

**SPECIALIST DEGREE PROGRAMME 31.05.01 'GENERAL MEDICINE'**

**COURSE (MODULE) 'Infectious diseases'**

**OVERVIEW**

Mode of study	full time
Faculty	General medicine
Department	Infectious Diseases
Year	5,6
Semester –	10,11
Lectures –	30 ac.h.*
Test (graded) –	11 semester 9 ac.h
Practical classes	120 ac.h
Self-directed learning	201 ac.h
Total workload	360 ac.h (10 credits)

\*ac. h. – academic hours

The course (module) is devised according to FSES HE requirements approved on February,9, 2016 by Order of Ministry of Health, Russian Federation) and vocational functions of General Practitioner (primary care physician, district doctor) Professional Standard.

**1. AIMS OF MASTERING THE DISCIPLINE**

The goals of mastering the discipline of infectious diseases are:

- to familiarize students with the basics of pathological processes occurring in the patient's body in infectious diseases, diagnostic methods, principles of treatment and prevention of infectious diseases.
- formation of an active life position based on knowledge of the peculiarities of the development of the infectious process in modern Russian society; formation of modern ideas about the etiology, pathogenesis, and clinical manifestations of infectious diseases; formation of clinical thinking, consolidation and improvement of the ability to independently establish and justify a clinical diagnosis, use methods of differential diagnosis, and resolve issues of treatment and prevention in patients with typical forms of the main, most frequently observed infectious diseases; formation of skills of relationships with patients using the rules of medical ethics and medical deontology.
- developing skills to present an independent, reasoned and logical point of view, the basics of clinical thinking and the ability to conduct a discussion.

Tasks of the discipline:

- to form the future doctor's clinical thinking on the etiology, pathogenesis and clinical manifestations of infectious diseases;
- implement measures to form a motivated attitude of adults and adolescents to preserve and strengthen their health and the health of others;
- carry out preventive and antiepidemiological measures aimed at preventing the occurrence of infectious diseases;
- perform dispensary monitoring of the adult population and adolescents, taking into account age, gender and initial state of health, carry out measures aimed at improving the effectiveness of medical examinations among the decreed contingents and chronic patients;
- to carry out diagnostics of diseases and pathological conditions in the adult population and adolescents on the basis of proficiency in propaedeutic and laboratory-instrumental research methods;
- diagnose emergency conditions in adults and adolescents;

- provide first aid and pre-medical care to adults and adolescents in emergency situations;
- carry out medical evacuation measures in an emergency situation and provide medical assistance to adults and adolescents in extreme conditions of epidemics, in centers of mass destruction;
- to motivate the adult population, adolescents and their families to introduce elements of a healthy lifestyle, including the elimination of bad habits that adversely affect the health of the younger generation;
- choose medical and non-medical therapy for patients with infectious diseases.

## 2. THE COURSE POSITION IN SPECIALIST DEGREE PROGRAMME 31.05.01 'GENERAL MEDICINE'

The course "Infectious diseases" belongs to the basic part of Block 1 in the specialty " General Medicine " and is studied in 10 and 11 semesters.

*The background knowledge for the course has been taught in \at:*

Bioethics; History Of Medicine; Latin Language; Psychology And Pedagogy; Medical Informatics; Biochemistry; Anatomy; Pathological Anatomy, Clinical Pathological Anatomy; Histology, Embryology, Cytology; Normal Physiology; Microbiology, Virology; Immunology; Pharmacology; Pathophysiology, Clinical Pathophysiology; Hygiene; Public Health And Healthcare, Health Economics; Dermatovenereology; Neurology, Medical Genetics; Otorhinolaryngology; Ophthalmology; Life Safety; Disaster Medicine; Propaedeutics Of Internal Diseases; Hospital Therapy.

- Variable subjects: Microbiology, Immunology, Bacteriology, Virology, Epidemiology

## 3. THE STUDENT'S COMPETENCIES FORMED AS A RESULT OF MASTERING THE DISCIPLINE:

GPC-4	- ability and readiness to implement ethical and deontological principles in professional activities
GPC-6	readiness to maintain medical documentation
GPC-8	readiness to use medicines and other substances and their combinations in solving professional tasks
GPC-10	readiness to provide organization of patient care and primary pre-medical care
PC-5	willingness to collect and analyze patient complaints, medical history, examination results, laboratory, instrumental, pathologic-anatomical and other studies in order to recognize the condition or establish the presence or absence of the disease
PC-6	the ability to determine the patient's main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International statistical classification of diseases and health-related problems, X revision
PC-9	readiness to manage and treat patients with various nosological forms in outpatient and day hospital settings
PC-13	readiness to participate in providing medical assistance in emergency situations, including participation in medical evacuation

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## OUTCOME COMPETENCIES OF THE COURSE

On completing the course a student is expected to:

**1. Know:** ethical and deontological aspects of medical activity in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives; etiology, pathogenesis and prevention of the most common infectious diseases; modern methods of clinical, laboratory, and instrumental examination of infectious patients; maintenance

of standard accounting and reporting medical documentation in medical organizations; pathogenesis of infectious diseases, their main clinical manifestations; criteria for the diagnosis of infectious diseases; the clinical picture, features of the course and possible complications of the most common infectious diseases that occur in a typical form in different age groups; modern classification of infectious diseases; diagnostic methods, diagnostic capabilities of methods of direct investigation of the patient's infectious profile; main methods of laboratory and instrumental diagnostics used in infectology (indications for use, theoretical basis of the method, interpretation of results); indications for hospitalization of an infectious patient; basic principles of treatment of infectious diseases and rehabilitation of patients; treatment methods and indications for their use; indications for outpatient treatment of an infectious patient; principles of medical examination of the population, rehabilitation of patients and over-ill; methods of conducting urgent actions; specific and non-specific prevention of infectious diseases; transportation of an infectious patient to a hospital: isolation rules for hospitalization of patients, sanitary and hygienic requirements for the device, organization of work and mode of infectious hospitals, departments, boxes; features of the organization of work with patients with HIV infection.

**2. To be able to** apply the methods of clinical science in various types of professional and social activities that are used in practice; apply ethical and deontological aspects of medical activity in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives; determine the patient's status: collect anamnesis, conduct a survey of the patient and / or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.); conduct an initial examination of systems and organs: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and joints, eyes, ears, throat, nose; fill in your medical history; make a preliminary diagnosis-synthesize information about the patient in order to determine the pathology and its causes; plan the amount of additional research in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a sufficient result; formulate a clinical diagnosis; develop an action plan, taking into account the course of the disease and its treatment; evaluate the patient's condition in order to make a decision about the need for medical care; choose an individual type of care for the treatment of the patient in accordance with the situation: primary care, hospitalization; use various methods of drug administration; formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents; determine the route of administration, mode and dose of medications, evaluate the effectiveness and safety of the treatment; write a prescription; provide first aid in emergency situations, first aid to victims in lesions in emergency situations.

**3. To provide:** methods of clinical sciences in various types of professional and social activities used in practice; ethical and deontological aspects of medical practice; activities in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives; methods of general clinical examination; interpretation of results of laboratory and instrumental diagnostic methods; correct maintenance of medical records; algorithm for making a preliminary diagnosis and then referring the patient to the appropriate specialist doctor; algorithm for a detailed clinical diagnosis; basic medical and diagnostic measures; algorithm for choosing medication and non-medication therapy for patients with infectious diseases; the main medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions.

**The process of studying the discipline is aimed at the formation of general professional and professional competencies:**

<b>Learning outcomes</b>	<b>Competency developed: a description of (compulsory) threshold level</b>	<b>Competency code</b>
<b>1</b>	<b>2</b>	<b>3</b>
<b>A student knows:</b> - ethical and deontological principles of medical activity in communication with colleagues, secondary and junior medical personnel, adults and adolescents, their parents and relatives <b>A student is able to:</b> - apply ethical and deontological aspects of medical activity in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives <b>A students uses:</b> - ethical and deontological aspects of medical activity in communication with colleagues, secondary and junior medical staff, adults and adolescents, their parents and relatives.	- ability and readiness to implement ethical and deontological principles in professional activities	GPC-4
<b>A student knows:</b> - rules for maintaining approved medical documentation <b>A student is able to:</b> - maintain approved medical records <b>A students uses:</b> - maintenance of the approved medical documents	readiness to maintain medical documentation	GPC-6
<b>A student knows:</b> - medicines used in solving professional tasks <b>A student is able to:</b> - apply medications and other substances and their combinations in solving professional tasks <b>A students uses:</b> - algorithm for prescribing medicines and other substances and their combinations in solving professional tasks.	readiness to use medicines and other substances and their combinations in solving professional tasks	GPC-8
<b>A student knows:</b> - principles of organization of patient care; - methods of providing primary pre-medical care <b>A student is able to:</b> - organize patient care; - conduct primary pre-medical care <b>A students uses:</b> - methods of organization of patient care; - methods for providing primary pre-medical	readiness to provide organization of patient care and primary pre-medical care	GPC-10

health care.		
<p><b>A student knows:</b></p> <ul style="list-style-type: none"> <li>- etiology, pathogenesis and prevention of the most common infectious diseases;</li> <li>- modern methods of clinical, laboratory, and instrumental examination of infectious patients;</li> <li>- maintaining standard accounting and reporting medical documentation in medical organizations.</li> </ul> <p><b>A student is able to:</b></p> <ul style="list-style-type: none"> <li>- determine the patient's status: collect anamnesis, conduct a survey of the patient and / or his relatives, conduct a physical examination of the patient (examination, palpation, auscultation, measurement of blood pressure, determination of the properties of the arterial pulse, etc.);</li> <li>- conduct an initial examination of systems and organs: nervous, endocrine, immune, respiratory, cardiovascular, blood and hematopoietic organs, digestive, urinary, reproductive, musculoskeletal and joints, eyes, ears, throat, nose;</li> <li>- fill out your medical history.</li> </ul> <p><b>A students uses:</b></p> <ul style="list-style-type: none"> <li>- methods of general clinical examination;</li> <li>- interpretation of results of laboratory and instrumental diagnostic methods;</li> <li>- proper maintenance of medical records.</li> </ul>	<p>willingness to collect and analyze patient complaints, medical history, examination results, laboratory, instrumental, pathologic-anatomical and other studies in order to recognize the condition or establish the presence or absence of the disease</p>	PC-5
<p><b>A student knows:</b></p> <ul style="list-style-type: none"> <li>- modern classification of infectious diseases;</li> <li>- diagnostic methods, diagnostic capabilities of methods of direct investigation of the patient's infectious profile;</li> <li>- the main methods of laboratory and instrumental diagnostics used in infectology (indications for use, theoretical basis of the method, interpretation of the results).</li> </ul> <p><b>A student is able to:</b></p> <ul style="list-style-type: none"> <li>- formulate a clinical diagnosis;</li> <li>- develop an action plan, taking into account the course of the disease and its treatment.</li> </ul> <p><b>A students uses:</b></p> <ul style="list-style-type: none"> <li>- algorithm for a detailed clinical diagnosis;</li> <li>- basic medical diagnostic measures.</li> </ul>	<p>the ability to determine the patient's main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International statistical classification of diseases and health-related problems, X revision</p>	PC-6
<p><b>A student knows:</b></p> <ul style="list-style-type: none"> <li>- indications for hospitalization of an infectious patient;</li> <li>- basic principles of treatment of infectious diseases and rehabilitation of patients;</li> <li>- treatment methods and indications for their</li> </ul>	<p>readiness to manage and treat patients with various nosological forms in outpatient and day hospital settings</p>	PC-9

<p>use;</p> <ul style="list-style-type: none"> <li>- indications for outpatient treatment of an infectious patient.</li> </ul> <p><b>A student is able to:</b></p> <ul style="list-style-type: none"> <li>- evaluate the patient's condition in order to make a decision about the need for medical care;</li> <li>- choose an individual type of care for the treatment of the patient in accordance with the situation: primary care, hospitalization;</li> <li>- use various methods of drug administration;</li> <li>- formulate indications for the chosen method of treatment, taking into account etiotropic and pathogenetic agents;</li> <li>- determine the route of administration, mode and dose of medications, evaluate the effectiveness and safety of the treatment;</li> <li>- write a prescription.</li> </ul> <p><b>A students uses:</b></p> <ul style="list-style-type: none"> <li>- algorithm for choosing medication and non-medication therapy for patients with infectious diseases.</li> </ul>		
<p><b>A student knows:</b></p> <ul style="list-style-type: none"> <li>- methods of conducting urgent actions;</li> <li>- specific and non-specific prevention of infectious diseases;</li> <li>- transportation of an infectious patient to a hospital: isolation rules for hospitalization of patients, sanitary and hygienic requirements for the device, organization of work and mode of infectious hospitals, departments, boxes;</li> <li>- features of the organization of work with patients with HIV infection.</li> </ul> <p><b>A student is able to:</b></p> <ul style="list-style-type: none"> <li>- provide first aid in emergency situations, first aid to victims in lesions in emergency situations.</li> </ul> <p><b>A students uses:</b></p> <ul style="list-style-type: none"> <li>- the main medical diagnostic and therapeutic measures to provide first aid in emergency and life-threatening conditions.</li> </ul>	<p>readiness to participate in providing medical assistance in emergency situations, including participation in medical evacuation</p>	<p>PC-13</p>

#### 4. STRUCTURE AND CONTENT OF THE DISCIPLINE

4.1 the total labor intensity of the discipline is 10,0 credits, 360 hours.

№	Academic discipline section	Semester	Types of academic work, including independent work of the student and labor intensity (in hours)				Forms of current monitoring of academic performance (by semester weeks) form of intermediate certification (by semesters)
			Lectures	Practice	Sem	IW	

				<b>classes</b>	<b>inar</b>		
1.	Introduction to Infectology Bacteriosises.	10	8	24	-	24	Survey Testing Clinical analysis of the patient solving situational problems Current control (rating section) Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester Writing a medical history (10th semester)
2.	Viral infection	10	4	24	-	24	Survey Testing Clinical analysis of the patient solving situational problems Current control (rating section) Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester
3.	Helminthiasises. Protozooses. (Moodle)	10	2	8	-	28	Survey Testing Clinical analysis of the patient solving situational problems Current control (rating section) Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester
4.	Rickettsiosises.	10	0	4	-	24	Survey Testing Clinical analysis of the patient solving situational problems Current control (rating section) Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester
5.	Section #1: - Chronic viral hepatitis  -Erysipelas.	11	10	28	-	40	Survey Testing Clinical analysis of the patient solving situational problems Current control (rating section)

	<p>Anthrax. Rabies.</p> <p>-Leptospirosis. Brucellosis. Tetanus.</p> <p>- Pseudotuberculosis. Intestinal yersiniosis.</p> <p>Mycoplasmosis. Ornithosis. Differential diagnosis of pneumonia.</p> <p>- Epstein-Barr infection. Listeriosis. Diphtheria, Differents. diagnosis of angina.</p> <p>- Natural focal diseases of the Voronezh region.</p> <p>Tick-borne infections: Lyme borreliosis, ehrlichiosis, tick-borne encephalitis.</p> <p>- Coronavirus infection (Covid 19)</p>						Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester
6.	<p>Section 2: Differential diagnosis of diseases with lymphadenopathy syndrome Differential diagnosis of diseases with long-term high fever</p>	11	4	20		36	<p>Survey Testing Clinical analysis of the patient solving situational problems Current control (rating section) Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester</p>



	<p>Differential diagnosis of diseases with meningeal syndrome is</p> <p>Differential diagnosis of diseases with jaundice syndrome (and in SDO Moodle)</p> <p>Differential diagnosis of diseases with exanthema and enanthema</p>						
7.	<p>Section 3:</p> <ul style="list-style-type: none"> <li>- Emergency conditions</li> <li>- Laboratory diagnostics of infectious diseases.</li> <li>- Principles of treatment of infectious patients</li> <li>- Specific and non-specific prevention of infectious diseases</li> <li>- Rehabilitation and medical examination of infectious patients.</li> <li>- Protection of medical records</li> </ul>	11	2	12		25	<p>Survey</p> <p>Testing</p> <p>Clinical analysis of the patient solving situational problems</p> <p>Current control (rating section)</p> <p>Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester</p>
<b>Total: 324 ч.</b>			<b>30</b>	<b>120</b>		<b>201</b>	
		<b>Exam: 9 ч.</b>					

### Main sections of the work program of the discipline

TYPE OF ACADEMIC WORK		TOTAL HOURS/ CREDIT UNIT	SEMESTER №10	SEMESTER №11
<b>Classroom classes (total), including:</b>		<b>150</b>	<b>74</b>	<b>76</b>
Lectures (L)		30	14	16
Practical classes (PC)		120	60	60
<b>Independent work of the student (IWS):</b>		<b>201</b>	<b>106</b>	<b>95</b>
Writing prescriptions		31	22	9
Abstract (writing and defense)		27	27	-
Preparation for classes (PC)		66	36	30
Preparation for the current control (PCC)		39	17	22
Preparation for interim control of the (PIC)		38	-	38
Type of intermediate certification test	Final test (FT)			
	Exam (E)			<b>9</b>
<b>TOTAL: Total labor intensity Hour.</b>	<b>HOURL</b>	<b>360</b>	<b>180</b>	<b>180</b>
	<b>CU</b>	<b>10,0</b>	<b>5,0</b>	<b>5,0</b>

Head of the Infectious  
Disease Department

Kokoreva S. P.