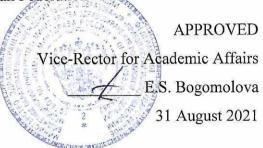
Federal State Budgetary Educational Institution of Higher Education "Privolzhsky Research Medical University" Ministry of Health of the Russian Federation



# WORKING PROGRAM

Name of the academic discipline: EMERGENCIES IN THERAPY

Specialty: **31.05.01 GENERAL MEDICINE** (code, name) Qualification: **GENERAL PRACTITIONER** 

Department: Department of Endocrinology and Internal Medicine

Mode of study: FULL-TIME

Labor intensity of the academic discipline: 72 academic hours

Nizhny Novgorod 2021 The working program has been developed in accordance with the Federal State Educational Standard for specialty 31.05.01 GENERAL MEDICINE approved by Order of the Ministry of Science and Higher Education of the Russian Federation No. 988 of August 12, 2020.

Developers of the working program:

Morozova Elena Pavlovna, Candidate of Medical Sciences, Docent of the Department of Endocrinology and Internal Medicine.

Reviewers: Necrasov Alexey Anatolievich, Doctor of Medical Sciences, Docent, The head of the Department of Faculty and Policlinic Therapy of "Privolzhsky Research Medical University";

Grygorieva Natalia Yurievna, Doctor of Medical Sciences, Docent, The head of the Department of Clinical Medicine of Nyzhegorodsky University named by N.I. Lobachevsky

The program was reviewed and approved at the department meeting of Endocrinology and Internal Medicine.

protocol№ 9, date 15 of April 2021Head of the Department of Endocrinology and Internal Medicine,Doctor of Medical Sciences professor,

(TPOHTAN M. (Strongin L.G.)

15 of April 2021

AGREED Deputy chief of Head of the EMA \_\_\_\_\_\_\_\_ L. V. Lovtsova (signature)

29 of April 2021

# 1. The purpose and objectives of mastering the discipline "Urgent conditions in therapy".

1.1 The purpose of mastering the discipline "Emergency conditions in therapy"

As a result of mastering the discipline program, a graduate should have universal, general professional and professional competencies: CC - 1,4,5; OPC - 1, 4, 5,10; PC - 5, 6, 7, necessary to achieve work functions in accordance with the Professional standard of a medical doctor (district therapist)

Universal competencies:

Systemic and critical thinking (category)

CC-1 is able to carry out a critical analysis of problematic situations based on a systematic approach, to develop a strategy of actions

Communication.

UK-4 is able to apply modern communication technologies, including in a foreign language, for academic and professional interaction

Cross-cultural interaction

UK-5 is able to analyze and take into account the diversity of cultures in the process of intercultural interaction

General professional competencies:

Ethical and legal foundations of professional activity.

OPK-1 is able to implement moral and legal norms, ethical and deontological principles in professional activity

Diagnostic instrumental methods of examination

OPK-4 is capable of using medical devices provided for by the procedure for providing medical care, as well as conducting examinations of the patient in order to establish a diagnosis

Etiology and pathogenesis

OPK-5 is able to evaluate morphofunctional, physiological states and pathological processes in the human body to solve professional tasks

Information literacy

OPK-10 is able to solve standard tasks of professional activity using information, bibliographic resources, medical and biological terminology, information and communication technologies, taking into account the basic requirements of information security

# **Professional:**

Conducting a patient examination in order to establish a diagnosis (labor function)

PC-5 is able to collect complaints, anamnesis of the patient's life and illness, conduct a complete physical examination of the patient (examination, palpation, percussion, auscultation), formulate a preliminary diagnosis and make a plan for laboratory and instrumental examinations of the patient

The PC-6 is able to refer the patient for laboratory, instrumental examination, for consultation with specialist doctors if there are medical indications in accordance with the current procedures for providing medical care, on issues of providing medical care taking into account the standards of medical care, as well as to refer the patient for specialized medical care in inpatient conditions or in a day hospital when availability of medical indications in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care

PC-7 is able to carry out differential diagnostics with other diseases/conditions, including urgent ones, to establish a diagnosis taking into account the current international statistical classification of diseases and health-related problems (ICD)1. The purpose and objectives of mastering the academic discipline\_\_\_\_\_\_ (hereinafter – the discipline):

1.2. Objectives of the discipline:

1. To form knowledge of symptoms, syndromes, features of anamnesis, modern methods

of clinical, laboratory and instrumental examination of patients with diseases of internal organs; etiology, pathogenesis, clinical manifestations, features of the course and possible complications occurring in typical form in adult patients of various age groups; diagnostic criteria of diseases and emergency conditions; methodology of diagnosis in accordance with the modern International Statistical Classification of Diseases ICD-10 (11)

2. To form the ability to determine the status of the patient: to collect anamnesis, to conduct a survey of the patient and / or his relatives, to conduct a physical examination of the patient (examination, palpation, percussion, auscultation, blood pressure measurement, etc.); to conduct an initial examination of all body systems.

3. To form skills: evaluation of the results of physical examination of patients with diseases of internal organs; interpretation of the results of laboratory, instrumental diagnostic methods; drawing up an algorithm for making a detailed clinical diagnosis in accordance with the modern International Statistical Classification of Diseases ICD-10 (11)

4. To provide the opportunity to acquire practical experience in the diagnosis of diseases of internal organs in a simulation center

Upon completion of the course of Propaedeutics of internal diseases, which includes a series of lectures, clinical practical classes, independent work, the student must:

### Know:

• Algorithm of examination of therapeutic patients, rules and stages of examination of the patient, physical methods of examination of the patient;

• Anatomical and physiological, age and sexual characteristics of a healthy and sick person;

• The causes of the main pathological processes in the body and the mechanisms of their development; etiology, pathogenesis and preventive measures of the most common diseases;

• The main clinical symptoms and syndromes of diseases of internal organs, urgent conditions in patients with various therapeutic diseases, taking into account their course;

• Symptomatology of the most common diseases of internal organs, clinical picture, features of the course and possible complications of the most common diseases occurring in a typical form in different age groups;

• Classical diagnostic methods, their diagnostic capabilities in the examination of a patient with a therapeutic profile, modern methods of clinical, laboratory, instrumental examination of patients (immunological, endoscopic, radiation diagnostic methods);

• Methodology of diagnosis, diagnostic criteria. Principles of clinical diagnosis in a therapeutic patient in accordance with the modern International Statistical Classification of Diseases ICD-10 (11);

• The structure of the medical history and the rules for filling it out and maintaining;

• Lexical minimum of general and terminological character, basic medical terminology in Latin and foreign languages;

• Principles of ethics and deontology, rules of conduct of a doctor with colleagues, with secondary and junior medical staff, with a patient, with his relatives;

• Factors shaping human health; diseases associated with the adverse effects of climatic and social factors.

#### Be able to:

• Conduct a survey of the patient or his relatives, collect anamnesis of life and history of the disease in order to determine the status of the patient and obtain complete information about the disease, establishing possible causes of its occurrence in typical cases;

• Assess the factors affecting the patient's physical and psychological health: professional, environmental, cultural, ethnic, religious, individual, family, social risk factors;

• Conduct a clinical examination of patients using physical methods (examination, percussion, palpation, auscultation, measurement of blood pressure, respiratory rate, pulse) and identify objective signs of the disease;

• Conduct an initial examination of the patient's systems and organs;

• Identify the main pathological symptoms and syndromes, urgent conditions in patients with various therapeutic diseases, taking into account their course and substantiate them;

• Establish, substantiate and formulate a clinical diagnosis of the most common diseases of internal organs occurring in a typical form in accordance with the International Classification of Diseases ICD 10 (11);

• Assess the patient's condition and priorities for making a decision on the need to provide him with medical care: critical condition, pain syndrome, chronic disease, infectious disease, disability, geriatric problems;

• To plan the volume of additional laboratory and instrumental studies in accordance with the prognosis of the disease, to clarify the diagnosis and obtain a reliable result;

• Decipher typical ECGs in 12 leads of a healthy person, as well as patients with the most frequent rhythm and conduction disorders, with ventricular myocardial hypertrophy, acute myocardial infarction and chronic forms of coronary artery disease;

• Evaluate the results of a general blood test, urine, sputum, feces, pleural effusion, as well as a biochemical blood test;

• To determine changes in the main pulmonary syndromes from the radiograph of the lungs;

• Evaluate the results of ultrasound examination of internal organs and the results of echocardiography;

• Present the results of the examination of the patient in the form of a medical history with justification of the preliminary diagnosis, registration of a temperature sheet and drawing up a plan for further examination of the patient. To report the patient's medical history at a medical conference;

• Work with scientific and medical literature;

• Make a public presentation, report, and lead a discussion;

• To train patients and their relatives in basic hygienic measures of a health-improving nature, skills of self-control of basic physiological indicators that contribute to the preservation and promotion of health, disease prevention.

• To carry out their activities taking into account the moral, ethical and legal norms accepted in society, to keep medical secrets;

• Build and maintain working relationships with other members of the team; protect the rights of the doctor and the patient;

• Work with texts of professional content in a foreign language, use at least 900 terminological units and term elements;

Have practical experience:

• Applying medical knowledge in practice;

• Communication with medical personnel, with patients and their relatives, taking into account ethnic, confessional and cultural differences, ethical and deontological aspects of medical activity;

• Work with patients to inform them and their relatives in accordance with the requirements of the "informed consent" rules;

• The use of foreign languages to the extent necessary for communication and obtaining information from foreign sources, reading and writing skills in Latin clinical and pharmaceutical terms and recipes;

• Work with modern medical scientific literature and regulatory documents;

• Collaboration with colleagues of related specialties;

• Conducting a physical general clinical examination of the patient (survey, examination, palpation, percussion, auscultation, blood pressure measurement, assessment of pulse characteristics, respiration, ECG);

• Filling in the inpatient patient's medical history;

• Carrying out diagnostic measures of pathological symptoms and syndromes, urgent conditions

in patients with various therapeutic diseases, taking into account their course;

• Interpretation of the results of laboratory, instrumental studies and methods of radiation diagnostics;

• Making a clinical diagnosis in a therapeutic patient, taking into account generally accepted requirements and the International Classification of Diseases ICD10 (11);

• Development of a plan of therapeutic and preventive measures taking into account the peculiarities of the development and course of the disease;

• Work on teaching patients and their relatives basic hygienic measures of a health-improving nature, skills of self-control of basic physiological indicators that contribute to the preservation and promotion of health, disease prevention.;

• Work on a personal computer using modern statistical programs of medical statistics and analysis.

# 2. Position of the academic discipline in the structure of the General Educational Program of Higher Education (GEP HE) of the organization.

2.1. The discipline belongs to the academic cycle of Block 1 of the Discipline (modules), the variable part, the discipline of choice B1.V.DV.1

The discipline is studied in the fifth semester.

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2.2. To study the discipline requires knowledge, skills and practical experience formed by previous disciplines and practices: physics, mathematics, chemistry, bioorganic chemistry, biology, anatomy, patient care, biochemistry, clinical aspects of biochemistry, normal physiology, methods of research of physiological functions, pathological physiology, clinical pathophysiology, pathological anatomy, clinical pathological anatomy, pharmacology, first aid, educational practice – patient care of therapeutic profile.

2.3. The study of the discipline is necessary to gain knowledge, skills and practical experience formed by subsequent disciplines and practices: faculty therapy, occupational diseases, polyclinic therapy, hospital therapy, endocrinology, infectious diseases, rheumatology, gastroenterology, fundamentals of emergency care, industrial practice - physician assistant, industrial practice – assistant physician outpatient clinic.

# 3. Deliverables of mastering the academic discipline and metrics of competence acquisition

As a result of mastering the discipline, Code and name of the students should: The content of Compete the competence competence the nce code able be (or its part) acquisition metric know possess to UC-1 is able to carry 1. IUK 1.1 methods research of

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Mastering the discipline aims at acquiring the following universal (UC) or/and general professional (GPC) or/and professional (PC) competencies

Knows: methods

scientific

analysis

achievements;

critical analysis and

evaluation of modern

principles of critical

				<b>.</b>	
	strategy for	IUK 1.2 is able to:	nts; basic	data on	other
	actions of	gain new knowledge	principles	complex	methods of
		based on analysis,	of critical	scientific	intellectual
		synthesis, etc.; collect	analysis	problems	activity;
		data on complex		related to	development
		scientific problems		the	of an action
		related to the		profession	strategy for
		professional field;		al field; to	solving
		search for information		search for	professional
		and solutions based on		informatio	problems
		actions, experiment		n and	
		and experience		solutions	
		IUK 1.3 Has		based on	
		practical experience:		actions,	
		researching the		experiment	
		problems of		and	
		professional activity		experience	
		using analysis,		· ·	
		synthesis and other			
		methods of intellectual			
		activity; developing			
		strategies for solving			
		professional problems			
		methods of critical			
		analysis and evaluation			
		of modern scientific			
		achievements; basic			
		principles of critical			
		analysis to gain new			
		knowledge based on			
		analysis, synthesis,			
		etc.; collect data on			
		complex scientific			
		problems related to to			
		the professional field;			
		to search for			
		information and			
		solutions based on			
		actions, experiment			
		and experience			
UC-4	is able to apply	4.1 Knows: the	fundame	express	writing
	modern	basics of oral and	ntals of	your	skills related
	communication	written communication	oral and	thoughts in	to
	technologies,	in Russian and foreign	written	Russian	professional
	including in a	languages, functional	communic	and a	activity;
	foreign	styles of the native	ation in	foreign	experience in
	language(s), for	language, requirements	Russian	language	translating
	academic and	for business	and	in business	medical texts
	professional	communication,	foreign	communic	from a
	interaction	modern means of	languages,	ation	foreign
		information and	functional		language into
		communication	styles of		Russian;
	1	communication	styles 01		russian,

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		technologies	the native		experience in
		IUK 4.2 Can:	language,		speaking
		express your thoughts	requireme		Russian and
		in Russian and a	nts for		foreign
		foreign language in	business		languages
		business	communic		
		communication	ation,		
		Russian Russian	modern		
		Specialist	means of		
		4.3 Has practical	informatio		
		experience: drafting	n and		
		texts in Russian and	communic		
		foreign languages	ation		
		0 0 0			
		related to professional	technologi		
		activities; experience	es		
		in translating medical			
		texts from a foreign			
		language into Russian;			
UC-5	is able to	IUK5.1Knows: the	the main	to	skills of
	analyze and take	main categories of	categories	present	productive
	into account the	philosophy, the laws of	of	profession	interaction in
	diversity of	historical	philosophy	al	а
	cultures in the	development, the	, the laws	informatio	professional
	process of	basics of intercultural	of	n	environment,
	intercultural	communication; the	historical	competentl	taking into
	interaction of	basic concepts of	developme	y and in an	account
		human interaction in	nt, the	accessible	national,
		the organization	basics of	manner in	ethno-
		5.2 will be able to:		the process	cultural,
			al	of	confessional
		present professional information		-	
			communic	intercultur	characteristic
		competently and in an	,		s;
		accessible manner in		interaction	overcoming
		the process of	concepts	; to	communicati
		intercultural	of human	observe	ve,
		interaction; observe	interaction	ethical	educational,
		ethical norms and	in the	norms and	ethnic,
		human rights; analyze	organizatio	human	confessional
		the features of social	n	rights; to	and other
		interaction taking into		analyze the	barriers in
		account national,		features of	the process
		ethno-cultural,		social	of
		confessional		interaction	intercultural
		characteristics		taking into	interaction
		IUK 5.3 Has		account	
		practical experience in:		national,	
		productive interaction		ethno-	
		-		cultural,	
		1		,	
		environment, taking		confession	
		into account national,		al	
		(1 1, 1		1	
		ethno-cultural, confessional		characteris tics	

		characteristics;			
		overcoming			
		communicative,			
		educational, ethnic,			
		confessional and other			
		barriers in the process			
		of intercultural			
		interaction.			
OPC-1	is able to	IOPK 1.1 Knows:	legal	apply	practical
	implement moral	fundamentals of	aspects of	rules and	experience:
	and legal norms,	medical ethics and	medical	norms of	solving
	ethical and	deontology;	activity to	interaction	standard
	deontological	fundamentals of	apply	of a doctor	tasks of
	principles in	legislation in the field	ethical	with	professional
	professional	of healthcare; legal	norms and	colleagues	activity
	activity	aspects of medical	principles	and	based on
		activity	of	patients	ethical norms
		IOPC 1.2 is able to:	behavior	(their legal	and
		apply ethical norms	of a	representat	deontological
		and principles of	medical	ives)	principles
		behavior of a medical	worker		when
		worker in the	when		interacting
		performance of their	performing		with
		professional duties;	their		colleagues
		knowledge of modern	profession		and patients
		legislation in the field	al duties;		(their legal
		of healthcare in	knowledge		representativ
		solving professional	of modern		es),
		tasks; apply rules and	legislation		knowledge of
		norms of interaction of	in the field		legal aspects
		a doctor with	of		of medical
		colleagues and patients			activity
		(their legal	when		
		representatives)	solving		
		IOPK 1.3 Has	problems		
		practical experience:	of		
		solving standard tasks	profession		
		of professional activity	al activity;		
		on the basis of ethical			
		norms and			
		deontological			
		principles when			
		interacting with			
		colleagues and patients (their legal			
		(their legal representatives),			
		knowledge of legal			
		aspects of medical			
		activity			
OPC-4	is able to use	IOPK 4.1 Knows the	collect	collect	collection
010-4	medical devices	methodology for	complaints	complaints	of
	provided for by	collecting anamnesis	anamnesis	anamnesis	complaints,
	Provided for by	concerning ananinesis	ununnicolo	ununnosis	comptunits,

the meandum for	of life and disasses	of life and	of life and	onomnosis of
the procedure for	of life and diseases,		of life and	
providing	complaints from	disease in	disease in	life and
medical care, as	patients (their legal	patients	patients	disease in
well as to	representatives); the	(their legal	(their legal	patients
conduct	methodology of	representat	representat	(their legal
examinations of		ives),	ives),	representativ
the patient in	physical examination;	identify	identify	es),
order to establish	clinical picture,	risk factors	risk factors	identification
the diagnosis	methods of diagnosis	and causes	and causes	of risk
	of the most common	of	of	factors and
	diseases; methods of	diseases;	diseases;	causes of
	laboratory and	apply	apply	diseases;
	instrumental studies to	methods of	methods of	examination
	assess the state of	examinatio	examinatio	and physical
	health, medical	n and	n and	examination
	indications for	physical	physical	of patients;
	conducting research,	examinatio	examinatio	diagnosis of
	rules for interpreting	n of	n of	the most
	their results;	patients;	patients;	common
	international statistical	interpret	interpret	diseases;
	classification of	the results	the results	identification
	diseases and health-	of	of	of risk
	related problems	examinatio	examinatio	factors for
	(ICD); conditions	n and	n and	major
	requiring emergency	physical	physical	oncological
	medical care; the	examinatio	examinatio	diseases;
	procedure for the use	n of	n of	formulation
	of medical devices in	patients;	patients;	of a
	accordance with	diagnose	diagnose	preliminary
	current medical	the most	the most	diagnosis,
	procedures, clinical	common	common	drawing up a
	recommendations	pathology	pathology	plan for
	(treatment protocols)	in patients;	in patients;	instrumental,
	on the provision of	identify	identify	laboratory,
	medical care, care	risk factors	risk factors	additional
	taking into account the	for	for	studies,
	standards of medical	oncologica	oncologica	consultations
	care	1 diseases;	1 diseases;	of specialist
	IOPC 4.2 is able to:	formulate	formulate	doctors;
	collect complaints, anamnesis of life and	a preliminar	a preliminar	referrals of
		preliminar	preliminar	patients for instrumental,
	1	y diagnosis,	y diagnosis,	
	· U			laboratory, additional
	representatives), identify risk factors	make a plan for	make a plan for	studies,
	and causes of disease	conducting	conducting	consultations
		laboratory,	laboratory,	of specialist
	development; apply methods of	instrument	instrument	doctors in
	examination and	al and	al and	accordance
	physical examination	additional	additional	with current
	1 0			
	of nationter internet	ST11/110C 10	studies in	medical care
	of patients; interpret the results of	studies in patients in	studies in patients in	medical care procedures,

	· · · ·		•	1 1
	examination and	accordance	accordance	clinical
	physical examination	with the	with the	recommendat
	of patients; diagnose	procedures	procedures	ions, taking
	the most common	for	for	into account
	pathology in patients;	providing	providing	medical care
	identify risk factors for	medical	medical	standards;
	cancer; formulate a	care,	care,	interpretation
	preliminary diagnosis,	clinical	clinical	of data from
	make a plan for	recommen	recommen	additional
	conducting laboratory,	dations,	dations,	(laboratory
	instrumental and	taking into	taking into	and
	additional studies in	account	account	instrumental)
	patients in accordance	the	the	examinations
	with the procedures for	standards	standards	of patients;
	providing medical	of medical	of medical	making a
	care, clinical	care; refer	care; refer	preliminary
	recommendations,	patients to	patients to	diagnosis in
	taking into account the	laboratory,	laboratory,	accordance
	standards of medical	instrument	instrument	with the
	care; refer patients to	al and	al and	international
	laboratory,	additional	additional	statistical
	instrumental and	studies in	studies in	classification
	additional studies in	accordance	accordance	of diseases
	accordance with the	with the	with the	and health-
	current procedures for	current	current	related
	÷			
	providing medical	procedures for	procedures	problems
	care, clinical	-	for	(ICD);
	recommendations,	providing	providing	differential
	taking into account the	medical	medical	diagnosis of
	standards of medical	care,	care,	diseases;
	care; refer patients for	clinical	clinical	recognition
	consultations with		recommen	of conditions
	specialist doctors in	dations,	dations,	arising from
	accordance with the	taking into	taking into	sudden acute
	procedures for	account	account	diseases,
	providing medical	the	the	exacerbation
	care, clinical	standards	standards	of chronic
	recommendations,	of medical	of medical	diseases
	taking into account the	care; refer	care; refer	without
	standards of medical	patients for	patients for	obvious signs
	care; interpret and	consultatio	consultatio	of a threat to
	analyze the results of	ns with	ns with	the patient's
	consultations by	specialist	specialist	life and
	specialist doctors of	doctors in	doctors in	requiring
	patients; interpret and	accordance	accordance	medical care
	analyze the results of	with the	with the	in an urgent
	basic (clinical) and	procedures	procedures	form; the use
	additional (laboratory,	for	for	of medical
	instrumental)	providing	providing	devices in
	examination methods;	medical	medical	accordance
	conduct differential	care,	care,	with current
	diagnosis of diseases	clinical	clinical	medical

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	in patients; to identify	recommen	recommen	procedures,
	clinical signs of	dations,	dations,	clinical
	sudden acute diseases,	taking into	taking into	recommendat
	conditions,	account	account	ions
	exacerbations of	the	the	(treatment
	chronic diseases	standards	standards	protocols) on
	without obvious signs	of medical	of medical	the provision
	of life-threatening,	care;	care;	of medical
	requiring medical care	interpret	interpret	care, care
	in an urgent form; to	and	and	taking into
	use medical devices in	analyze the	analyze the	account the
	accordance with	results of	results of	standards of
	current medical	consultatio	consultatio	medical care
	procedures, clinical	ns by	ns by	
	recommendations	specialist	specialist	
	(treatment protocols)	doctors of	doctors of	
	on the provision of	patients;	patients;	
	medical care,	interpret	interpret	
	assistance taking into	and	and	
	account the standards	analyze the	analyze the	
	of medical care	results of	results of	
	IDOPK 4.3 Has	basic	basic	
	practical experience in:	(clinical)	(clinical)	
	collecting complaints,	and	and	
	anamnesis of life and	additional	additional	
	disease in patients	(laboratory	(laboratory	
	(their legal	,	,	
	representatives),	instrument	instrument	
	identifying risk factors	al)	al)	
	and causes of disease	examinatio	examinatio	
	development;	n methods;	n methods;	
	examination and		conduct differential	
	physical examination	differential		
	of patients; diagnosis of the most common	diagnosis of diseases	diagnosis of diseases	
	diseases; identification	in patients;	in patients;	
	of risk factors for	to identify	to identify	
	major oncological	clinical	clinical	
	diseases; formulation	signs of	signs of	
	of a preliminary	sudden	sudden	
	diagnosis, drawing up	acute	acute	
	a plan for instrumental,	diseases,	diseases,	
	laboratory, additional	conditions,	conditions,	
	studies, consultations	exacerbati	exacerbati	
	of specialist doctors;	ons of	ons of	
	referrals of patients for	chronic	chronic	
	instrumental,	diseases	diseases	
	laboratory, additional	without	without	
	studies, consultations	obvious	obvious	
	of specialist doctors in	signs of	signs of	
	accordance with	life-	life-	
	current medical care	threatening	threatening	
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		procedures, clinical	, requiring	, requiring
		recommendations,	medical	medical
		taking into account	care in an	care in an
		medical care	urgent	urgent
		standards;	form; to	form; to
		interpretation of data	use	use
		from additional	medical	medical
		(laboratory and	devices in	devices in
		instrumental)	accordance	accordance
		examinations of	with	with
		patients; making a	current	current
		preliminary diagnosis	medical	medical
		in accordance with the	procedures	procedures
		international statistical	, clinical	, clinical
		classification of	recommen	recommen
1		diseases and health-	dations	dations
1		related problems	(treatment	(treatment
1		(ICD); differential	protocols)	protocols)
		diagnosis of diseases;	on the	on the
1		recognition of	provision	provision
1		conditions arising from	of medical	of medical
1		sudden acute diseases,		
1		exacerbation of	care, assistance	care, assistance
		chronic diseases	taking into	taking into
		without obvious signs	account	account
		of a threat to the	the	the
		patient's life and	standards	standards
		requiring medical care	of medical	of medical
		in an urgent form; the	care	care
		use of medical devices		
		in accordance with		
		current medical		
		procedures, clinical		
		recommendations		
		(treatment protocols)		
1		on the provision of		
		medical care,		
		assistance taking into		
		account the standards		
		of medical care		
		methods of collecting		
		anamnesis of life and		
		diseases, complaints		
		from patients (their		
		legal representatives);		
		methods of		
		examination and		
1		physical examination;		
1		clinical picture,		
		methods of diagnosis		
		of the most common		
1		diseases; methods of		
L	I	,		II

						1
			laboratory and			
			instrumental studies to			
			assess the state of			
			health, medical			
			indications for			
			conducting research,			
			rules for interpreting			
			,			
			international statistical			
			classification of			
			diseases and health-			
			related problems			
			(ICD); conditions			
			requiring urgent			
			medical care; the			
			procedure for the use			
			of medical devices in			
			accordance with the			
			current procedures for			
			the provision of			
			medical care, clinical			
			recommendations			
			(treatment protocols)			
			on the provision of			
			medical care,			
			assistance taking into			
			account the standards			
			of medical care			
	OPC-5	is able to	IOPK-5.1 Knows:	anatomy,	to	to check
	010-5			histology,	evaluate	the main
		assess	anatomy, histology,			
		morphofunctiona	embryology,	embryolog	the main	morphofuncti
			topographic anatomy,	у,	morphofun	onal data,
		conditions and	physiology,	topographi	ctional	physiological
		pathological	pathological anatomy	c anatomy,	data,	conditions
		processes in the	and physiology of	physiology	physiologi	and
		human body to	human organs and	,	cal	pathological
		solve	systems	pathologic	conditions	processes in
		professional	IOPC 5. 2 is able to:	al anatomy	and	the human
		tasks,	evaluate the basic	and	pathologic	body
		,	morphofunctional data,	physiology	al	-
			physiological states	of human	processes	
			and pathological	organs and	in the	
			processes in the human	-	human	
			-	systems		
			body		body	
			IOPK5. 3. Has			
			practical experience:			
			assessment of basic			
			morphofunctional data,			
			physiological			
			conditions and			
			pathological processes			
1		1		1		
			in the human body			

		when solving		[	
		professional tasks			
OPC-10	is able to solve	OPK10. 1.Knows:	to master	to apply	to master
01010	standard tasks of	the capabilities of	and apply	modern	and apply
	professional	reference information	modern	informatio	modern
	activity using	systems and	informatio	n and	information
	information,	professional databases;	n and	communic	and
	bibliographic	methods of	communic	ation	communicati
	resources,	information retrieval,	ation	technologi	on
	biomedical	information and	technologi	es to solve	technologies
	terminology,	communication	es in	the tasks	in
	information and	technologies; modern	profession	of	professional
	communication	medical and biological	al activity,	profession	activity,
	technologies,	terminology;	taking into	-	taking into
	taking into	fundamentals of	account	to carry	account the
	account the basic	information security in	the basic	out an	basic
	requirements of	professional activities	requireme	effective	requirements
	information	IOPC10. 2.He is able	nts of		of
	security a	to: apply modern	informatio	informatio	information
	J	information and	n security	n	security
		communication	5	necessary	5
		technologies to solve		to solve	
		the tasks of		the tasks	
		professional activity;		of	
		carry out an effective		profession	
		search for information		al activity	
		necessary to solve the		using	
		tasks of professional		reference	
		activity using		systems	
		reference systems and		and	
		professional databases;		profession	
		use modern medical		al	
		and biological		databases;	
		terminology; master		to use	
		and apply modern		modern	
		information and		medical	
		communication		and	
		technologies in		biological	
		professional activity,		terminolog	
		taking into account the		У	
		basic requirements of			
		information security			
		IOPC 10 3. Has			
		practical experience in			
		the use of modern			
		information and			
		bibliographic			
		resources, the use of			
		special software and			
		automated information			
		systems to solve			
		standard tasks of			

professional activity, taking into account the basic requirements of information security, the possibilities of reference information systems and professional databases; methods of information retrieval,	
basic requirements of information security, the possibilities of reference information systems and professional databases; methods of information retrieval,	
information security, the possibilities of reference information systems and professional databases; methods of information retrieval,	
information security, the possibilities of reference information systems and professional databases; methods of information retrieval,	
the possibilities of reference information systems and professional databases; methods of information retrieval,	
reference information systems and professional databases; methods of information retrieval,	
systems and professional databases; methods of information retrieval,	
professional databases; methods of information retrieval,	
methods of information retrieval,	
information retrieval,	
information and	
communication	
technologies; modern	
medical and biological	
terminology;	
fundamentals of	
information security in	
professional activity	
PC-5 is able to IPK 5.1 Knows: The The regulariti collection	ıg
collect legislation of the legislation es of complain	-
complaints, Russian Federation in of the functionin anamnesi	
anamnesis of the the field of health Russian g of a the patie	
patient's life and protection, regulatory Federation healthy life	and
illness, conduct a legal acts and other in the field human illness	and
full physical documents defining of health body and analyzing	
	ш
the patient organizations and regulatory ms of received;	
(examination, medical workers; legal acts ensuring conduct	a
palpation, methods of collecting and other health full physical sectors and the sector of the sector	
percussion, complaints, anamnesis documents from the examinat	
auscultation), of the patient's life and defining standpoint of the pa	
formulate a illness; the the of the (examina	ion
preliminary methodology of a activities theory of , palpar	ion,
diagnosis and complete physical of medical functional percussio	1,
draw up a plan examination of the organizatio systems; auscultation	on)
for laboratory patient (examination, ns and features of and inter	pret
	ilts;
examinations of auscultation); etiology, workers; of determini	
the patient pathogenesis and the method functional the order	-
pathomorphology, of failure, systems of the volu	
clinical picture, anamnesis the human content	and
differential diagnosis, of life and body in sequence	
features of the course, disease of pathologic diagnostic	
complications and the patient; al measures	
regularities of complete laboratory	
functioning of a physical and	
healthy human body examinatio instrument	
and mechanisms of n of the al studies	
ensuring health from patient to assess	
the standpoint of the (examinati the state of	

		theory of functional		health,	
		systems; features of	palpation,	medical	
		regulation of	percussion,	indications	
		functional systems of	auscultatio	for	
		the human body in	n);	research,	
		pathological processes;	etiology,	rules for	
		methods of laboratory	pathogenes	interpretin	
		and instrumental	is and	g their	
		studies to assess the	pathomorp	results	
		state of health, medical	hology,	results	
		indications for	clinical		
		research, rules for	picture,		
		interpreting their	differential		
		results	diagnosis,		
		IPK 5.2 is able to:			
		collect complaints,	the course,		
		anamnesis of the	complicati		
		patient's life and illness	ons and		
		and analyze the	outcomes		
		information received;	of diseases		
		conduct a complete	of internal		
		physical examination	organs;		
		of the patient	8,		
		(examination,			
		palpation, percussion,			
		auscultation) and			
		interpret its results;			
		determine the order of			
		volume, content and			
		sequence of diagnostic			
		measures			
PC-6	Is able to refer	IPK 6 1. Knows:	general	to justify	substantiati
	the patient for	0			on of the
	laboratory,	organization of	-	and scope	need and
	instrumental	medical care to the	n of	of	scope of
	examination, for	1 1	medical	laboratory	laboratory
	consultation with	5	care to the		examination
	specialist doctors	instrumental studies to	population	n of the	of the
	if there are	assess the state of	methods of	patient; to	patient;
	medical	health, medical	laboratory	justify the	substantiatio
	indications in	indications for	and	need and	n of the need
	accordance with	conducting research,	instrument	scope of	and scope of
	the current	U I	al studies	-	instrumental
	procedures for	their results;		al	examination
	providing	procedures for	the state of	examinatio	of the
	medical care,	providing medical	health,	n of the	patient;
	clinical	care, clinical	medical	patient; to	justification
	recommendation	recommendations	indications	justify the	of the need to
	1		for	need to	refer the
	```	· · · · · · · · · · · · · · · · · · ·			
	protocols) on the	on the provision of	0		1
	provision of	medical care, standards	research,	patient for	consultations
	medical care,	of medical care	rules for	consultatio	with

Г	1.1.		•	•.•	• • •
	taking into		-	ns with	1
	account the	5 5	g their	specialist	doctors;
	standards of	scope of laboratory	results;	doctors; to	
	medical care, as	examination of the	procedures	determine	n of medical
	well as to refer	patient; justify the	for	medical	indications
	the patient for	need and scope of	providing	indications	for the
	specialized	instrumental	medical	for the	provision of
	medical care in	examination of the	care,	provision	emergency,
	inpatient	patient; justify the	clinical	of	including
	1	need to refer the	recommen	emergency	emergency
	conditions of a	patient for	dations	, including	specialized,
	day hospital in	1	(treatment	emergency	medical care
	the presence of	specialist doctors;	protocols)	specialized	medical care
	medical	determine medical	on the	, medical	
			provision	care	
	accordance with	provision of	of medical		
	the current	emergency, including	care,		
	procedures for	emergency specialized,	standards		
	the provision of	medical care	of medical		
	medical care,		care		
	clinical				
	recommendation				
	s (treatment				
	protocols) on the				
	provision of				
	medical care,				
	taking into				
	account the				
	standards of				
	medical care				
PC-7	is able to carry	IPK 7.1 Knows:	etiology,	analyze	interpretati
	out differential	etiology, pathogenesis	pathogenes	the results	on of the
	diagnostics with		is and	of the	
	other	clinical picture,	pathomorp	patient's	collecting
	diseases/conditio	differential diagnosis,	hology,	examinatio	information
	ns, including	features of the course,	clinical	n, if	about the
	urgent ones, to	complications and	picture,	necessary,	patient's
	establish a	outcomes of diseases	differential	justify and	disease;
	diagnosis taking	of internal organs;	diagnosis,	plan the	interpretation
	into account the	methods of	features of	scope of	-
	current	laboratory and	the course,	additional	obtained
	international	instrumental studies to	complicati	studies;	during
	statistical	assess the state of	ons and	interpret	laboratory
	classification of		outcomes	the results	examination
	diseases and	indications for	of diseases	of	of the
	health-related			collecting	
		conducting research,	of internal	U	patient;
	problems (ICD)	rules for interpreting	organs;	informatio	interpretation
		their results; ICD	methods	n about the	of data
		IPK 7.2 is able to:	of	patient's	obtained
		analyze the results of	laboratory	disease;	during
		the patient's examination, if	and	interpret the data	instrumental examination
1 1		examination, if	instrument		

necessary, justify and	al studies	obtained	of the
plan the scope of	to assess	during the	patient;
additional studies;	the state of	laboratory	interpret data
interpret the results of	health,	examinatio	obtained
collecting information	medical	n of the	during
about the patient's	indications	patient;	consultations
disease; interpret the	for	interpret	of the patient
data obtained during	conducting	the data	· 1
the laboratory	research,	obtained	doctors;
examination of the	rules for	during the	
patient; interpret the data obtained during	interpretin g their	instrument al	diagnosis of diseases of
the instrumental	U	examinatio	internal
examination of the	ICD	n of the	organs from
patient; interpret the	100	patient;	other
data obtained during		interpret	diseases
the consultations of the		the data	
patient by specialist		obtained	
doctors; carry out		during the	
differential diagnosis		consultatio	
of diseases internal		ns of the	
organs from other		patient by	
diseases		specialist doctors; to	
		carry out	
		differential	
		diagnostics	
		of diseases	
		of internal	
		organs	
		from other	
		diseases of	
		the	
		analysis of the results	
		of the	
		examinatio	
		n of the	
		patient, if	
		necessary,	
		substantiat	
		ion and	
		planning	
		of the	
		volume of additional	
		studies	
		studies	

4. Sections of the academic discipline and competencies that are formed when mastering them

Compete nce code	Section name of the discipline	The content of the section in teaching units
UC- 1,4,5 OPK- 1,4,5,10 PK-5,6.7	Urgent conditions in diseases of the respiratory system	Urgent conditions in pulmonology. Bronchial asthma attack, asthmatic status. Spontaneous and valvular pneumothorax. Pulmonary hemorrhage. Acute respiratory failure. Acute respiratory distress syndrome. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.
UC-1,4,5 OPK- 1,4,5,10 PK-5,6.7	Urgent conditions in diseases of the cardiovascular system	Urgent conditions in cardiology. Pulmonary embolism. Acute cardiac arrhythmias and conduction disorders. Acute vascular insufficiency. Acute coronary insufficiency. Acute left ventricular failure (cardiac asthma). Hypertensive crisis. Sudden death. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.
UC-1,4,5 OPK- 1,4,5,10 PK-5,6.7	Urgent conditions in diseases of the digestive system	Urgent conditions in gastroenterology. Biliary colic. Acute bleeding from the digestive tract. Hepatic encephalopathy and coma.
UC-1,4,5 OPK- 1,4,5,10 PK-5,6.7	Urgent conditions in diseases of the endocrine system	Urgent conditions in diseases of the endocrine system. Thyrotoxic crisis. Hypothyroid coma. Acute insufficiency of the adrenal cortex. Hypoglycemic conditions. Diabetic ketoacidosis and ketoacidotic coma. Hyperosmolar coma. Lactic acid coma.
UC-1,4,5 OPK- 1,4,5,10 PK-5,6.7	Urgent conditions in the clinic of internal diseases	Urgent conditions in the clinic of internal diseases. Infectious- toxic shock. Hypovolemic shock. Anaphylactic shock.

# 5. Volume of the academic discipline and types of academic work

Type of educational work	Labor i	Labor intensity			Labor intensity (AH) in semesters			
	volume in	volume in						
	credit units (CU)	academic hours (AH)	4	5	6			
Classroom work, including	1,22	44	-	44				
Lectures (L)	0,28	10	-	10				
Laboratory practicum (LP)*	-	-	-	-	-			
Practicals (P)	-	-	-	-	-			
Seminars (S)	0,94	34	-	34	-			
Student's individual work (SIW)	-	-	-	-	-			
Mid-term assessment	0,78	28	-	28				
credit/exam (specify the type)								
TOTAL LABOR INTENSITY	-	-		-				
		зачет		зачет				

# 6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work

№ п/п	№ sem	Name of the section of the academic discipline	Types of academic work* (in AH)						
11/11									
		Emergency conditions in	L	LP	Р	S	С	SIW	всего

1.	5	diseases of the respiratory system	2	-	-	6	-	6	16
2.	5	Urgent conditions in diseases of the cardiovascular system	4			12		8	22
				-	-		-		
		Urgent conditions in diseases							
3.	5	of the digestive system	2	-	-	4	-	4	10
4.	5	Urgent conditions in diseases of the endocrine system	2	-	-	10	-	8	20
		Urgent conditions in the							
5.	5	clinic of internal diseases	-			2		2	4

\* - L – lectures; LP – laboratory practicum; P – practicals; S – seminars; SIW – student's individual work.

6.2. Thematic schedule of educational work types:

	6.2.1 Thematic schedule of lectures	
N⁰	Name of lecture topics	Volume in AH semester
	Urgent conditions in pulmonology. Modern diagnostics. Emergency care.	2
	Emergency conditions in cardiology. Modern approaches in diagnosis and treatment. Part 1.	2
	Emergency conditions in cardiology. Modern approaches in diagnosis and treatment. Part 2.	2
	Urgent conditions in diseases of the digestive system. Modern diagnostics. Emergency care.	2
	Urgent conditions in diseases of the endocrine system. Modern approaches in diagnosis and treatment	2
	TOTAL (total - AH)	10

6.2.2. The thematic plan of laboratory practicums (if this type of classes is stipulated in the curriculum)

N⁰	Name of laboratory practicums	Volume in AH semester
1	Urgent conditions in pulmonology. Bronchial asthma attack, asthmatic status. Spontaneous and valvular pneumothorax. Pulmonary hemorrhage. Acute respiratory failure. Acute respiratory distress syndrome. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Patient supervision in the intensive care unit	6
2	Emergency conditions in cardiology. Pulmonary embolism. Acute cardiac arrhythmias and conduction disorders. Acute vascular insufficiency. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.	6
3	Emergency conditions in cardiology. Acute coronary insufficiency. Acute left ventricular failure (cardiac asthma). Hypertensive crisis. Sudden death. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Patient supervision in the intensive care unit.	6
4	Urgent conditions in gastroenterology. Biliary colic. Acute bleeding from the digestive tract. Hepatic encephalopathy and	6

	coma.		
5	Urgent conditions in the clinic of internal diseases. Infectious- toxic shock. Hypovolemic shock. Anaphylactic shock.	5	
6	Urgent conditions in diseases of the endocrine system. Hypoglycemic conditions. Diabetic ketoacidosis and ketoacidotic coma. Hyperosmolar coma. Lactic acid coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Patient supervision in the intensive care unit.	5	
	TOTAL (34 - AH)		

# 6.2.3. Name of the type and topic of the SRS

N₂	Name of the type and topic of the SRS		/olume in l	h
π/π		IV	V	VI
1	Work with lecture material, review and study of literature, work with electronic educational resources on the topic: Urgent conditions in pulmonology. Bronchial asthma attack, asthmatic status. Spontaneous and valvular pneumothorax. Pulmonary hemorrhage. Acute respiratory failure. Acute respiratory distress syndrome. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Work with electronic educational programs on lung auscultation, interpretation of radiographs, spirometry results, preparation for clinical practical training; answers to control questions; preparation for computer testing, center, solving situational professional tasks.		6	
2	Work with lecture material, review and study of literature, work with electronic educational resources on the topic: Emergency conditions in cardiology. Pulmonary embolism. Acute cardiac arrhythmias and conduction disorders. Acute vascular insufficiency. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Preparation for practical training, interpretation of cardiograms, laboratory results, answers to control questions; preparation for computer testing, solving situational professional tasks.		6	
3	Work with lecture material, study of lectures and educational literature Review and study of literature, work with electronic educational resources on the topic: Emergency conditions in cardiology. Acute coronary insufficiency. Acute left ventricular failure (cardiac asthma). Hypertensive crisis. Sudden death. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Preparation for a practical lesson, interpretation of cardiograms, laboratory results, answers to control questions; preparation for computer testing, solving situational professional tasks.		6	
4	Work with lecture material, study of lectures and educational literature Review and study of literature, work with electronic educational resources on the topic: Urgent conditions in gastroenterology. Biliary colic. Acute bleeding from the digestive tract. Hepatic encephalopathy and coma. Urgent conditions in the clinic of internal diseases. Infectious-toxic shock. Hypovolemic shock. Anaphylactic shock. Preparation for a practical lesson, interpretation of the results of laboratory and instrumental research methods, answers to control questions; preparation for computer testing, solving situational professional tasks.		6	
5	Work with lecture materials and educational literature on the topic: Urgent conditions in diseases of the endocrine system. Thyrotoxic crisis. Hypothyroid coma. Acute insufficiency of the adrenal cortex. Hypothalamic-pituitary coma. Acute hypercalcemic and hypocalcemic crisis. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Preparation for practical training, interpretation of the results of laboratory and instrumental research methods, answers to control questions; preparation for computer testing, solving situational professional tasks.		5	

6	Work with lecture material, review and study of literature, work with electronic educational resources on the topic: Urgent conditions in diseases of the endocrine system. Hypoglycemic conditions. Diabetic ketoacidosis and ketoacidotic coma. Hyperosmolar coma. Lactic acid coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. Preparation for the lesson, interpretation of laboratory results, preparation for clinical practical classes; answers to control questions; solving situational professional tasks, writing a medical history.	5	
	TOTAL (BCEFO - 28 AU)	28	

6.2.4. Student's research work:

N₂	Name of seminar topics	SEMESTER
п/п		
1	Differential diagnosis emergency conditions in pulmonology	5
2	Pulmonary embolism in the Clinic of internal Diseases	5
3	The possibilities of ECHO-KG in the diagnosis of emergency conditions in cardiology	5
4	Modern instrumental and functional methods in the diagnosis of emergency conditions	5
5	Acute respiratory distress syndrome in the clinic of internal Diseases. The current state of the problem.	5
6	Acute rhythm and conduction disorders in cardiology practice. Modern diagnostic and treatment capabilities.	5
7	Diagnosis of emergency syndromes in the clinic of internal diseases. Infectious-toxic shock. Modern diagnostics and treatment.	5
8	Pathogenetic approaches in the treatment of various types of hypertensive crisis. Modern features.	5
9	Paroxysmal tachyarrhythmias in the clinic of internal diseases. Modern methods of treatment.	5
10	Acute complications of diabetes mellitus. Modern diagnostic and treatment capabilities.	5
11	Urgent conditions in diseases of the thyroid gland and hypothalamic- pituitary region. Differential diagnosis. Modern approaches to treatment.	5
12	Urgent conditions in diseases of the liver and kidneys. Modern approaches in diagnosis and treatment.	5
13	Acute coronary syndrome in the clinic of internal diseases. Modern approaches in diagnosis and treatment.	5
14	Acute left ventricular failure. The current state of the problem.	5
15	An attack of bronchial asthma. Modern approaches in diagnosis and treatment.	5

The following educational technologies are used in the process of teaching the discipline:

1. Informational lecture, visualization lecture, problem lecture.

2. Clinical practical exercises at the patient's bedside, requiring the use of practical skills, discussion seminars, clinical analyses, practical training based on the case method, computer simulation.

3. The use of game technologies with the recreation of situations through educational, business and role-playing games.

Only 70% of interactive classes from the volume of classroom work.

Examples of educational technologies in an interactive form:

1. Discussion of educational clinical case histories during a practical lesson.

2. Collective discussion of anamnesis, symptoms, objective signs of the patient's disease based on the results of practical work at the patient's bedside – seminar-discussion.

3. Student clinical Conference.

						]
N₂	Se mes ter No.	Types of control	Name of section of academic discipline	Competence codes	types	number
1	2	3	4	5	• •	7
1	2		-	3	6	
1.	5	Control of the student's independent work,	Emergency conditions in diseases of the	tests	10	No limited Computer tests
		control of the development of the topic, control of the development of practical skills	respiratory system	Clinical cases	1	15
2.	2. Control of the Urgent co student's in disease independent work, cardiovase		Urgent conditions in diseases of the cardiovascular system	tests	10	No limited
	5	development of the topic, control of the development of practical skills		Case reports	1	Depends on numbers of students in the group
				Interpretation of results	5	10
3.		Control of the				No limited
		student's	Urgent conditions	tests	20	
		independent work, control of the	in diseases of the digestive system	Individual tasks	1	15
	5	development of the topic, control of the development of		cases	1	15
		practical skills		Control questions	2	15
		-	**		3	
		Control of the	Urgent conditions	tests	10	No limited
		student's	in diseases of the	Individual tasks	1	15
4		independent work, control of the development of the topic, control of the	endocrine system	Case reports	1	Depends on numbers of students in the group
	5	development of practical skills		Tests of the practical skills	8	10
				cases	1	15
				Control questions	5	15
4.		Control of the student's	Urgent conditions in the clinic of	tests	10	No limited
	5	independent work, control of the	internal diseases	Individual tasks	1	15

# 7. Types of assessment formats for ongoing monitoring and mid-term assessment

		development of the topic, control of the development of practical skills		Case reports	1	Depends on numbers of students in the group
5.	5	Intermediate certification. Credit	ALL topics.	Control Questions	3	30
		All sections of the discipline Control		cases	1	30
		questions				

#### 7.1. Examples of evaluation tools:

### 1. Intermediate certification - questions to prepare for the test:

1. The importance of anamnesis collection and physical examination in the diagnosis of emergency conditions in diseases of the respiratory system.

2. Urgent conditions in pulmonology. Bronchial asthma attack, asthmatic status. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

3. Urgent conditions in pulmonology. Spontaneous and valvular pneumothorax. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

4. Urgent conditions in pulmonology. Pulmonary hemorrhage. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

5. Urgent conditions in pulmonology. Acute respiratory failure. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

6. Urgent conditions in pulmonology. Acute respiratory distress syndrome. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

7. Emergency conditions in cardiology. Pulmonary embolism. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

8. Emergency conditions in cardiology. Acute cardiac arrhythmias and conduction disorders. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

9. Emergency conditions in cardiology. Acute vascular insufficiency. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

10. Emergency conditions in cardiology. Acute coronary insufficiency. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

11. Emergency conditions in cardiology. Acute left ventricular failure (cardiac asthma). Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

12. Emergency conditions in cardiology. Hypertensive crisis. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

13. Emergency conditions in cardiology. Sudden death. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

14. The importance of electrocardiography in the diagnosis of emergency conditions in the clinic of internal diseases.

15. Urgent conditions in gastroenterology. Biliary colic. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

16. Urgent conditions in gastroenterology. Acute bleeding from the digestive tract. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

17. Urgent conditions in gastroenterology. Hepatic encephalopathy and coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

18. Emergency conditions in the clinic of internal diseases. Infectious and toxic shock. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

19. Emergency conditions in the clinic of internal diseases. Hypovolemic shock. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

20. Emergency conditions in the clinic of internal diseases. Anaphylactic shock. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

21. Urgent conditions in diseases of the endocrine system. Thyrotoxic crisis. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

22. Urgent conditions in diseases of the endocrine system. Hypothyroid coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

23. Urgent conditions in diseases of the endocrine system. Acute insufficiency of the adrenal cortex. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

24. Urgent conditions in diseases of the endocrine system. Hypothalamic-pituitary coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

25. Urgent conditions in diseases of the endocrine system. Acute hypercalcemic and hypocalcemic crisis. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

26. Urgent conditions in diseases of the endocrine system. Hypoglycemic conditions. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

27. Urgent conditions in diseases of the endocrine system. Diabetic ketoacidosis and ketoacidotic coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

28. Urgent conditions in diseases of the endocrine system. Hyperosmolar coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

29. Urgent conditions in diseases of the endocrine system. Lactic acid coma. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

30. Modern methods of treatment of paroxysmal tachyarrhythmias.

#### 2. Test control "Emergency conditions in the clinic of internal diseases"

1. Complications of the early period of pneumonia include:

- A) infectious and toxic shock
- B) acute arterial hypotension

C) edema

D) delirious syndrome

E) exudative pleurisy

2. The following drugs are used for the treatment of stage I asthmatic status:

A) beta2-agonists by inhalation

B) nebulizer therapy with selective beta2-agonists

C) euphyllin

D) prednisone

- E) mucolytics
- E) diuretics

3. Indicate the most characteristic changes in the chest during valvular pneumothorax:

A) reduction of half of the chest, its sinking and lagging in breathing

B) lag in breathing, enlargement of half of the chest and smoothing of intercostal spaces

C) only a lag in the breathing of half of the chest

D) hyperstenotic chest

E) an increase in the antero-posterior and transverse dimensions of the chest, the retraction of intercostal spaces in the lower lateral sections on both sides.

4. What is the main respiratory noise most often heard in spontaneous pneumothorax?

A) weakened vesicular breathing

B) amphoric respiration

C) bronchial respiration

D) hard breathing

E) mixed bronchovesicular respiration

5. Indicate the most characteristic changes in the chest with a closed pneumothorax:

A) reduction of half of the chest, its sinking and lagging in breathing

B) lag in breathing, enlargement of half of the chest and smoothing of intercostal spaces

C) only a lag in the breathing of half of the chest

D) hyperstenotic chest

E) an increase in the antero-posterior and transverse dimensions of the chest, the retraction of intercostal spaces in the lower lateral sections on both sides

6. What is a potentially threatening sign of asthmatic status?

A) weakened vesicular respiration

B) tachypnea

C) bronchial respiration

D) bradypnea

E) absence of respiratory noises during auscultation

7. What kind of dyspnea is most characteristic of asthmatic status?

A) stridorous breathing

B) expiratory dyspnea

C) Kussmaul breathing or Cheyne-Stokes breathing

D) Cheyne-Stokes breathing or Biota breathing

E) inspiratory dyspnea

8. What is an ECG- a sign of the development of pulmonary embolism?

A) overload of the left ventricle

B) overload of the right ventricle

C) the development of tachyarrhythmia

D) development of atrioventricular blockade

E) the appearance of a pathological Q wave

9. Dose of glucocorticoids in stage II asthmatic status:

A) 30-60 mg I/ v every 6 hours

B) 60-90 mg I / v every 3 hours

C) 60-120 mg I / v every 60-90 minutes

D) 120-150 mg I / v every 2 hours

10. For the treatment of thyrotoxic crisis are used:A) anaprilinB) mercazolilC) levothyroxineD) glucocorticosteroidsE) cordaron

#### 3. Situational tasks (example)

A 52-year-old patient was admitted to the hospital with complaints of burning chest pain, which appeared 6 hours ago. Pain radiates to both shoulders and shoulder blades. The pain attack appeared at rest when the patient was resting at home on the couch. In addition, he feels interruptions in the work of the heart, it is difficult for him to breathe, he is dizzy. It is known from the anamnesis that he has been suffering from Hypertension for 12 years, but he takes medications irregularly, does not control blood pressure. The patient smokes up to a pack of cigarettes a day, takes strong alcohol at least once a week. It was found out from the family history that the patient's mother died of a stroke, and his father from a "heart disease". On objective examination, the condition is of moderate severity, the patient is sitting on the edge of the bed, his hands are on his knees, his skin is wet and cold, cyanosis of the lips, nose, ears, fingers are pale and cold; vital signs: pulse rate 118 per minute, irregular pulse, low filling, respiratory rate 32 per minute, Blood pressure 95/60 mmHg, temperature 36.0. Small xanthelasms are noted on the lower lobes of the lungs on both sides. With percussion of the heart, the left border of the heart is expanded to the left by 3 cm. During auscultation of the heart, deaf irregular heart tones with a heart rate of 130 per minute and an accent of the second tone in the aortic region are heard.

task:

- 1. Name and justify the syndromes
- 2. Formulate the diagnosis in accordance with the modern classification.
- 2. Schedule an additional laboratory and instrumental examination of the patient

# 8. Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources)

8.1. Key literature references

N₂	Name according to bibliographic requirements	Number o	f copies
		at the department	in the library
1			
2	Strongin L. G. Guidelines for case reports, medical		
	history collection and physical examination : a		
	textbook for foreign English-speaking medical		
	students. NNSMA Publishing House, 2014 64 p.		
3	Bickley Lynn S. Bates Pocket Guide to Physical		
	Examination and Medical History Collection.		
	Lippincott, 2013.		
4	Gritsevskaya I.M. Learning to listen and understand		
	the patient: a textbook on learning Russian as a foreign		
	language in the framework of clinical practice for		
	foreign medical students. NizhGMA Publishing		
	House, 2014. – 150 p.		
5	Botova S. N. Practical aspects of spirometry : a		
	textbook for foreign medical students. NNSMA		
	Publishing House, 2015 56 p.		
6	Strongin L. G. Interpretation of ECG data : a textbook		
	for foreign English-speaking medical students.		
	NNSMA Publishing House, 2014 68 p.		
7	Strongin L. G. Diabetes mellitus : a textbook for		
	foreign English-speaking medical students. NNSMA		
	Publishing House, 2015100 S.		
8	P. Kumar, M. ClarkClinical Medicine / ed. – 8th ed. –		
	Edinburgh: Saunders, 2012. – 1286 p.		
9	Longo Dan L. Principles of Internal Medicine		
	Harrison. Vol.1. McGraw-Hill, 2012		

8.2. Further reading

	8.2. Further reading		
N⁰	Name according to bibliographic requirements	Number o	f copies
		at the department	in the library
1	Clinical history taking and examination Welsby		
	Philip D. Churchill Livingstone, 2002-158p.		
2	Shchukin Yu.V. Propaedeutics of internal diseases		
	Methods of patient research: textbook. Rostov-on-		
	Don: Phoenix, 2014. – 287c.		
3	Internal diseases propedeutics : textbook. V. T.		
	Ivashkin and A.V.Okhlobystin, Moscow : GEOTAR-		
	Media, 2006 - 176 p.		
4	Swash M. Hutchisons Clinical Methods, - 21st ed		
	Edinburgh : W.B. Saunders, 2002. – 501 pp		
5	J. R. Hampton The ECG made easy - 7th ed		
	Edinburgh: Churchill Livingstone, 2008. – 179 pp.		
6	V. Kumar, A. K. Abbas Robbins and Cotran		
	pathological basis of disease edited by Vinay Kumar		
	and Abul K. Abbas . 7th ed Elsevier Saunders, 2005.		
	(2005) - 1525 p. 1 CD-Rom.		
7	N. A. Boon, N. R. Colledge, B. R. Walker, J. A. A.		
	Hunter. Davidson's principles and practice of medicine		

	/ edited by - 20th ed Edinburgh : Churchill	
	Livingstone, 2006. – 1381 p.	
8	Mukhin N.A. Propaedeutics of internal diseases : a	
	textbook with an appendix on a CD - 2nd ed.	
	supplement and revision - M. : GEOTAR-Media,	
	2009. – 848 p.	
9	Butov M.A. Propaedeutics of internal diseases:	
	textbook, Moscow: FORUM, 2011. – 512s.	
10	D. A. Shikhnebiev, Propaedeutics of internal diseases	
	with the basics of general patient care: textbook for	
	students of medical universities - Makhachkala :	
	Science-Dagestan, 2015. – 252 p.	

8.3. List of methodological recommendations for independent work of students:

- 1. Strongin L. G. Guidelines for case reports, medical history collection and physical examination : a textbook for foreign English-speaking medical students. NNSMA Publishing House, 2014. 64 p.
- 2. Bickley Lynn S. Bates Pocket Guide to Physical Examination and Medical History Collection. Lippincott, 2013.
- 3. Gritsevskaya I.M. Learning to listen and understand the patient: a textbook on learning Russian as a foreign language in the framework of clinical practice for foreign medical students. NizhGMA Publishing House, 2014. 150 p.
- 4. Botova S. N. Practical aspects of spirometry : a textbook for foreign medical students. NNSMA Publishing House, 2015.- 56 p.
- 5. Strongin L. G. Interpretation of ECG data : a textbook for foreign English-speaking medical students. NNSMA Publishing House, 2014. 68 p.
- 6. Strongin L. G. Diabetes mellitus : a textbook for foreign English-speaking medical students. NNSMA Publishing House, 2015.-100 S.
- 7. P. Kumar, M. Clark..Clinical Medicine / ed. 8th ed. Edinburgh: Saunders, 2012. 1286 p.
- 8. Longo Dan L. Principles of Internal Medicine Harrison. Vol.1. McGraw-Hill, 2012
- 9. Longo Dan L. Harrison's Principles of Internal Medicine. Vol.2. McGraw-Hill, 2012
- 10. Collection of clinical history and examination.- Welsby Philip D. Churchill Livingston, 2002–158 p.
- 11. Propaedeutics of internal diseases : textbook. V. T. Ivashkin, A.V.Okhlobystin, Moscow : GEOTAR-Media, 2006 176 p.
- 12. Swash M. Hutchison Clinical Methods, 21st ed. Edinburgh: W.B. Saunders, 2002. 501 s..
- 13. J. R. Hampton "ECG made easy" 7th ed. Edinburgh: Churchill Livingston, 2008. 179 p.
- 14. V. Kumar, A. K. Abbas Robbins and Kotran "Pathological foundations of disease" edited by Vinay Kumar and Abul K. Abbas. 7th ed.- Elzevir Saunders, 2005. (2005) 1525 p. 1 CD.
- 15. N.A. Boone, N. R. College, B. R. Walker, J. Hunter. Principles and Practice of Davidson Medicine / edited 20th ed. Edinburgh: Churchill Livingston, 2006. 1381 S.
- 16. D. Kasper, E. Braunwald, A.Fauci, S.Hauser "Principles of Harrison's Internal Medicine" / edited 16th ed. McGraw-Hill Medical Publishing division, 2018. 2783c.

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8.4.1	8.4.1. Internal Electronic Library System of the University (IELSU)					
N⁰	Name of the electronic resource	Brief description (content)	Access conditions	Number of users		
	Internal Electronic Library System (EBS) PIM	Works of PIM employees (textbooks, manuals, collections of tasks, manuals, laboratory work, monographs, etc.)	Accessbyindividualloginandpasswordfromanycomputerandmobiledeviceis			

8.4 Electronic educational resources for teaching academic subjects

n	not limited	
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<u>N₀</u>	Name of the electronic	ces acquired by the University	Access conditions	Number of users
JNO	name of the electronic resource	Brief description (content)	Access conditions	Number of users
	resource			
1	Database "Medicine.		Access by	
	Healthcare (VO) and		individual login	
	"Medicine. Healthcare		and password	
	(SPO)" as part of the		from any	
	database "Electronic library		computer and	
	of a technical university		mobile device	
	(EBS "Student Consultant"			
	Textbooks and manuals for			
	higher medical and			
2	pharmaceutical education.		A 1	
2	Database "Doctor's		Access by	
	consultant. Electronic		individual login	
	Medical Library" National		and password from any	
	guidelines, clinical guidelines, textbooks,		2	
	guidelines, textbooks, monographs, atlases,		computer and mobile device	
	reference books, etc.		mobile device	
	Access by individual login			
	and password from any			
	computer and mobile			
	device is not limited			
3	Database "Electronic		Access by	
_	library system "Bukap"		individual login	
	Educational and scientific		and password	
	medical literature of		from any	
	Russian publishers,		computer and	
	including translated		mobile device	
	editions. The collection of			
	subscription publications is			
	formed point-by-point.			
	Access by individual login			
	and password from any			
	computer and mobile			
	device.			

8.4.2. Electronic educational resources acquired by the University

8.4.3 Open	access	resources
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N⁰	Name of the electronic resource	Brief description (content)	Access conditions
1.	EBS "Student Consultant"	Educational resource (www.studentlibrary.ru) for students of medical and pharmaceutical universities is an electronic library system (EBS) that provides access via the Internet to electronic versions of educational, scientific literature and additional materials.	
2	«Free Medical Journals»	Catalog of links to foreign medical journals, open for free	÷ .

	1		
		access to the full texts of articles. http://www.freemedicaljournals .com / Free from any computer and mobile device.	
3	http://www.freebooks4doctors.c om /	Catalog of links to foreign medical journals, open for free access to the full texts of articles. http://www.freemedicaljournals .com / Free from any computer and mobile device.	Free from any computer and mobile device.
4	High Wire. Library of the Sciences and Medicine	A large database of journal articles is presented on the website of the Stanford University Publishing House. Individual journals are completely open for free access. http://highwire.stanford.edu /	Free from any computer and mobile device.
5	BioMed Central	Electronic archive of open access to the results of research in the field of medicine, biology and technology. The portfolio includes articles from more than two hundred peer-reviewed journals http://www.biomedcentral.com	Free from any computer and mobile device.
6	Oxford Medicine	Online is a collection of publications of the Oxford Publishing House on medical topics, combining over 350 publications into a common resource with the possibility of cross-searching.Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine, the electronic versions of which are constantly updated. http://www.oxfordmedicine.co m	Free from any computer and mobile device.
7	PubMed	Is a free search engine in the largest medical bibliographic database MedLine. Documents medical and biological articles from specialized literature, and also provides links to full-text articles. http://www.ncbi.nlm.nih.gov/pu bmed	Free from any computer and mobile device.

# 9. Material and technical support for mastering an academic discipline

9.1. The list of premises required for conducting classroom classes in the discipline.

1. Lecture hall equipped with presentation equipment, multimedia complex (screen, laptop, projector).

2. An auditorium equipped with an interactive complex for practical classes and conferences.

3. Classrooms for conducting practical classes with students (3 classrooms), information stands, computers, interactive whiteboards, multimedia complex, slide show, DVD films by sections: methods of examination of a patient in therapeutic practice, assessment of vital signs, examination of a patient with diseases of the respiratory system, cardiovascular system, gastrointestinal diseasesintestinal tract, with joint diseases, auscultation of the heart, auscultation of the lungs, cardiac murmurs.

4. Offices for working with patients receiving medical care in therapeutic, cardiological, intensive care, polyclinic departments, as well as undergoing examination in the department of functional diagnostics and endoscopy.

9.2. List of equipment\* required for conducting classroom classes in the discipline.

1. Information stands

2. Personal computers

3. Interactive whiteboard with multimedia complex

4. TV

5. Slide show,

6. DVD films by sections: methods of examination of a patient in therapeutic practice, assessment of vital signs, examination of a patient with diseases of the respiratory system, cardiovascular system, gastrointestinal tract diseases, joint diseases, auscultation of the heart, auscultation of the lungs, cardiac murmurs.

7. Magnetic marker boards

8. Sets of thematic tables and multimedia visual materials on various sections of the discipline

9. A set of electrocardiograms, spirograms, echocardiograms, radiographs, blood tests, urine, sputum

Ite m no.	Software	number of licenses	Type of software	Manufacture r	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovic h	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user license for educational organizations, with no expiration date, with the right to receive updates for 1 year.	220	Office Application	LLC "NEW CLOUD TECHNOLO GIES"	283	without limitation, with the right to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	
4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscriptio n	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to	170	Office	Microsoft		23618/HN100

9.3. A set of licensed and freely distributed software, including domestic production

MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of Russia	Application	30 LLC "Softline Trade" from 04.12.2020
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# **10.** List of changes to the working program (to be filled out by the template)

Federal State Budgetary Educational Institution of Higher Education "Privolzhsky Research Medical University" Ministry of Health of the Russian Federation (FSBEI HE "PRMU" of the Ministry of Health of Russia)

Department of *Name of the department* 

## **CHANGE REGISTRATION SHEET**

working program for the academic discipline *NAME OF THE ACADEMIC DISCIPLINE* 

Field of study / specialty / scientific specialty:

Training profile: \_\_\_\_\_

(name) - for master's degree programs

Mode of study: \_\_\_\_\_

full-time/mixed attendance mode/extramural

Position	Number and name of the program section	Contents of the changes made	Effective date of the changes	Contributor's signature
1				

Approved at the department meeting
Protocol No. \_\_\_\_\_of \_\_\_\_\_20\_\_\_

Head of the Department

signature

print name

(code, name)

department name, academic title