitary prevention of tuberculosis.

## 5.2. Courses of the discipline and types of trainings.

№ b/o	Name of the course of the discipline	Lectures			Self-study work	Total hours
			Practical	Clinical studies		
1.	General part	2	2		6	10
2.	Bacteriosis		10		12	22
3.	Virus disease		20		21	41
4.	Epidemiology of tuberculosis	1	1		3	5
5.	Diagnosis and principles of treatment of tuberculosis	1	3		6	10
6.	Tuberculosis in the practice of a dentist		4		6	10
7.	Tuberculosis prevention and organization of anti-tuberculosis assistance to the population		4		6	10
	<b>Total</b>	<b>4</b>	<b>44</b>		<b>60</b>	<b>108</b>

## 6. Laboratory work (if available) is not provided

## 7. Practical clinical studies

№ b/o	Name of the thesis's of practical studies of general part of the discipline according to FSES and forms of control	Value by semesters
		VII
1	Properties of the causative agents of infectious diseases. Modern methods of laboratory diagnostics of infectious diseases. Principles of treatment of infectious diseases. Tactics of a dentist if infectious disease is suspected in a patient.	2
2	Diphtheria. Etiology. The sources and pathways of infection. Pathogenesis. The defeat of the oral cavity. Outcomes. Differential diagnosis. Laboratory Diagnostics. Principles of treatment. Prevention.	4
3	Sepsis. Pathogenesis, basis of prevention, diagnosis and treatment. Odontogenic sepsis, causes, prevention, diagnosis and treatment.	4
4	Chlamydial infections. The clinic, diagnosis, treatment, prevention foundations.	Self-study
5	Streptococcal infection: acute tonsillitis (angina), erysipelas of face, scarlet fever. Epidemiology. Pathogenesis. Clinic. Laboratory diagnosis. Complications. Principles of treatment.	Self-study
6	Tetanus. Etiology. Epidemiology. Pathogenesis. Clinical manifestations. Laboratory diagnosis. Treatment. Prevention.	Self-study
7	Influenza, adenovirus infection and other acute viral respiratory disease. Etiology. The source of infection, the ways of distribution. Pathogenesis. The clinical course. Oral complications. Specific rapid diagnosis. Principles of treatment. Prevention. Immunotherapy. Rubella. Etiology. Epidemiology. Pathogenesis. Clinical symptoms in adults rubella. Laboratory diagnosis. Complications. Principles of treatment. Preventive measures. Rubella in pregnant women.	4
8	Herpesvirus disease. Classification. Etiology. Sources of infection. Mechanism of infection. Pathogenesis. The persistence of the pathogen. Clinical manifestations. Lesions of the oral mucosa. Complications. Treatment.	4
9	Epstein-Barr viral infection. Clinical manifestations of primary infection and immunodeficiency conditions (including oral), diagnosis, treatment, prevention.	4



10	Mumps infection (epidemical mumps). Etiology. Epidemiology. Pathogenesis. Clinical manifestations. Symptoms lesions of the salivary glands. Complications. Treatment. Prevention.	4
11.	Infection caused by the human immunodeficiency virus (HIV) infection. Etiology. Sources and routes of transmission. Pathogenesis. Clinical manifestations at different stages of the disease. Manifestations of HIV infection from the oral mucosa. Laboratory diagnosis. Measures to prevent HIV infections in dental practice patients.	4
12.	Viral hepatitis with parenteral route of infection. The etiology of hepatitis B, C, D. The mechanism of transmission. Pathogenesis. Clinical course. Complications. Outcomes. Approach to the Patient. Preventing nosocomial infection when working with patients with hepatitis. Prevention.	4
13.	Enteric viral hepatitis (A, E). Clinic, diagnostic, treatment.	Self-study
14	Measles. Etiology. Epidemiology. Pathogenesis. The main symptoms of measles in different periods of the disease in adults. Complications. Treatment. Preventive measures.	Self-study
15.	Rubella. Etiology. Epidemiology. Pathogenesis. Clinical symptoms in adults rubella.	Self-study
16.	Taxonomic characteristics of the causative agent of tuberculosis; the main species properties of the MBT; pathogenicity and virulence of MBT. Pathogenesis of tuberculosis development; concept of latent tuberculosis infection. Pathomorphology of tuberculous inflammation.	1
17	Complaints of suspicious tuberculosis, features of respiratory and intoxication syndromes in tuberculosis. Sensitivity and specificity of different methods of identifying the strain; timing of the results. Types of drug resistance MBT; mechanisms of its formation.	2
18	Clinical and X-ray classification of tuberculosis.	3
19	Principles of treatment of tuberculosis. Basic and reserve anti-tuberculosis drugs. Principles of the formation of regimens of chemotherapy for tuberculosis, the timing of treatment. Mode and nutrition of the patient with tuberculosis. Therapy of emergency conditions in phthisiatric practice.	2

20	<p>Tuberculosis of the facial skin: classification, clinical manifestations, diagnosis, treatment.</p> <p>Tuberculosis of peripheral lymph nodes: classification, clinical manifestations, diagnosis, treatment.</p> <p>Tuberculosis of the larynx: classification, clinical manifestations, diagnosis, treatment.</p> <p>Tuberculosis of the oral cavity, language: clinical manifestations, diagnosis, treatment.</p> <p>Tuberculosis of the bones of the skull, face: clinical and radiological manifestations, diagnosis, treatment.</p>	2
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## 8. Material and technical support of the discipline:

Clinical bases:

Infectious Clinical Hospital No. 1 - 500 beds

Infectious Clinical Hospital No. 2 - 900 beds

Use of wards, laboratories, class rooms, computers, multimedia systems, laboratory and instrumentation equipment. Sets of slides, tables, multimedia visual materials. Video films. Situational tasks, test tasks on given topics.

## 9. Information support of the discipline

At the department of infectious diseases with a course epidemiology, for lectures and practical (clinical) training software has Microsoft office 365.

Telecommunications educational and information systems: <https://esystem.rudn.ru/>; <http://lib.rudn.ru/>; <http://www.elsevier.com/about/open-access/open-archives>

## 10. Educational and methodological support of the discipline:

### Basic sources

1. Koshechkin V.A., Tuberculosis: Text book in Russian and in English — M.: Publishing house of Peoples friendship Univ. 2017, 276 p
2. Essentials of Clinical Infectious Diseases by William Floyd Wright
3. Harrison's infectious diseases 3rd edition by Dennis kasper
4. Databases, information and reference systems and search systems-
5. Educational and Scientific Information Library Center - <http://lib.rudn.ru/>

### Additional sources

1. Online tuberculosis textbook <http://www.news-medical.net/news/2007/06/20/26673.aspx>
2. Tuberculosis: Current Issues in Diagnosis and Management
3. <http://www.e-booksdirectory.com/details.php?ebook=8772>
4. FDI POLICY STATEMENT.
5. <https://www.fdiworldddental.org/sites/default/files/media/documents/Tuberculosis-and-the-practice-of-dentistry-2003.pdf>
6. Stop TB, site WHO [www.med.pfu.edu.ru/www.stoptb.org/home.html](http://www.med.pfu.edu.ru/www.stoptb.org/home.html)
7. Tuberculosis site of CDC Atlanta [www.cdc.gov/nchstp/tb/](http://www.cdc.gov/nchstp/tb/)
8. The site of the international Union Against Tuberculosis and Lung Disease [www.iatld.org](http://www.iatld.org)

9. The site of Utah Univ. <http://www-medlib.med.utah.edu/WebPath/TUTORIAL/MTB/>
10. e-library for medical students. [www.medicalstudent.com](http://www.medicalstudent.com)
11. Tuberculosis Exposure Control Plan for Low Risk Dental Offices. [http://laneykay.com/Tuberculosis\\_Control\\_Program.pdf](http://laneykay.com/Tuberculosis_Control_Program.pdf)
12. Tuberculosis Prevention of Transmission in CSN Dental Clinics <https://www.csn.edu/sites/default/files/legacy/PDFFiles/EH%26S/Policies/TB.Prevent.Dental.pdf>
13. Wasley A, Grytdal S, Gallagher K, Centers for Disease Control and Prevention (CDC). Surveillance for acute viral hepatitis- 2006. *MMWR Surveill Summ.* 2008 Mar 21. 57 (2):1-24. [Medline].
14. Previsani N, Lavanchy D, World Health Organization. Hepatitis B (WHO/CDS/CSR/LYO/2002.2). 2002. [Full Text].
15. Fattovich G. Natural history of hepatitis B. *J Hepatol.* 2003. 39 suppl 1:S50-8. [Medline].
16. Guidelines for the use of antiretroviral agents in HIV-1-infected adults and adolescents. Department of Health and Human Services. January 10, 2011; 1-174. [Full Text].
17. Harrison's Principles of Internal Medicine, 19th Edition Textbook Infectious Diseases A Clinical Short Course by Frederick S Southwick

Methodical recommendations for students.

- 1) Comprehension of course topics by attending seminars and active participation during seminars
- 2) Attaining the cut-off score of written test.

## **11 Methodical instructions for students**

In accordance with the requirements of Federal standards for higher education, the teaching of the discipline "Infectious Diseases" provides a competence approach in the educational process, which is based on innovative psychological and pedagogical technologies aimed at improving the effectiveness and quality of the formation of the professional skills of students. The main forms of training are: lectures, practical clinical studies (conducted in the classrooms and in the wards of patients with infectious diseases), as well as self study of the student.

The list of topics for classroom activities determines the socio-economic and epidemiological significance of certain infectious and non-infectious diseases, prevention of which is within the competence of the doctor in health care centres and institutions.

Active and interactive forms of training were used in the developed program: discussions, analysis of clinical situations.

For successful completion of the discipline each student is provided with educational materials (thematic plans of lectures and practical clinical studies, educational-methodical literature, test , situational tasks).

Different types of academic work, including self study of the student, contribute to improving perception, self-improvement, self-realization, personal and subject reflection.

Subjects of lectures and practical clinical studies correspond to the content of the discipline program.

Lectures are read on the most important sections of the program. They are problematic in nature and form a systematic understanding of the topic, ensure their understanding of the basic principles and provisions of the discipline "Infectious Diseases", as well as their readiness to perceive scientific and technological innovations and technologies.

Practical clinical classes provide acquisition and consolidation of necessary skills, form professional competencies, readiness for independent and individual work, making responsible decisions in the framework of professional activities in health care centres and institutions

On the practical part of the lesson, the teacher pays attention to the student's ability to logical thinking and self-independence, using in his pedagogical activity an innovative personality-oriented approach to teaching.

The list of practical clinical topics determines the socioeconomic and epidemiological significance of certain infectious diseases in medical treatment facilities (currently HIV infection, parenteral hepatitis, tuberculosis, etc.), as well as the need for students to master the skills of managing patients with infectious disease.

Priority in the conduct of practical clinical sessions is an overview (system) principle, reflecting the general approaches to conducting a complex of diagnostic, therapeutic and preventive measures in the management of patients with infectious diseases.

Practical clinical studies are conducted with the aim of mastering the main theoretical, methodological and organizational sections of the program by the students, as well as developing and consolidating the practical skills in managing patients with infectious diseases in health care centres, as well as in emergency situations.

When conducting practical clinical classes on infectious diseases with students, it is mandatory to identify the initial (basic) level of knowledge with subsequent correction. The result of the lesson is self-understanding of the topics with the help of thematic test tasks. Self-study topics are monitored in a practical lesson using test control.

Individual subjects of sections of discipline students study independently. The content of independent work: reading the basic and recommended additional literature, solving case study, which contributes to the development of cognitive activity, creative thinking of students, installs skills of independent search for information, and also forms the ability and readiness for self-improvement, self-realization and creative adaptation. Self study with basic and additional literature forms the ability to analyze medical and social problems, the ability to use natural science, biomedical and clinical sciences in various kinds of professional and social activities. Self study of students is conducted in off-hour hours and is about 1/2 of the total complexity of the discipline. Assessment of theoretical and practical knowledge of students is carried out using test control, solving situational problems. At the end of the 9th semester, a test is conducted, this includes written and oral. At the end of the 10th semester an intermediate certification is conducted in the form of a course exam.

## **12. Foundation of program evaluation for Intermediate Attestation of Students (Module)**

Materials for assessing the level of mastering the educational material of the discipline "Infectious Diseases, Phthisiology" (evaluation materials), including a list of competencies with an indication of the stages of their formation, a description of indicators and criteria for assessing competencies at various stages of their formation, a description of the assessment scales, typical evaluation tasks or other materials necessary for the assessment of knowledge, abilities, skills and (or) experience of activities, characterizing the stages of the formation of competencies in the process of mastering the educational program, methodological materials that determine the procedures for assessing knowledge, skills and (or) experience of activities that characterize the

stages of formation of competencies , are developed in full and available for students on the course page at TUIS RUDN

This program was set up in the accordance with the requirements of the Educational Program (EP) for Higher Education (HE), Peoples' Friendship University of Russia (RUDN) and the Federal standards for higher education

**Program developers:**

Assistant Professor

K.C. Emerole

Department associate professor

S.L. Voznesenskiy

Professor, department of infectious diseases  
with the course of epidemiology

V.N. Zimina

Professor, Head of the department of infectious diseases  
with the course of epidemiology

G.M. Kozhevnikova

**Head of Program**

Programme director

Deputy Director medical Institute of PFUR

S. N. Razumova