#### 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)

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;

<sup>\*</sup>ac. h. – academic hours

- 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; Dermatovenerology; 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: $\frac{1}{2}$

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

health care.		
	willingness to collect and analyze	PC-5
A student knows:  - etiology, pathogenesis and prevention of the most common infectious diseases;  - modern methods of clinical, laboratory, and instrumental examination of infectious patients;  - maintaining standard accounting and reporting medical documentation in medical organizations.  A student is able to:  - 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	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-5
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 out your medical history.  A students uses: - methods of general clinical examination; - interpretation of results of laboratory and		
instrumental diagnostic methods;		
- proper maintenance of medical records. <b>A student knows</b> :	the ability to determine the patient's	PC-6
<ul> <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> <li>A student is able to:</li> <li>formulate a clinical diagnosis;</li> <li>develop an action plan, taking into account the course of the disease and its treatment.</li> <li>A students uses:</li> <li>algorithm for a detailed clinical diagnosis;</li> <li>basic medical diagnostic measures.</li> </ul>	main pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the International statistical classification of diseases and health-related problems, X revision	
A student knows: - indications for hospitalization of an infectious patient; - basic principles of treatment of infectious diseases and rehabilitation of patients; - treatment methods and indications for their	readiness to manage and treat patients with various nosological forms in outpatient and day hospital settings	PC-9

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use;		
- indications for outpatient treatment of an		
infectious patient.		
A student is able to:		
- 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.		
A students uses:		
- algorithm for choosing medication and non-		
medication therapy for patients with		
infectious diseases.		
A student knows:	readiness to participate in providing	PC-13
- methods of conducting urgent actions;	medical assistance in emergency	
- specific and non-specific prevention of	situations, including participation in	
infectious diseases;	medical evacuation	
- 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.		
A student is able to:		
- provide first aid in emergency situations,		
first aid to victims in lesions in emergency	1	
situations.		
situations.		
situations. A students uses:		

# 4. STRUCTURE AND CONTENT OF THE DISCIPLINE 4.1 the total labor intensity of the discipline is 10,0 credits, 360 hours.

№	Academic		Types of	academic v	vork, in	Forms of current monitoring	
	discipline		independent work of the student				of academic performance (by
	section	٠	and labor intensity (in hours)				semester weeks) form of
		ster	• • • • • • • • • • • • • • • • • • • •			intermediate certification (by	
		ue					semesters)
		Sen	Lectures	Practice	Sem	IW	

				classes	inar		
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)

	Anthrax. RabiesLeptospirosis. Brucellosis. Tetanus.					Intermediate certification-exam (curation, interview on theoretical issues, solving situational problems, interpretation of laboratory research) - 11 semester
	Pseudotuberculo sis.Intestinal yersiniosis.					
	Mycoplasmosis. Ornithosis. Differential diagnosis of pneumonia.					
	- Epstein-Barr infection. Listeriosis. Diphtheria, Differents.diagn osis of angina.					
	- Natural focal diseases of the Voronezh region.					
	Tick-borne infections: Lyme borreliosis, ehrlichiosis, tick-borne encephalitis.					
	- Coronavirus infection (Covid 19)					
6.	Section 2: Differential diagnosis of diseases with lymphadenopath y syndrome Differential diagnosis of diseases with long-term high fever	11	4	20	36	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

	T				<del>                                     </del>		
	Differential. diagnosis of diseases with meningeal syndrome is Differential. diagnosis of diseases with jaundice syndrome (and in SDO Moodle) Differential diagnosis of diseases with exanthema and enanthema						
7.	Section 3: - Emergency	11	2	12		25	Survey Testing
	conditions						Clinical analysis of the patient
	- Laboratory						solving situational problems
	diagnostics of						Current control (rating section)
	infectious						Intermediate certification-exam
	diseases.						(curation, interview on
	Dringinles of						theoretical issues, solving situational problems,
	- Principles of treatment of						situational problems, interpretation of laboratory
	infectious						research) - 11 semester
	patients						,
	G						
	- Specific and						
	non-specific prevention of						
	infectious						
	diseases						
	-Rehabilitation						
	and medical						
	examination of						
	infectious						
	patients.						
	- Protection of						
	medical records						
Tota	ıl: 324 ч.		30	120		201	
				Exam: 9 ч.			

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

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

Head of the Infectious Disease Department

Kokoreva S. P.