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

APPROVED
Vice-Rector for Academic Affairs
E.S. Bogomolova
31 August 2021

WORKING PROGRAM

Name of the academic discipline: **PROPAEDEUTICS OF INTERNAL DISEASES**

Specialty: **31.05.01 GENERAL MEDICINE**

Qualification: **GENERAL PRACTITIONER**

Department: **ENDOCRINOLOGY AND INTERNAL MEDICINE**

Mode of study: **FULL-TIME**

Labor intensity of the academic discipline: **360 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, PH. D, scientific title associate professor, position associate professor

The program was reviewed and approved at the department meeting
protocol No.9 of April 15, 2021

Head of the Department of
Endocrinology and internal medicine,
Doctor of Medical Sciences, Professor _____ Pochinka I.G.

AGREED
Deputy Head of EMA ph.d. of biology _____ Lovtsova L.V.

_ April 15, 2021

1. **The purpose and objectives of mastering the academic discipline "Propaedeutics of internal diseases".**

1.1. The purpose of mastering the discipline **"Propaedeutics of internal diseases"**

As a result of mastering the discipline program, a graduate should have universal, general professional and professional competencies: УК – 1,4,5; ОПК – 1, 4, 5,10; ПК – 5, 6, 7, necessary to achieve work functions in accordance with the Professional standard General practitioner

Universal competencies:

Systemic and critical thinking (category)

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

Communication.

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

Cross-cultural interaction

UC-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.

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

Diagnostic instrumental methods of investigation

GPC-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

GPC-5 is able to evaluate morpho functional, physiological states and pathological processes in the human body to solve professional tasks Information literacy

GPC-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 competencies:

Examination of the patient in order to make a diagnosis (labor function)

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

PC-6 is able to refer the patient for laboratory, instrumental investigation, 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 make a diagnosis taking into account the current international statistical classification of diseases and health-related problems (ICD)

1.2. Tasks of the discipline:

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

methods of clinical physical examination, laboratory and instrumental investigation of patients with internal diseases; 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 making in accordance with the modern International Statistical Classification of Diseases ICD-10 (11)

2. To form the ability to assess the status of the patient: to gather anamnesis, to perform physical examination of the patient (inspection, palpation, percussion, auscultation, blood pressure measurement, etc.); to perform initial physical 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 the conditions of the simulation center

1.3. Requirements to the deliverables of mastering the discipline

As a result of completing the discipline, the student should

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 investigations of patients (including 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 forming human health; diseases associated with the adverse effects of climatic and social factors.

Be able to:

• Conduct taking history of the patient or his relatives, to take history of present illness and personal history 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;

• Perform a physical examination of patients using physical methods (inspetion,

percussion, palpation, auscultation, measurement of blood pressure, respiratory rate, pulse) and identify objective signs of the disease;

• Perform 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;

• Make, 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, condition with pain syndrome, with chronic disease, with 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;

• Interpret 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;

• Interpret the spirogram in obstructive and restrictive ventilatory disorders;

• Evaluate the phonocardiogram for mitral, aortic and tricuspid valvular defects;

• Evaluate the results of a complete blood count, urine test, sputum, feces, pleural fluid, as well as a biochemical blood test;

• To interpret chest x-ray in main lung syndromes;

• 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 substantiation of the initial 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:

• Application of 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;

• Performing a physical general clinical examination of the patient (taking history,

omspection, palpation, percussion, auscultation, blood pressure measurement, assessment of pulse characteristics, respiration, ECG);

• Filling in the patient's medical history (case report);

• 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 "Privolzhsky Research Medical University" Ministry of Health of the Russian Federation.

2.1. The discipline **"Propaedeutics of internal diseases"** refers to the core part of Block 1 of GEP HE **Б1.Б37**. The discipline is taught in IV, V, VI semester/ 2-3 year of study.

2.2. The following knowledge, skills and abilities formed by previous academic disciplines are required for mastering the discipline:

1. Physical, biological and mathematical processes of the organism
2. Chemical and biochemical processes of the organism
3. Anatomy of the body and organism
4. Clinical aspects of biochemistry
5. Normal and pathological physiology and methods of research of physiological functions
6. Clinical pathophysiology and basic mechanisms of pathological processes development
7. Some aspects of pharmacology
8. First aid
9. Patient care

2.3. Mastering the discipline is required for forming the following knowledge, skills and abilities for subsequent academic disciplines:

1. Faculty therapy
2. Occupational disease
3. Polyclinic therapy
4. Hospital therapy
5. Endocrinology
6. Infectious diseases
7. Rheumatology
8. Gastroenterology
9. Fundamentals of emergency care
10. Professional practice – physician assistant, assistant physician outpatient clinic

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

Mastering the discipline aims at acquiring the following universal UC – 1,4,5, general professional GPC – 1, 4, 5,10 and professional competencies PC – 5, 6, 7

№	Competence code	The content of the competence	Code and name of the competence acquisition metric	As a result of mastering the discipline, the students should:		
				know	be able to	Have practical experience
1.	UC-1	Student is able to carry out a critical analysis of problem situations based on a systematic approach, to develop a strategy of actions	MUC 1.1 Knows: methods of critical analysis and evaluation of modern scientific achievements; basic principles of critical analysis MUC 1.2 Is able to: gain new knowledge based on analysis, synthesis, etc.; collect data on complex scientific problems related to the professional field; search for information and solutions based on actions, experiment and experience MUC 1.3 Has practical experience: research of the problem of professional activity with the use of analysis, synthesis and other methods of intellectual activity; development of an action strategy for solving professional problems	methods of critical analysis and evaluation of modern scientific achievements; basic principles of critical analysis	gain new knowledge based on analysis, synthesis, etc.; collect data on complex scientific problems related to the professional field; search for information and solutions based on actions, experiment and experience	research of the problem of professional activity with the use of analysis, synthesis and other methods of intellectual activity; development of an action strategy for solving professional problems
2.	UC - 4	Student is able to apply modern communication technologies, including in a foreign language, for academic and professional interaction	MUC 4.1 Knows: the basics of oral and written communication in Russian and foreign languages, functional styles of the native language, requirements for business communication, modern means of information and communication technologies MUC 4.2 Can: express your thoughts in Russian and a foreign language in business communication MUC 4.3 Has practical experience in writing texts	basics of oral and written communication in Russian and foreign languages, functional styles of the native language, requirements for business communication, modern means of information and communication technologies	express your thoughts in Russian and a foreign language in business communication	in writing texts in Russian and foreign languages related to professional activity; experience in translating medical texts from a foreign language into Russian; experience in speaking Russian and foreign

			in Russian and foreign languages related to professional activity; experience in translating medical texts from a foreign language into Russian; experience in speaking Russian and foreign languages			languages
3.	UC-5	Student is able to analyze and take into account the diversity of cultures in the process of intercultural interaction	MUC 5.1 Knows: the main categories of philosophy, the laws of historical development, the basics of intercultural communication; the basic concepts of human interaction in the organization and the organization. MUC 5.2 will be able to: present professional information competently and in an accessible manner in the process of intercultural interaction; observe ethical norms and human rights; analyze the features of social interaction taking into account national, ethno-cultural, confessional characteristics MUC 5.3 Has practical experience in: productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communicative, educational, ethnic, confessional and other barriers in the process of intercultural interaction	the main categories of philosophy, the laws of historical development, the basics of intercultural communication; the basic concepts of human interaction in the organization and the organization	present professional information competently and in an accessible manner in the process of intercultural interaction; observe ethical norms and human rights; analyze the features of social interaction taking into account national, ethno-cultural, confessional characteristics	productive interaction in a professional environment, taking into account national, ethno-cultural, confessional characteristics; overcoming communicative, educational, ethnic, confessional and other barriers in the process of intercultural interaction
4.	GPC-1	is able to implement moral and legal norms, ethical and deontological principles in professional activity	GPCM 1.1 Knows: fundamentals of medical ethics and deontology; fundamentals of legislation in the field of healthcare; legal aspects of medical activity GPCM 1.2 is able to: apply ethical norms and principles of behavior of a medical worker in the	fundamentals of medical ethics and deontology; fundamentals of legislation in the field of healthcare; legal aspects of medical activity	apply ethical norms and principles of behavior of a medical worker in the performance of their professional duties; knowledge of	solving standard tasks of professional activity based on ethical norms and deontological principles when interacting with colleagues

			performance of their professional duties; knowledge of modern legislation in the field of healthcare in solving professional tasks; apply rules and norms of interaction of a doctor with colleagues and patients (their legal representatives) GPCM 1.3 Has practical experience: solving standard tasks of professional activity based on ethical norms and deontological principles when interacting with colleagues and patients (their legal representatives), knowledge of legal aspects of medical activity		modern legislation in the field of healthcare in solving professional tasks; apply rules and norms of interaction of a doctor with colleagues and patients (their legal representative)	and patients (their legal representatives), knowledge of legal aspects of medical activity
5.	GPC-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	GPCM 4.1 Knows the methodology of complaints taking, history of present illness and personal history taking, the methodology of examination and physical examination; clinical picture, methods of diagnosis of the most common diseases; methods of laboratory and instrumental studies to assess the state of health, medical indications for research, rules for interpreting their results; international statistical classification of diseases and problems related to health (ICD); conditions requiring medical care in an emergency form; the procedure for the use of medical devices in accordance with current medical procedures, clinical recommendations (treatment protocols) on the provision of medical care, care taking into account the standards of medical care GPCM 4.2 is able to: take	the methodology of collecting anamnesis of life and diseases, complaints from patients (their legal representatives); the methodology of examination and physical examination; clinical picture, methods of diagnosis of the most common diseases; methods of laboratory and instrumental studies to assess the state of health, medical indications for research, rules for interpreting their results; international statistical classification of diseases and problems related to health (ICD); conditions	take complaints, history of present illness and personal history, identify risk factors and causes of diseases; apply methods of Physical examination of the patients; interpret the results of examination and physical examination of patients; diagnose the most common pathology in patients; identify cancer risk factors; formulate a preliminary diagnosis,	complaints taking, history of present illness and personal history taking, identifying risk factors and causes of diseases; examination and physical examination of patients; diagnosis of the most common diseases; identification of risk factors for major oncological diseases; formulation of a preliminary diagnosis, drawing up a plan for instrumental, laboratory, additional studies, consultations specialist

			complaints, history of present illness and personal history, identify risk factors and causes of diseases; apply methods of Physical examination of the patients; interpret the results of examination and physical examination of patients; diagnose the most common pathology in patients; identify cancer risk factors; formulate a preliminary diagnosis, make a plan for laboratory, instrumental and additional studies in patients in accordance with the procedures for medical care, clinical recommendations, taking into account the standards of medical care; refer patients to laboratory, instrumental and additional studies in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care; refer patients for consultations with specialist doctors in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care; refer patients to consultations with specialist doctors in accordance with the procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care; interpret and analyze the results of consultations by specialist doctors of patients; interpret and analyze the results of the main (clinical) and additional (laboratory,	requiring medical care in an emergency form; the procedure for the use of medical devices in accordance with current medical procedures, clinical recommendations (treatment protocols) on the provision of medical care, taking into account the standards of medical care	make a plan for laboratory, instrumental and additional studies in patients in accordance with the procedures for medical care, clinical recommendations, taking into account the standards of medical care; refer patients to laboratory, instrumental and additional studies in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care; refer patients for consultations with specialist doctors in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical	doctors; referrals of patients to instrumental, referrals of patients for instrumental, laboratory, additional studies, consultations of specialist doctors in accordance with current medical care procedures, clinical recommendations, taking into account medical care standards; interpretation of data from additional (laboratory and instrumental) examinations of patients; making a preliminary diagnosis in accordance with the international statistical classification of diseases and health-related problems (ICD); differential diagnosis of diseases; recognition of conditions arising from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's

			instrumental) examination methods; to carry out differential diagnosis of diseases in patients; to identify clinical signs of sudden acute diseases, conditions, exacerbations of chronic diseases without obvious signs of life-threatening, requiring urgent medical care; to use medical devices in accordance with current medical procedures, clinical recommendations (treatment protocols) on the following issues providing medical care GPCM 4.3 Has practical experience in: collecting complaints, anamnesis of life and disease in patients (their legal representatives), identifying risk factors and causes of diseases; examination and physical examination of patients; diagnosis of the most common diseases; identification of risk factors for major oncological diseases; formulation of a preliminary diagnosis, drawing up a plan for instrumental, laboratory, additional studies, consultations specialist doctors; referrals of patients to instrumental, referrals of patients for instrumental, laboratory, additional studies, consultations of specialist doctors in accordance with current medical care procedures, clinical recommendations, taking into account medical care standards; interpretation of data from additional (laboratory and instrumental) examinations of patients; making a preliminary diagnosis in accordance		care; refer patients to consultations with specialist doctors in accordance with the procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care; interpret and analyze the results of consultations by specialist doctors of patients; interpret and analyze the results of the main (clinical) and instrumental) investigation methods; to carry out differential diagnosis of diseases in patients; to identify clinical signs of sudden acute diseases, conditions, exacerbations of chronic diseases without obvious signs of life-threatening, requiring urgent medical care; to use medical devices in	life and requiring urgent medical care; the use of medical devices in accordance with current medical procedures, clinical recommendations (treatment protocols) regarding the provision of medical care, assistance taking into account the standards of medical care

			with the international statistical classification of diseases and health-related problems (ICD); differential diagnosis of diseases; recognition of conditions arising from sudden acute diseases, exacerbation of chronic diseases without obvious signs of a threat to the patient's life and requiring urgent medical care; the use of medical devices in accordance with current medical procedures, clinical recommendations (treatment protocols) regarding the provision of medical care, assistance taking into account the standards of medical care		accordance with current medical procedures, clinical recommendations (treatment protocols) on the following issues providing medical care	
6.	GPC-5	is able to evaluate morpho functional, physiological states and pathological processes in the human body to solve professional tasks Information literacy	GPCM 5.1 Knows: anatomy, histology, embryology, topographic anatomy, physiology, pathological anatomy and physiology of human organs and systems GPCM 5.2 is able to: evaluate the basic morpho functional data, physiological states and pathological processes in the human body GPCM 5.3. Has practical experience: evaluation of basic morpho functional data, physiological conditions and pathological processes in the human body when solving professional tasks	anatomy, histology, embryology, topographic anatomy, physiology, pathological anatomy and physiology of human organs and systems	evaluate the basic morpho functional data, physiological states and pathological processes in the human body	evaluation of basic morpho functional data, physiological conditions and pathological processes in the human body when solving professional tasks
7.	GPC-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	GPCM 10. 1. Knows: the capabilities of reference information systems and professional databases; methods of information retrieval, information and communication technologies; modern medical and biological terminology; fundamentals of information security in professional activities GPCM 10. 2 Is able to: apply modern information	the capabilities of reference information systems and professional databases; methods of information retrieval, information and communication technologies; modern medical and biological	: apply modern information and communication technologies to solve the tasks of professional activity; carry out an effective search for	Has practical experience in the use of modern information and bibliographic resources, the use of special software and automated information systems to solve standard

		requirements of information security	and communication technologies to solve the tasks of professional activity; carry out an effective search for information necessary to solve the tasks of professional activity using reference systems and professional databases; use modern medical and biological terminology; master and apply modern information and communication technologies in professional activity, taking into account the basic requirements of information security GPCM 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	terminology; fundamentals of information security in professional activities	information necessary to solve the tasks of professional activity using reference systems and professional databases; use modern medical and biological terminology; master and apply modern information and communication technologies in professional activity, taking into account the basic requirements of information security	tasks of professional activity, taking into account the basic requirements of information security
8.	PC-5	is able to take complaints, history of present illness, personal history, perform a complete physical examination of the patient (inspection, palpation, percussion, auscultation), formulate a initial diagnosis and make a plan for laboratory and instrumental investigation of the patient	PCM 5.1 Knows: The legislation of the Russian Federation in the field of health protection, regulatory legal acts and other documents defining the activities of medical organizations and medical workers; methods of taking history, methods of complete physical examination of the patient (inspection, palpation, percussion, auscultation); etiology, pathogenesis and path morphology, clinical picture, differential diagnosis, features of the course, complications and outcomes of diseases of internal organs; regularities of functioning of a healthy human body and mechanisms of ensuring health from the	the legislation of the Russian Federation in the field of health protection, regulatory legal acts and other documents defining the activities of medical organizations and medical workers; methods of history taking, method of physical examination of the patient (inspection, palpation, percussion, auscultation); etiology,	to take complaints, history of present illness, personal history; perform a complete physical examination of the patient (inspection, palpation, percussion, auscultation), determine the order of volume, content and sequence of diagnostic measures and interpret its results;	has a practical experience to take complaints, history of present illness, personal history; perform a complete physical examination of the patient (inspection, palpation, percussion, auscultation), determine the order of volume, content and sequence of diagnostic measures and interpret its

			standpoint of the theory of functional systems; features of regulation of functional systems of the human body in pathological processes; methods of laboratory and instrumental studies to assess the state of health, medical indications for conducting research, rules for interpreting their results PCM 5.2 is able to: collect complaints, anamnesis of the patient's life and illness and analyze the information received; conduct a complete physical examination of the patient (examination, palpation, percussion, auscultation) and interpret its results; determine the order of volume, content and sequence of diagnostic measures	pathogenesis and path morphology, clinical picture, differential diagnosis, features of the course, complications and outcomes of diseases of internal organs; regularities of functioning of a healthy human body and mechanisms of ensuring health from the standpoint of the theory of functional systems; features of regulation of functional systems of the human body in pathological processes; methods of laboratory and instrumental studies to assess the state of health, medical indications for conducting research, rules for interpreting their results		results
9.	PC- 6	is able to refer the patient for laboratory, instrumental investigation, 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	PCM 6.1 Knows: general issues of the organization of medical care to the population methods of laboratory and instrumental studies to assess the state of health, medical indications for conducting research, rules for interpreting their results; procedures for providing medical care, clinical recommendations (treatment protocols) on the provision of medical care, standards of medical care	general issues of the organization of medical care to the population methods of laboratory and instrumental studies to assess the state of health, medical indications for conducting research, rules for interpreting their results; procedures for providing	substantiate the need and scope of laboratory examination of the patient; justify the need and scope of instrumental examination of the patient; justify the need to refer the patient for consultations with	has practical experience to justify the need and scope of laboratory examination of the patient; justify the need and scope of instrumental examination of the patient; justify the need to refer the patient for consultations with specialist

		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	PCM 6.2 is able to: justify the need and scope of laboratory examination of the patient; justify the need and scope of instrumental examination of the patient; justify the need to refer the patient for consultations with specialist doctors; determine medical indications for the provision of emergency, including emergency specialized, medical care	medical care, clinical recommendation s (treatment	specialist doctors; determine medical indications for the provision of emergency, including emergency specialized, medical care	doctors; determine medical indications for the provision of emergency, including emergency specialized, medical care
10.	PC-7	is able to carry out differential diagnostics with other diseases/condition s, including urgent ones, to make a diagnosis taking into account the current international statistical classification of diseases and health-related problems (ICD)	PCM 7.1 Knows: etiology, pathogenesis and path morphology, clinical picture, differential diagnosis, features of the course, complications and outcomes of diseases of internal organs; methods of laboratory and instrumental studies to assess the state of health, medical indications for conducting research, rules for interpreting their results; PCM 7.2 is able to: analyze the results of the patient's examination, if necessary, justify and plan the scope of additional studies; interpret the results of collecting information about the patient's disease; interpret the data obtained during the laboratory examination of the patient; interpret the data obtained during the instrumental examination	etiology, pathogenesis and path morphology, clinical picture, differential diagnosis, features of the course, complications and outcomes of diseases of internal organs; methods of laboratory and instrumental studies to assess the state of health, medical indications for conducting research, rules for interpreting their results;	the results of the patient's examination, if necessary, justify and plan the scope of additional studies; interpret the results of collecting information about the patient's disease; interpret the data obtained during the laboratory examination of the patient; interpret the data obtained during the instrumental examination of the patient; interpret the	has practical experience to analyze the results of the patient's examination, if necessary, justify and plan the scope of additional studies; interpret the results of collecting information about the patient's disease; interpret the data obtained during the laboratory examination of the patient; interpret the data obtained during the instrumental examination of

			of the patient; interpret the data obtained during the consultations of the patient by specialist doctors; carry out differential diagnosis of diseases internal organs from other diseases		data obtained during the consultations of the patient by specialist doctors; carry out differential diagnosis of diseases internal organs from other diseases	the patient; interpret the data obtained during the consultations of the patient by specialist doctors; carry out differential diagnosis of diseases internal organs from other diseases

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

№	Competence code	Section name of the discipline	The content of the section in teaching units
1.	UC-1,4,5 GPC-1,4.5.10	Introduction to propaedeutics of internal diseases	1. The subject and tasks of propaedeutics. Therapy as a field of clinical medicine, its importance in a number of other medical disciplines. 2. The history of the development of therapy as a science. Domestic and foreign therapeutic schools. Outstanding internists in the history of medicine, the significance of their discoveries and achievements for the development of therapy. 3. Methodology of diagnosis. Basics of diagnostics. The general plan and basic principles of diagnostic research and differential diagnosis. Symptoms and syndromes. Stages of diagnosis and rules for substantiating the diagnosis. 4. Fundamentals of deontology. Principles of medical care, their justification, the Hippocratic oath. Psychological portrait of a doctor. Rules of relations with the patient, with his relatives, with colleagues, with junior medical staff.
2.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Methods of clinical examination of a patient. Taking history. Physical methods.	1. Characteristics of examination methods. Taking history and physical methods: inspection, palpation, percussion, auscultation. General characteristics. 2. Taking history as the first stage of examination of the patient. Rules of the event. 3. Complaints of the patient. Chief and additional complaints. The main characteristics of the pain syndrome. Rules for its description in the medical history (case report), 4. History of present illness. Principles of construction and rules of writing. 5. Personal history. Family, social, past medical history, current health status. Allergological, transfusiological, epidemiological anamnesis. 6. Physical examination. General inspection. Assessment of the general condition, the level of consciousness, the posture, position of the patient, his facial expression. Diagnostic value. Determination of the patient's habitus, assessment of his physique, body mass index, constitution, motor activity and behavior, gait. Assessment of vital signs: body temperature, pulse rate, respiratory rate, arterial blood pressure level. Types of temperature chart. Causes of fever. Inspection and palpation of the skin. Skin discoloration, skin rashes, excessive humidity, dryness, temperature, elasticity. Determination of

			skin turgor Examination of subcutaneous fat. Rules for detecting edema. Rules of examination of palpation of lymph nodes. Rules for describing the lymph node. Causes of lymphadenopathy. Examination of skin derivatives: hair and nails. Types of distribution of body hair growth. Diagnostic value of deformation of the nails. Inspection and palpation of the musculoskeletal system. Determination of the degree of development of the muscular system, its strength, tone. Identification of deformities of bones and joints. Causes of bone and joint deformities.
3.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7 -	Respiratory system	1. Clinical examination of a patient with respiratory diseases. Complaints, anamnesis. Inspection of the ears, nose, nasal passages, inspection of the throat. Palpation of the laryngeal area. 2. Questioning of patients with bronchial and lung diseases. Characteristics of the chief complaints, features of the history of present illness and personal history. 3. Clinical examination of patients with respiratory diseases. Assessment of the severity of the general condition. Possible changes of the level of consciousness. Forced postures. Extrapulmonary manifestations of respiratory diseases: changes of skin color, turgor and moisture of the skin, changes in nails, hair, cervical veins, lymph nodes, the presence of peripheral edema. 4. Local physical examination of patients with respiratory diseases. Determination of the structure type of the chest. Pathological types of the chest. Causes of asymmetry, bulging and retraction of the chest. Causes of asynchrony and lag of half of the chest when breathing. Retraction and bulging of intercostal spaces, their causes. Assessment of the type of breathing: diaphragmatic and thoracic. Measurement of the volume of the respiratory excursion. Determination of the frequency, rhythm of breathing. Physiological and pathological types of breathing. 5. Palpation of the chest. General palpation to determine painful areas, assessment of the magnitude of the epigastric angle, symmetry of respiratory movements, determination of resistance and elasticity of the chest, vocal fremitus tests, pleural friction rub and splashing noise in the pleural cavity. Causes of pathological manifestations. 6. Chest percussion. Rules of conducting and diagnostic significance of comparative and topographic lung percussion. Dullness and disappearance of normal lung resonance, causes. Box and tympanic percussion sound, reasons. Changes of the position of the upper and lower borders of the lungs, causes. Determination of the mobility of the pulmonary margin, the reasons for the restriction of movement. 7. Auscultation of the lungs. Rules of comparative auscultation of the lungs. The main types of breathing: vesicular and bronchial breathing, their physiological and pathological changes. Pathological lung sounds: wheezing, rhonchi, crackles, crepitation, pleural friction rub, falling drop noise, splashing noise. Bronchophony, rules of determination, causes of strengthening and weakening. 8. Laboratory and instrumental methods of respiratory examination. Complete blood count, biochemical blood analysis, sputum examination, pleural effusion, bronchoscopy, lung function tests: spirometry, peak flowmetry, computer spirograph, diffuse lung capacity by carbon monoxide, blood gases. 9. Radiological studies. Chest X-ray and radiography, fluorography, X-ray tomography, bronchography, X-ray computed tomography, magnetic resonance imaging, lung scintigraphy, thoracoscopy, mediastinoscopy, angiography of pulmonary and bronchial vessels. 10.The basic lung syndromes: lung tissue consolidation, respiratory

			failure, pulmonary hyperinflation, bronchospastic, lung cavitation, accumulation of fluid and air in the pleural cavity, obstructive and compression atelectasis of the lungs, the presence of adhesions and mooring in the pleural cavity. 11. respiratory diseases. Lobar and segmented pneumonia. Bronchial asthma, acute and chronic bronchitis, COPD, pulmonary emphysema, bronchiectasis disease, lung abscess, lung cancer, dry and exudative pleurisy, pneumothorax. Etiology, pathogenesis, clinical manifestations, laboratory and instrumental diagnostics, principles of treatment.
4.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Cardiovascular system	1. Clinical examination of a patient with cardiovascular diseases. Taking history. Characteristics of the chief complaints. Rules for description of the pain syndrome. Diagnostic significance of pain characteristics in different cardiac diseases. Features of the History of present illness and personal history. 2. General inspection of a patient with cardiovascular diseases. Assessment of the general condition and level of consciousness of the patient. The forced postures of the patient with various heart diseases. Extracardiac manifestations of heart diseases: discoloration of the skin and mucous membranes, nails, pulsation and swelling of veins, swelling of the face, lower extremities, ascites, etc. 3. Inspection of the precordial area. Characteristics of the apex beat. Detection of chest swelling, pathological pulsations, 4. Palpation of the pulse. Assessment of the rhythm, rate, volume, tension and shape of the pulse. The concept of sphygmography and sphygmogram. 5. Palpation of the precordial area. Palpation of the apex beat, it's characteristics: localization, width, height, strength, resistance. Physiological and pathological causes of changed apex beat. 6. Percussion of the heart and vascular fascicle. Rules for determining relative and absolute dullness. Determination of the length and diameter of the heart. Determination of the configuration of cardiac dullness and the borders of the vascular fascicle. Diagnostic importance of cardiac percussion. 7. Auscultation of the heart and great vessels. Rules of auscultation of the heart and great vessels. Heart tones, mechanisms of their occurrence. Cardiac cycle. The concept of phonocardiography. Normal phonocardiogram. Physiological and pathological changes of heart sounds. Additional heart sounds. The rhythm gallop, its variants. Heart murmurs, classification, their characteristics. Extracardiac and intracardiac murmurs. Organic and functional murmurs. Systolic and diastolic murmurs. Differences between organic and functional cardiac murmurs. Phonocardiogram for mitral and aortic valve defects. 8. Measurement of blood pressure. Rules and preparations for measuring blood pressure. The patient's position. Measurement technique. The multiplicity of BP measurements. Difficulties and the most common errors in measuring blood pressure. Additional methods for assessing AD – 24-hours ambulatory BP monitoring. 9. Electrocardiography as the main diagnostic method in cardiology. The main functions of the heart. Anatomical and physiological characteristics of the heart. ECG registration. ECG elements in healthy persons and in hypertrophy of the heart. The concept of the electrical axis of the heart, the definition of its position. Conduction disturbances. ECG-changes in heart blockades. Arrhythmias of the heart. Classification, causes of occurrence. ECG-signs in supraventricular and ventricular arrhythmias. ECG in patients with coronary heart disease. 10. Methods of radiological diagnostics in cardiology. Chest X-ray. Ultrasound examination of the heart and great vessels. Angio

			coronarography. Nuclear magnetic resonance imaging of the heart and great vessels. Radionuclide study of the contractility of the heart. Perfusion scintigraphy. 11. The main clinical syndromes in cardiology: arterial hypertension, cardiac arrhythmias, coronary insufficiency, incompetence and stenosis of the mitral, aortic, and tricuspid valves, heart failure. 12. Diseases of the cardiovascular system. Acute rheumatic fever, acquired valvular heart diseases, arterial hypertension, coronary heart disease: angina pectoris, myocardial infarction, cardiac arrhythmias, circulatory insufficiency; myocardial diseases: myocarditis, cardiomyopathies, pericarditis, infective endocarditis. Etiology, pathogenesis, clinical manifestations, diagnostic methods.
5.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Digestive system	1. General principles of diagnosis making alimentary tract diseases. Features of taking history in gastroenterological patients. The nature of the pain syndrome: visceral, parietal, radiating pain; mechanisms of occurrence, causes of occurrence. Characteristics of pain syndrome in diseases of the gastrointestinal tract. Types of dyspepsia. Types of dysphagia. Characteristics of belching, heartburn, nausea, vomiting, etc. Manifestations of gastrointestinal bleeding: hematemesis, melena, hematochezia. Types of diarrhea, causes. 2. Clinical examination of patients with diseases of the digestive organs. General and abdominal inspection, superficial and deep, sliding, topographic methodical palpation, percussion, abdominal auscultation. 3. General principles of diagnosis making of diseases of the stomach of the duodenum. Taking history of the patient, the chief complaints, the features of the anamnesis. General examination: assessment of the severity of the condition, the level of consciousness, the position of the patient, facial expression, skin color. Local inspection: changes in the tongue, bad breath, pathology of teeth and gums; when examining the abdomen, the presence of postoperative scars, the participation of the abdomen in the act of breathing. Superficial palpation: abdominal muscle tension, regional cutaneous hyperesthesia, pain during abdominal shaking. Percussion of the abdomen according to Mendel, revealing the splashing noise. Deep palpation of the large curvature of the stomach. 4. Laboratory and instrumental investigations of diagnosis making of stomach diseases. Gastric secretion studies, ph-metry, electrogastrography, endoscopy examination, X-ray diagnostics, helicobacter pylori testing. 5. Diseases of the digestive system. Acute and chronic gastritis, peptic ulcer disease. Etiology, pathogenesis, clinical manifestations, diagnostic methods, principles of treatment. 6. General principles of diagnosis making in pancreatic and intestinal diseases. Taking history. Characteristics of pain syndrome. Symptoms of dyspepsia. Intestinal symptoms: flatulence, rumbling, transfusion in the intestine, tenesmus, intestinal bleeding. Other symptoms: itching, fever, neuropsychiatric and vegetative symptoms, disorders of the general condition. Features of anamnesis in diseases. 7. Physical examination in diseases of the pancreas and intestines. General inspection: assessment of the severity of the general condition, level of consciousness, position of the patient, facial expression, degree of nutrition. Examination of the skin: changes in color, humidity, elasticity. Examination of the oral cavity, tongue, teeth, gums. Examination of the abdomen: shape, size, enhanced peristalsis, contours of the tumor, etc. Superficial indicative palpation of the abdomen. Determination of skin hyperesthesia zones. Percussion and auscultation of the abdomen. Causes of pathological sounds. Deep sliding topographic methodical palpation of the abdomen according to Obraztsov-Strazhesco.

			Palpation of the descending part of the transverse colon, caecum, ascending part of the transverse colon, transverse colon, terminal part of the ileum, appendix, pancreas. Finger examination of the rectum. Determination of pain points in the Shoffar and Hubergritz-Skulsky zones. 8. Laboratory investigations to study of pancreatic function. Examination of feces, the main coprological syndromes; assessment of the enzymes activity in the blood. 9. Methods of radiological investigation in diseases of the pancreas. Overview abdominal radiography, ultrasound, CT scan, MRI. 10. Instrumental invasive methods of intestinal investigation. Rectoromanoscopy, sigmoidoscopy, fibro colonoscopy, laparoscopy, irrigoscopy, radiography. 11. The main syndromes in diseases of the pancreas and small intestine. Malabsorption, celiac disease. Mechanisms of development, clinical manifestations. 12. The main diseases of the intestine and pancreas. Pancreatitis. Pancreatic cancer. Inflammatory bowel diseases: Crohn's disease, ulcerative colitis. Functional bowel diseases: irritable bowel syndrome. Etiology, pathogenesis, clinical manifestations, diagnostic methods. 13. General principles of diagnosis making in diseases of the biliary system and liver. Taking history. Features of complaints and anamnesis. Characteristics of pain syndrome, dyspeptic symptoms, neuropsychic and vegetative symptoms. 14. Physical examination in the diagnosis making of liver and gallbladder diseases. General inspectionn: assessment of the severity of general condition, level of consciousness, facial expression and position of the patient. Skin changes: jaundice, xanthelasma, bruises and hemorrhages, telangiectasia, "hepatic palms", "drum fingers". Local examination: congestion, liver odor from the mouth, overlaid tongue, "lacquer" tongue, papillary atrophy, tremor of the hands, protrusion of the right hypochondrium, "jellyfish head", ascites. Superficial palpation: resistance of the abdominal wall in the right hypochondrium, cutaneous hyperesthesia in cholecystitis. Percussion: detection of free fluid in the abdominal cavity, determination of the liver borders by Kurlov. Auscultation: intestinal paresis in biliary colic, increased intestinal peristalsis in cholecystitis. Deep palpation and determination of pain points. Rules for palpation of the liver and gallbladder. Palpatory symptoms of gallbladder inflammation: symptoms of Ker, Lepene, Grekov-Ortner, Murphy, Mussy, Gausman, Lidsky, Deep liver palpation. Percussion and palpation of the spleen. 15. Laboratory and instrumental diagnostics of diseases of the biliary system. Duodenal probing, rules of conduct, indications, stages of bile excretion. The main functional tests of the liver: the level of bilirubin, blood glucose, serum sialic acids, the level of total protein, its fractions, sedimentary samples, indicators of the state of lipid metabolism: cholesterol, triglycerides, lipoproteins, assessment of the activity of liver enzymes, indicators of water-salt and mineral metabolism, serological diagnosis of hepatitis. Differential diagnosis of jaundice. 16. Methods of radiological diagnostics in diseases of the liver and biliary tract. Endoscopic examination, ultrasound of the liver, gallbladder, pancreas. Ultrasound using functional tests. X-ray diagnostics: radioscopy of the esophagus with contrast, abdominal cavity X-ray, X-ray examination of the biliary tract using radiopaque substances: oral and intravenous cholecystography, retrograde cholangiography, intravenous cholangiography. Computer X-ray tomography. Radiometric and thermometric methods, laparoscopy,

			nuclear magnetic resonance imaging. 17. Diseases of the biliary tract. Functional diseases of the biliary tract, cholelithiasis, acute and chronic cholecystitis. Etiology, pathogenesis, clinical manifestations, diagnostic methods. 18. The main liver syndromes. Inflammatory syndrome, jaundice, cholestasis, cholemic, cytolysis, portal hypertension, hypersplenism, hepatolienal, hepatocellular insufficiency. Clinical manifestations, diagnostic methods. 19. Major liver diseases. Hepatitis, liver cirrhosis, metabolic diseases of the liver. Etiology, pathogenesis, clinical manifestations, laboratory and instrumental diagnostics, principles of treatment.
6.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Urinary system	1. Principles of diagnosis making in diseases of the urinary system. Taking history. Features of complaints. Characteristics of the pain syndrome. Mechanisms of renal edema. Features of arterial hypertension syndrome in kidney diseases. Gastrointestinal complaints in kidney diseases. Features of the history of present illness and personal history. 2. Physical examination in the diagnosis making of renal diseases. Inspection: assessment of the level of consciousness, severity of the general condition, forced posture of the patient, localization of edema. Extrarenal manifestations of kidney diseases: anemia, ascites, heart auscultation murmurs, arterial hypertension, hemorrhages, hyperpigmentation. 3. Palpation, percussion, auscultation of the kidneys. Rules of the event. Diagnostic importance. The symptom of Pasternatsky F.N. 4. Laboratory and instrumental methods of investigations. Urine test: clinical analysis, Nechiporenko test, Addis-Kakovsky test. Functional methods of kidney examination: Zimnitsky test, Raiselman test, hemorenal tests: Reberg test. 5. Methods of radiation diagnostics in nephrology. Overview X-ray examination of the kidneys, cystoscopy, ultrasound of the kidneys, radioisotope examination of the kidneys. 6. The main syndromes in kidney diseases. Disorders of urination, urinary changes, renal arterial hypertension, nephrotic, edematous, renal eclampsia, acute and chronic renal failure, Clinical manifestations, diagnostic methods. 7. The main diseases of the kidneys and urinary system. Acute and chronic glomerulonephritis, pyelonephritis, nephrosis, nephrosclerosis, urolithiasis. Etiology, pathogenesis, clinical manifestations, laboratory and instrumental diagnostics, principles of treatment.
7.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Hematopoietic system	1. Principles of diagnosis making in diseases of the hematopoiesis. Taking history. Features of complaints: general and specific. Anamnesis features. 2. Physical examination methods in the diagnosis making of blood diseases. General inspection: skin color, hemorrhages, scratching marks. Inspection of the oral cavity: swelling, puffiness, bleeding gums, redness, cracks, atrophy of the papillae of the tongue, necrotic changes on the tonsils, etc. Palpation of lymph nodes, liver, spleen: lymphadenopathy, hepatosplenomegaly. 3. Laboratory and instrumental investigations. Complete blood count, bone marrow analysis, studies for hemorrhagic syndrome: coagulation tests, duration of bleeding, blood clot retraction, capillary resistance, prothrombin index. 4. The main clinical syndromes in diseases of the hematopoietic organs: anemia syndrome, hemorrhagic syndrome, myeloproliferative, lymphoproliferative syndromes. Clinical manifestations, laboratory diagnostics. 5. The main diseases of the hematopoiesis system. Anemia:

			posthemorrhagic, iron deficiency, hemolytic, aplastic. Leukemia: acute and chronic. Chronic myeloid leukemia and lymphocytic leukemia. Hemorrhagic diathesis: hemophilia, thrombocytopathies, vasculopathies. Etiology, pathogenesis, clinical manifestations, diagnostic methods, principles of treatment.
8.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Endocrine system	1. Principles of diagnosis making in diseases of the endocrine system. Features of complaints and anamnesis. 2. Physical examination in the diagnosis of diseases of the endocrine system. Inspection. Diagnostic importance of the endocrine patient's facial expression and habitus. Inspection of the skin, assessment of the type of hair loss, the degree of nutrition, examination of the musculoskeletal system. Palpation of the thyroid gland, its percussion and auscultation. Palpation of the testicles. 3. Laboratory and instrumental methods of investigations in endocrinology. Assessment of blood glucose, glycemic profile, glucose tolerance test, calcium level, phosphorus; determination of glycosylated hemoglobin, insulin, adrenocorticotropic hormone, cortisol, thyroxine, triiodothyronine, thyroid-stimulating hormone; urinalysis: albuminuria, hormone excretion. 4. Methods of radiation diagnostics in endocrinology. Ultrasound of the thyroid gland, adrenal glands. Radioimmune and radiological research methods. Computed tomography, MRI. 5. The main clinical syndromes in endocrinology. Hyperglycemia, glucosuria, hypoglycemia, hyperthyroidism syndrome, hypothyroidism. Clinical manifestations, laboratory and instrumental diagnostics. 6. The main diseases of the endocrine glands. Diffuse toxic goiter, myxedema, diabetes mellitus. Diabetic comas. Etiology, pathogenesis, clinical manifestations, diagnostic methods, principles of treatment.
9.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Musculoskeletal system	1. Basic principles of diagnosis making of joint and muscle diseases. Taking history. Features of complaints and anamnesis. 2. Physical examination in rheumatology. General and local inspection. Inspection of joints, muscles, bones. Palpation. Special motor testing. 3. Laboratory and instrumental investigations in rheumatology. Biochemical blood tests (protein fractions, acute phase proteins); uric acid, its clearance; rheumatoid factor. Immunological methods: CEC, immunoglobulins, cryoglobulins, antibodies to antigenic determinants of streptococcus, hepatitis B virus, C, cardiolipin, native DNA, collagen, complement content, HLA-27. Immunofluorescence methods: smears from the urethra, cervix, rectum on chlamydia, mycoplasma, urea plasma. 4. Methods of radiation diagnostics in rheumatology. Radiography of bones and joints, spine, ultrasound of joints, CT and MRI of joints and spine, densitometry, arthroscopy, puncture of joints, biopsy of synovial membranes. 5. The main diseases of the joints. Rheumatoid arthritis, ankylosing spondylitis, osteoarthritis, gout, reactive arthritis, osteoporosis, Reiter's disease. Etiology, pathogenesis, clinical manifestations, laboratory and instrumental diagnostic methods, principles of treatment.
10.	UC-1,4,5 GPC-1,4,5,10 PC-5,6.7	Urgent conditions in the clinic of internal diseases	1. Urgent conditions in pulmonology. Bronchial asthma attack, status asthmatic. Pneumothorax. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. 2. Emergency 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. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

			3. Urgent conditions in gastroenterology. Acute gastric bleeding. Gallbladder colic. Acute pancreatitis. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. 4. Emergency conditions in nephrology. Renal colic. Acute renal failure. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care. 5. General emergency conditions. Anaphylactic shock. Causes, mechanisms of development, clinical manifestations, diagnostic methods, emergency care.

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

Type of educational work	Labor intensity		Labor intensity (AH) in semesters		
	volume in credit units (CU)	volume in academic hours (AH)			
Classroom work, including	5,55	200	88	56	56
Lectures (L)	1,44	52	26	14	12
Laboratory practicum (LP)*	-	-	-	-	-
Clinical Practical (P)	4,11	148	62	42	44
Seminars (S)	-	-	-	-	-
Student's individual work (SIW)	3,44	124	56	34	34
Mid-term assessment					
credit/exam *(specify the type)*	1	36			36 exam
TOTAL LABOR INTENSITY	10	360	144	90	126

6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work

№ п/п	№ semester	Name of the section of the academic discipline	Types of academic work* (in AH)						
1.	4	Introduction to propaedeutics of internal diseases	L 2	LP -	P -	КПР 4	S -	SIW 2	total 8
2.	4	Methods of clinical examination of a patient. Taking history. Physical methods	8	-	-	8	-	10	24
3.	4 5	Respiratory System	10	-	-	30	-	20	65
4.	4 5 6	Cardiovascular system	14	-	-	36	-	22	74
5.	4 5 6	Digestive system	8	-	-	30	-	18	63
6.	4 5 6	Urinary tract	2	-	-	10	-	12	31
7.	4 5 6	Hematopoietic system	2	-	-	6	-	12	20

8.	4 5 6	Endocrine system	2	-	-	6	-	10	22
9.	4 5 6	Musculoskeletal system	2	-	-	8	-	10	21
10.	5 6	Urgent conditions in the clinic of internal diseases	2	-	-	10	-	8	32
		ИТОГО	52	-	-	148	-	124	324

* - 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

№	Name of lecture topics	Volume in AH		
		semester 4	semester 5	semester 6
1.	Introduction to propaedeutics of internal diseases. The subject and tasks of propaedeutics. Methodology of diagnosis. The concept of medical ethics and deontology. Principles of medical care.	2		
2.	The method of subjective examination of the patient. Questioning the patient, its meaning. Rules for the taking history, its structure.	2		
3.	General examination of the patient. Its importance in the diagnosis making of diseases of internal organs.	2		
4.	Palpation, percussion, auscultation as the main methods of physical examination of the patient in the diagnosis making of diseases of internal organs.	2		
5.	The importance of determining vital signs in assessing the patient's condition. Pulse. Temperature. Respiratory rate. Blood pressure.	2		
6.	Features of taking history in patients with diseases of the upper and lower respiratory system.	2		
7.	The importance of inspection of the patient, palpation, comparative and topographic percussion of the chest in the diagnosis making of diseases of the respiratory system.	2		
8.	The importance of lung auscultation in the diagnosis making of respiratory diseases. Main breathing and additional lung sounds. Bronchophony.	2		
9.	Laboratory and instrumental investigation in the diagnosis making of respiratory diseases.	2		
10.	Main lung syndromes. Diagnostic algorithm.	2		
11.	Pneumonia as a manifestation of pulmonary tissue consolidation syndrome. Dry and exudative pleurisy as a manifestation of pleural fluid accumulation syndrome.	2		
12.	Acute and chronic bronchitis. Chronic obstructive pulmonary disease. Etiology, pathogenesis, clinical manifestations. Diagnostic methods. General approaches to treatment.	2		
13.	Clinical manifestations of bronchospastic syndrome. Bronchial asthma. Features of clinical and laboratory diagnostics. Status asthmaticus. Urgent measures.	2		
14.	The importance of taking history in diagnosis making of cardiovascular diseases.		2	
15.	The importance of inspection of the patient in diagnosis making of cardiovascular diseases.		2	
16.	The importance of palpation and percussion in diagnosis making of cardiovascular diseases.		2	

17.	The importance of auscultation in diagnosis making of cardiovascular diseases. Heart tones, their possible changes. Phonocardiography.		2	
18.	Heart murmurs. The importance of phonocardiography and echocardiography in diagnosis making of valvular heart diseases.		2	
19.	Basics of Electrocardiography. Normal ECG. Interpretation algorithm.		2	
20.	Chronic heart failure. Classification, etiology, pathogenesis, clinical manifestations. Methods of laboratory and instrumental diagnostics necessary for diagnosis. Principles of treatment.		2	
21.	Taking history in diagnosis making of gastrointestinal and liver diseases. The importance of inspection of a patient, percussion, palpation and auscultation of the abdomen in the diagnosis making of gastrointestinal and liver diseases.			2
22.	The main clinical syndromes in liver diseases. Hepatitis. Cirrhosis. Features of laboratory and instrumental diagnostics.			2
23.	The main syndromes in renal diseases. The concepts of pyelonephritis and glomerulonephritis, nephrosis and nephrosclerosis. Acute and chronic renal failure. Clinical and laboratory diagnostics. The main approaches in treatment.			2
24.	The importance of methods of physical examination and laboratory and instrumental investigations in the diagnosis making of blood diseases. Concepts of anemia, erythremia, leukemia, hemorrhagic diathesis.			2
25.	Methods of physical examination of patients with diseases of the endocrine system. Thyrotoxicosis syndrome, hypothyroidism. Diabetes mellitus, diabetic comas.			2
26.	Features of complaints, anamnestic data and physical examination methods for diseases of the musculoskeletal system. Methods of laboratory and instrumental investigations.			2
	Total - 52 AH	26	14	12

6.2.2. Thematic plan of clinical practical

№	Name of the topics of practical	Volume in AH		
		semester 4	semester 5	semester 6
1.	Introduction to the clinic of internal Diseases. Introduction to propaedeutics. The concept of a disease, a symptom, a sign of a disease and a syndrome. Stages of diagnosis making. Introduction to Deontology. Principles of medical care and their justification. Interaction between the patient and the doctor. Fundamentals of ethics and medical behavior. Outstanding foreign and domestic internists.	3		
2.	Rules of taking history. Official anamnesis. Chief and additional complaints. History of the present illness. Personal history. Allergies, transfusions, epidemiological anamnesis. Patient curation: taking history.	4		
3.	The importance of general examination of the patient in the diagnosis making of internal diseases. Rules for assessment of the general condition and level of consciousness of the patient. Emotional and psychological state of the patient. General view (habitus): body structure, height, weight, constitution, gait, posture, position. Examination of body parts. Assessment of vital signs.	4		

	Patient physical examination: general inspection and assessment of vital signs.			
4.	Complaints and anamnesis data in respiratory diseases. Characteristics of the chief complaints in the upper and lower respiratory tract diseases: changes of voice, runny nose, sore throat, cough, sputum, shortness of breath, chest pain. Patient curation.	4		
5.	General inspection and inspection of the chest during the examination of a patient with respiratory diseases. The shape of the chest, symmetry, type, depth and rhythm of breathing. The value of chest palpation in respiratory diseases: soreness, elasticity, resistance, tactile vocal fremitus. Practical work: cultivation of skills of inspection and palpation of the chest.	4		
6.	Comparative and topographic percussion of the lungs. Lung resonance and its changes in the pulmonary consolidation syndrome and the syndrome of lung hyperinflation. The upper and lower borders of the lungs, the mobility of the lung's lower bodies. Practical work: cultivation of skills of comparative and topographic percussion of the lungs.	4		
7.	Rules of auscultation of the lungs. The main types of breathing: vesicular, weakened or enhanced vesicular, bronchial, bronchovesicular, amphoric. Additional lung sounds: wheezing, rhonchi, crackles, crepitation, pleural friction rub. The mechanisms of their appearance. Bronchophony. Practical work: cultivation of lung auscultation skills.	4		
8.	Syndromes of pulmonary consolidation, cavitation of lung tissue, compressive atelectasis. Pneumonia, etiology, pathogenesis, classification, clinical picture of lobar and segmented pneumonia. Complications of pneumonia. Lung abscess. Methods of laboratory and instrumental diagnostics. Basic principles of treatment. Patient curation.		5	
9.	Pleural effusion syndrome. Differential diagnosis of exudate and transudate. Dry and exudative pleurisy. Hydrothorax. Methods of laboratory and instrumental diagnostics. Basic principles of treatment. Patient curation.		5	
9.	Air flow limitation syndromes, syndrome of lung hyperinflation. Acute and chronic bronchitis. Chronic obstructive pulmonary disease. Emphysema. Respiratory failure. Cor pulmonale. Classification, etiology, pathogenesis, clinical manifestations. Laboratory and instrumental diagnostic methods. Lung function test. The main approaches in treatment. The groups of drugs. Patient curation.		5	
10.	Syndrome of bronchospasm. Syndrome of air accumulation in the pleural cavity. Bronchial asthma. Pneumothorax. Etiology, pathogenesis, classification, clinical manifestations. Methods of laboratory and instrumental diagnostics. Spirometry. Peak flowmetry. Principles of treatment of bronchial asthma.		4	
11.	Taking history in diagnosis making of cardiovascular diseases. The importance of anamnesis in the diagnosis of angina and myocardial infarction. The importance of general inspection and inspection of the precordial region in the diagnosis making of diseases of the cardiovascular system. The method of measuring blood pressure. Patient curation.	4		
	The importance of palpation and percussion in the diagnosis making of cardiovascular diseases. Palpation of the pulse and precordial area. Characteristics of the pulse, apical impulse. Percussion of the relative and absolute heart bodies, borders of the vascular fascicle. Configuration of cardiac dullness. Changes of the results of			

12.	palpation and percussion in cardiovascular diseases. Practical work: cultivation of skills of palpation of the pulse, apical impulse and percussion of the heart bodies.	4		
13.	The importance and rules of auscultation of the heart and great vessels in the diagnosis making of diseases of the circulatory system. Heart tones, their mechanisms of formation and possible changes. The rhythm gallops. Intracardiac murmurs: organic and functional. Extracardiac murmurs. Elements and structure of a phonocardiogram, its significance in diagnostics. Practical work: cultivation of skills of heart auscultation.	4		
14.	Introduction to electrocardiography. Basics of ECG. ECG registration. Normal ECG elements. Major ECG abnormalities. ECG interpretation algorithm. Determination of the heart rate and the position of the electrical axis of the heart. Practical work: interpretation of a ECG of a healthy patient and with atrial and ventricular hypertrophy.	4		
15.	Arterial hypertension syndrome. Primary arterial hypertension and symptomatic arterial hypertension. Classification, causes, pathogenesis, clinical manifestations. Features of laboratory and instrumental diagnostics. ECG-changes, BP-monitoring, ECHO-KG. Principles of treatment. The main groups of antihypertensive drugs. Patient curation.		5	
16.	Syndromes of myocardial ischemia. Coronary heart disease. Angina pectoris. Myocardial infarction. Classification, etiology, pathogenesis, clinical manifestations. Methods of laboratory and instrumental diagnostics. The importance of electrocardiography in the diagnosis of coronary heart disease. Curation of patients. Practical work: interpretation of ECG with coronary insufficiency.		5	
17.	Cardiac rhythm disorders syndrome. Supraventricular and ventricular tachyarrhythmias. Classification, etiology, pathogenesis, clinical manifestations. Methods of instrumental diagnostics. The importance of electrocardiography and 24-hours ECG monitoring in the diagnosis of coronary heart disease and cardiac arrhythmias. Practical work: interpretation of ECG with cardiac arrhythmias.		5	
18.	Heart failure syndrome. Etiology, pathogenesis of acute and chronic heart failure. Congestive heart failure. Clinical manifestations of left ventricular and right ventricular heart failure, instrumental investigations, principles of treatment. Curation of a patients.		4	
19.	General principles of diagnosis of gastrointestinal diseases. Features of pain syndrome, complaints and anamnesis in diseases of the esophagus, stomach, intestines, and pancreas. General examination of the patient. Patient curation.	3		
20.	Physical methods of abdominal examination: inspection, percussion, auscultation, superficial and deep sliding topographic palpation of the abdomen in the diagnosis of diseases of the gastrointestinal tract and pancreas. Practical work: cultivation of skills of abdominal examination.	4		
21.	Characteristics of abdominal pain syndrome, dyspeptic phenomena and anamnesis data. The importance of physical examination methods in the diagnosis of diseases of the hepatobiliary system: general and local examination, auscultation, palpation and percussion of the abdomen, liver, gallbladder and spleen. Pain characteristics in the diseases of the biliary tract. Practical work: cultivation of skills of physical examination of the liver, gallbladder, spleen.	3		
	Syndromes of gastric dyspepsia and gastrointestinal bleeding. Acute			

22.	and chronic gastritis. Peptic ulcer disease. Classification, etiology, pathogenesis, clinical manifestations, complications, principles of treatment. Laboratory and instrumental methods for the diagnosis of diseases of the stomach and duodenum: gastric secretion study, ph-metry, endoscopy, testing for helicobacter infection, X-ray diagnostics. Patient curation.			5
23.	Syndromes of intestinal dyspepsia, insufficiency of intestinal absorption (malabsorption), digestive insufficiency (maldigestion), exocrine pancreatic insufficiency. Laboratory methods of fecal examination. The main coprological syndromes. Instrumental and laboratory methods of investigations of the pancreas and intestines. Crohn's disease. Ulcerative colitis. Irritable bowel syndrome.			5
24.	Diseases of the biliary tract and pancreas: dyskinesia, gallstone disease, chronic cholecystitis. Chronic pancreatitis. Pancreatic cancer. Etiology, pathogenesis, clinical manifestations. Laboratory and instrumental diagnostics of diseases of the biliary system: biochemical blood analysis, duodenal intubation endoscopy, ultrasound, contrast X-ray diagnostics, CT, MRI, etc. Practical work: interpretation of the results of laboratory and instrumental methods in diseases of the biliary tract and pancreas.			5
25.	The main hepatic syndromes: parenchymal inflammation, jaundice, cholestasis, cholemia, portal hypertension, hypersplenism, hepatocellular insufficiency. Acute and chronic hepatitis. Cirrhosis of the liver. Classification, etiology, pathogenesis, clinical manifestations. Differential diagnosis of jaundice. The main functional tests of the liver. Instrumental methods of investigation. Patient curation.			5
26.	Methods of physical examination of a patient with diseases of the urinary system. Characteristics of pain syndrome, other complaints, anamnesis data. Physical examination of the patient: general inspection, palpation, percussion, auscultation of the kidneys. Urine test. Functional methods of investigations of the kidney. Radiological diagnostic methods. Invasive methods. Practical work: interpretation of the analysis results. Curation of a patient with diseases of the urinary system.	3		
27.	The main clinical syndromes in renal diseases: urinary, nephrotic, nephritic, edematous, hypertensive, renal eclampsia. Acute and chronic glomerulonephritis. Etiology, pathogenesis, clinical manifestations. Laboratory and instrumental investigations. Principles of treatment. Patient curation.			4
28.	The main clinical syndromes in kidney diseases: urinary tract infections, renal colic, uremia syndrome. Acute and chronic pyelonephritis. Calculus of the kidney. Nephrosis. Nephrosclerosis. Acute and chronic renal failure. Etiology, pathogenesis, clinical manifestations, laboratory and instrumental research methods. Principles of treatment. Patient curation			4
29.	Methods of physical examination of patients with blood diseases. Characteristics of complaints, anamnesis features and physical findings. Laboratory and instrumental investigations in the diagnosis making of blood diseases: complete blood count, coagulation tests, immunological, radioisotope methods, bone marrow analysis, puncture of lymph nodes, liver, spleen. Practical work: interpretation of blood tests.	2		
30.	The basic syndromes in blood diseases. Main diseases of the blood system. Anemia. Erythremia. Leukemia. Hemorrhagic diathesis. Classification, etiology, pathogenesis, clinical manifestations, laboratory and instrumental investigations. Principles of treatment.			4

	Patient curation.			
31.	Taking history and physical examination of a patients with endocrine diseases: complaints, anamnesis data, general inspection, facial expression of the patient, palpation and percussion of the thyroid gland. Laboratory and instrumental methods of investigation in endocrinology. Practical work: interpretation of the analysis results and inspection of a patient with endocrine diseases.	2		
32.	The basic syndromes and main diseases of the endocrine system. Hyperthyroidism syndrome, hypothyroidism. Diffuse toxic goiter. Myxedema. Diabetes mellitus. Classification, etiology, pathogenesis, clinical manifestations, diagnosis, principles of treatment. Patient curation.			4
33.	Taking history and physical examination of a patient with musculoskeletal diseases. Chief complaints, anamnesis data, physical methods of examination. Laboratory and instrumental diagnostic methods. Practical work: interpretation of radiographs in diseases of the joints.	2		
34.	The main diseases of the musculoskeletal system. Rheumatoid arthritis. Osteoarthritis. Ankylosing spondylitis. Gout. Etiology, clinical manifestations, diagnosis, principles of treatment. Patient curation.			4
35.	Urgent conditions in pulmonology. Status asthmatic. Pneumothorax. Pulmonary hemorrhage. Acute respiratory failure. Etiology, pathogenesis, clinical manifestations, diagnostics, urgent measures. Curation of the patient in the intensive care unit		2	
36.	Emergency conditions in cardiology. Acute vascular insufficiency: fainting, collapse, shock. Acute heart failure: pulmonary edema, pulmonary embolization. Hypertensive crisis. Paroxysmal tachyarrhythmias. Etiology, pathogenesis, clinical manifestations, urgent measures. Curation of the patient in the intensive care unit.		2	
37.	Urgent conditions in the clinic of gastrointestinal diseases: esophageal, gastric bleeding, acute pancreatitis, cholelithiasis, intestinal obstruction. Etiology, pathogenesis, clinical manifestations, diagnostics, urgent measures. Curation of the patient in the intensive care unit.			2
38.	Urgent conditions in urology, endocrinology and hematology: renal colic, acute renal failure, hypoglycemia, ketoacidosis, thyrotoxic crisis, acute posthemorrhagic anemia. Etiology, pathogenesis, clinical manifestations, diagnostics, urgent measures. Curation of the patient in the intensive care unit.			2
	Total - 148 AH	62	42	44

6.2.3. Types and topics of student's individual work (SIW)

№	Types and topics of SIW	Volume in AH		
		semester 4	semester 5	semester 6
1.	Search and review of literature, work with electronic educational resources on the topic: outstanding foreign and domestic internists, their contribution to the development of medicine, preparation of a report for a student conference.	2		
2.	Lecture material study, study of the material submitted for independent study: inspection of the skin in case of rashes, signs of hair damage, imspection of muscles, bones, joints, practical training on the assessment of vital signs and palpation of lymph nodes, preparation for clinical practical training, preparation for testing,	6		

	preparation for presentation at the conference, writing an abstract.			
3.	Work with lecture material, review and study of literature, work with electronic educational resources on the following topics: pulmonary syndromes: atelectasis, lobular and segmented consolidation, hydropneumothorax, pleural adhesions syndrome; laboratory and instrumental methods in pulmonology; practical training of palpation, percussion, auscultation of the lungs. Work with electronic educational programs on lung auscultation. Writing a medical history, preparation for clinical practical classes; answers to control questions; preparation for testing, training of practical skills in simulation center, solving situational professional tasks, performing case tasks.	10	12	
4.	Work with lecture material, study of lecture notes and educational literature Review and study of literature, work with electronic educational resources on the topics of practical classes. Practical training of the skills of blood pressure measurement, pulse palpation, apical impulse, assessment of their characteristics, percussion of the heart bodies, auscultation of heart tones and murmurs, interpretation of ECG and ECHO-KG. Work with electronic educational programs on auscultation of the heart. Preparation of reports on the topic: myocardial diseases. Writing a medical history, preparing for clinical practical classes; preparing for testing, for a test, classes in a multi-profile accreditation and simulation center, solving situational professional tasks, performing case tasks..	12	14	
5.	Review and study of literature, work with electronic educational resources on gastroenterological topics. Search and review of literature and electronic sources of information on an individually specified topic. Practical training of the skills of palpation, auscultation, percussion of the abdomen, liver, gallbladder, spleen; interpretation of the results of laboratory and instrumental research methods. Preparation of presentations on the topic: intestinal diseases. Compilation of tables for systematization of educational material on the topic: syndromes in liver diseases. Writing a medical history, preparing for clinical practical classes; preparing for testing.	8		8
6.	Search, review and study of literature, work with electronic educational resources on the topics of practical classes. Practical training of skills of palpation, percussion of kidneys; interpretation of results of urine tests and methods of radiologic diagnostics. The study of the material submitted for independent study: nephrolithiasis, the causes of the formation of kidney stones; hydronephrosis. Preparation for practical and classes; preparation for written testing; solving situational professional tasks, completing case tasks, preparing for the test.	6		6
7.	Search, review and study of literature, work with electronic educational resources on the topics of practical classes. Practical training of skills of palpation of lymph nodes, spleen; interpretation of blood tests. The study of the material submitted for independent study: rare forms of anemia, leukemia. Preparation of presentations. Preparation for practical and classes, for written testing, solving situational professional tasks, performing case tasks, preparing for the test.	4		6
8.	Search, review and study of literature, work with electronic sources of information on the topics of lectures and practical classes. The study of the material submitted for independent study: other diseases of the endocrine system: Itsenko-Cushing syndrome, adrenal insufficiency, acromegaly, pheochromocytoma. Practical	4		4

	training of thyroid palpation skills. Preparation for practical and classes, solving situational professional tasks, completing case tasks, preparing for the test, for written testing.			
9.	Search, review and study of literature, work with electronic sources of information on the topics of lectures and practical classes. The study of the material submitted for independent study: reactive arthritis, Reiter's disease. Writing a medical history. Practical training in the interpretation of radiographs for joint diseases. Preparation for practical classes, for written testing, solving situational professional tasks, completing case studies, preparing for the test. Preparation of abstracts on join diseases.	4		4
10.	Search, review and study of literature, work with electronic sources of information on the topics of lectures and practical classes. Practical training in the interpretation of ECG, the results of laboratory and instrumental research methods. Writing a medical history. Preparation for practical and classes, for written testing, for the test.		8	6
	Total - 124 AH	56	34	34

6.2.4. Student's research work

№	Names of the topic of the student's research work	Semester
1.	Outstanding internists in world practice and their contribution to the development of modern media.	4
2.	Skin manifestations and hair changes in diseases of internal organs.	4
3.	Lymphadenopathy in therapeutic practice.	4
4.	The influence of the patient's constitution type on the development of internal pathology.	4
5.	Obesity and cachexia in the clinic of internal diseases.	4
6.	Transudate and exudate in pleural effusion syndrome.	5
7.	Obstructive and restrictive ventilatory disorders in various pulmonary syndromes.	5
8.	Normal ECG variants	5
9.	Ecg-changes in myocardial infarction and infarct-like curves.	5
10.	Myocardial ischemia syndrome in the clinic of internal diseases.	5
11.	Auscultation of the heart in combined valvular heart diseases.	5
12.	Modern methods of instrumental and functional diagnostics in cardiac syndromes.	5
13.	Syndromes of maldigestion and malabsorption in the clinic of internal diseases.	6
14.	Features of diagnosis making in gastroenterological syndromes.	6
15.	Modern laboratory and instrumental diagnostics in hepatic syndromes.	6
16.	Differential diagnosis of jaundice syndrome.	6
17.	Modern laboratory and instrumental diagnostics in urinary syndromes.	6
18.	Differential diagnosis of syndromes in blood disease.	6
19.	Differential diagnosis of endocrine disease syndromes.	6
20.	Differential diagnosis in anemic syndrome.	6
21.	Diagnosis of emergency syndromes in the clinic of internal diseases.	6

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

№	№ semes	Types of control	Name of section of academic discipline	Competence	Assessment formats		
					types	number of test	number of test task options

	ter			codes		questions	
1	2	3	4		5	6	7
1.	4	Monitoring of the student's individual work, monitoring of the mastering of the topic	Introduction to the subject of propaedeutics of internal diseases	УК-1,4,5 ОПК-1,4.5.10	Test task	10	Unlimited
					Report	1	10
2.	4	Monitoring of the student's individual work, monitoring of mastering of the topic, control of the cultivation of practical skills	Methods of clinical examination of the patient. Taking history. Physical examination methods.	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	10	Unlimited
					Case report	1	Corresponds to the number of students in the group
					Practical skills testing	5	10
3.	4 5	Monitoring of the student's individual work, monitoring of mastering of the topic, control of the cultivation of practical skills	Respiratory system	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	20	Unlimited
					Individual survey	1	15
					Case report	1	Corresponds to the number of students in the group
					Practical skills testing	10	10
					Case study	1	15
					Control questions	3	15
H	4 5	Monitoring of the student's individual work, monitoring of mastering of the topic, control of the development of practical skills	Cardiovascular system	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	20	Unlimited
					Individual survey	1	15
					Case report	1	Corresponds to the number of students in the group
					Practical skills testing	8	10
					Case study	1	15
					Control questions	5	15
4.	4 5	Monitoring of the student's individual work, monitoring of mastering of the topic, control of the cultivation of practical skills	Digestive system	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	20	Unlimited
					Case report	1	Corresponds to the number of students in the group
					Practical skills testing	6	10
					Case study	1	15
					Report	1	15
5.		Monitoring of the student's individual work,	Urinary system	УК-1,4,5 ОПК-1,4,5,10	Test task	20	Unlimited
					Case report	1	Corresponds to

	4 5 6	monitoring of mastering of the topic, control of the cultivation of practical skills		ПК-5,6.7			the number of students in the group
					Practical skills testing	3	15
					Case study	1	15
					Control questions	3	15
6.	4 5 6	Monitoring of the student's individual work, monitoring of mastering of the topic, control of the cultivation of practical skills	Hematopoietic system	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	20	Unlimited
					Case report	1	Corresponds to the number of students in the group
					Practical skills testing	3	15
					Control questions	3	15
					Case study	1	15
7.	4 5 6	Monitoring of the student's individual work, monitoring of the mastering of the topic, control of the cultivation of practical skills	Endocrine system	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	10	Unlimited
					Case report	1	Corresponds to the number of students in the group
					Practical skills testing	3	15
					Control questions	3	15
					Report	1	15
8.	4 6	Monitorimg of the student's individual work, monitoring of mastering of the topic, control of the cultivation of practical skills	Musculoskeletal system	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	10	Unlimited
					Case report	1	Corresponds to the number of students in the group
					Practical skills testing	3	15
					Control questions	3	15
					Report	1	15
					Case study	1	15
9.	5 6	Monitoring of the student's individual work, monitoring of tmastering of the topic, control of the cultivation of practical skills	Urgent conditions in the clinic of internal diseases	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Test task	10	Unlimited
					Control questions	3	15
					Report	1	15
					Case study	1	15
10.	6	Mild-term assessment. Exam.	All sections of the academic discipline.	УК-1,4,5 ОПК-1,4,5,10 ПК-5,6.7	Control questions	3	150
					Case study	1	50

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

№	Name according to bibliographic requirements	Number of copies		electronic catalog
		at the department	in the library	
1.	Strongin L. G. Guide to case report writing, history taking and physical examination : textbook for the international english speaking medical students. Publishing House of NNSMA, 2014. - 64 p.	10	10	есть
2	Bickley Lynn S. Bates' pocket guide to physical examination and history taking. Lippincott, 2013.	1	70	есть
3.	Грицевская И.М. Учимся слушать и понимать больного: учебное пособие по изучению русского языка как иностранного в рамках клинической практики для иностранных студентов-медиков. Изд-во НижГМА, 2014. – 150 с.	1	155	есть
4.	Botova S. N. Practical aspects of spirometry : textbook for the overseas medical students. Publishing House of NNSMA, 2015.- 56 p.	3	5	есть
5.	Strongin L. G. Interpretation of ECG data : textbook for the international english speaking medical students. Publishing House of NNSMA, 2014. - 68 p.	5	15	есть
6.	Strongin L. G. Diabetes mellitus : textbook for the international english speaking medical students. Publishing House of NNSMA, 2015.-100 p.	2	30	есть
7.	P. Kumar, M. Clark..Clinical medicine / edited by – 8th ed. – Edinburgh : Saunders, 2012. – 1286 p.	1	50	есть
8.	Longo Dan l. Harrison's principles of internal medicine. V.1. McGraw-Hill, 2012	-	15	есть
9.	Longo Dan l. Harrison's principles of internal medicine. V.2. McGraw-Hil, 2012	-	15	есть

8.2. Further reading

№	Name according to bibliographic requirements	Number of copies		electronic catalog
		at the department	in the library	
1.	Clinical history taking and examination. - Welsby Philip D. Churchill Livingstone,2002– 158p.	1	1	есть
2	Щукин Ю.В. Пропедевтика внутренних болезней Методы исследования пациента: учебное пособие. Ростов-на-Дону: Феникс, 2014. – 287с.		1	есть
3.	Internal diseases propedeutics : textbook. V. T. Ivashkin и A.V.Okhlobystin, Moscow : GEOTAR- Media, 2006 - 176 с.	1	130	есть
4.	Swash M. Hutchison´s Clinical Methods, – 21st ed. – Edinburgh: W.B. Saunders, 2002. – 501 с.	1	41	есть
5.	J. R. Hampton Tthe ECG made easy – 7th ed. – Edinburgh: Churchill Livingstone, 2008. – 179 с.	1	14	есть
6.	V. Kumar, A. K. Abbas Robbins and Cotran pathologic basis of disease edited by Vinay Kumar и Abul K. Abbas . 7th ed.- Elsevier Saunders, 2005. (2005) - 1525 с. 1 CD-Rom.	-	15	есть

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 c.	-	4	есть
9.	Мухин Н.А. Пропедевтика внутренних болезней: учебник с приложением на компакт- диске – 2-е изд. доп. и перераб. – М. : ГЭОТАР-Медиа, 2009. – 848 с.	1	98	есть
11.	Бутов М.А Пропедевтика внутренних болезней: учебное пособие., Москва: ФОРУМ, 2011. – 512с.	1	1	есть
12.	Д. А. Шихнебиев, Пропедевтика внутренних болезней с основами общего ухода за больными: учебное пособие для студентов медицинских вузов – Махачкала : Наука-Дагестан, 2015. – 252 с.	-	1	есть

8.2.1 List of methodological recommendations for individual student's work

№	Name according to bibliographic requirements	Number of copies	
		at the department	in the library
1.	Strongin L. G. Guide to case report writing, history taking and physical examination : textbook for the international english speaking medical students. Publishing House of NNSMA, 2014. - 64 p.	10	10
2	Bickley Lynn S. Bates' pocket guide to physical examination and history taking. Lippincott, 2013.	1	70
3.	Грицевская И.М. Учимся слушать и понимать больного: учебное пособие по изучению русского языка как иностранного в рамках клинической практики для иностранных студентов-медиков. Изд-во НижГМА, 2014. – 150 с.	1	155
4.	Botova S. N. Practical aspects of spirometry : textbook for the overseas medical students. Publishing House of NNSMA, 2015.- 56 p.	3	5
5.	Strongin L. G. Interpretation of ECG data : textbook for the international english speaking medical students. Publishing House of NNSMA, 2014. - 68 p.	5	15
6.	Strongin L. G. Diabetes mellitus : textbook for the international english speaking medical students. Publishing House of NNSMA, 2015.-100 p.	2	30
7.	P. Kumar, M. Clark..Clinical medicine / edited by – 8th ed. – Edinburgh : Saunders, 2012. – 1286 p.	1	50
8.	Longo Dan l. Harrison's principles of internal medicine. V.1. McGraw-Hill, 2012	-	15
9.	Longo Dan l. Harrison's principles of internal medicine. V.2. McGraw-Hil, 2012	-	15
10.	Clinical history taking and examination.- Welsby Philip D. Churchill Livingstone,2002– 158p.	1	1
11.	Internal diseases propedeutics : textbook. V. T. Ivashkin и A.V.Okhlobystin, Moscow : GEOTAR- Media, 2006 - 176 c.	1	130
12.	Swash M. Hutchison´s Clinical Methods, – 21st ed. – Edinburgh: W.B. Saunders, 2002. – 501 c.	1	41
13.	J. R. Hampton The ECG made easy – 7th ed. – Edinburgh: Churchill Livingstone, 2008. – 179 c.	1	14
15.	V. Kumar, A. K. Abbas Robbins and Cotran pathologic basis of disease edited by Vinay Kumar и Abul K. Abbas. 7th ed.- Elsevier Saunders, 2005. (2005) - 1525 c. 1 CD-Rom.	-	15
16.	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 c.	-	4
17.	D. Kasper, E. Brawnwald, A.Fauci, S.Hauser Harrison's principles of Internal Medicine/ edited by – 16th ed. McGraw-Hill Medical Publishing division, 2018. – 2783c.	-	1

8.3. Electronic educational resources for teaching academic subjects
8.3.1. Internal Electronic Library System of the University (IELSU)

№	Name of the electronic resource	Brief description (content)	Access conditions	Number of users
1	Internal Electronic Library System (EBS) PRMU	The works of the staff of PRMU (textbooks, manuals, collections of tasks, manuals, laboratory work, monographs, etc.)	Access by individual login and password from any computer and mobile device	Unlimited

8.3.2. Electronic educational resources acquired by the University

№	Name of the electronic resource	Brief description (content)	Access conditions	Number of users
1.	Database "Medicine. Healthcare (VO) and "Medicine. Healthcare (SPO)" as part of the database "Electronic library of a technical university (EBS "Student Consultant"	Textbooks and teaching aids for higher medical and pharmaceutical education.	Access by individual login and password from any computer and mobile device	Unlimited
2.	Database "Doctor's consultant. Electronic Medical Library"	National guidelines, clinical guidelines, textbooks, monographs, atlases, reference books, etc.	Access by individual login and password from any computer and mobile device	Unlimited
3.	Database "Electronic library system "Book up"	Educational and scientific medical literature of Russian publishers, including translated editions. The collection of subscription publications is formed point-by-point.	Access by individual login and password from any computer and mobile device. From university computers – access is automatic.	Unlimited

8.3.3 Open access resources

№	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.	Free from any computer and mobile device.
2.	«Free Medical Journals»	Catalog of links to foreign medical journals, open for free access to the full texts of articles.	Free from any computer and

		http://www.freemedicaljournals.com/	mobile device.
3.	Free Books for Doctors	Books on medicine in English are freely available http://www.freebooks4doctors.com/	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	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.com	Free from any computer and mobile device.
7.	PubMed	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/pubmed/	Free from any computer and mobile device.

9. Material and technical support for mastering an academic discipline

9.1. List of premises for classroom activities for the discipline

1. A lecture hall equipped with presentation equipment, a 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 diseases, musculoskeletal 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 for classroom activities for the discipline

1. Information stands
2. Personal computers
3. Interactive whiteboard with multimedia complex
4. TV
5. Slide-screen,
6. DVD-films by sections: methods of examination of the patient in therapeutic practice, assessment of vital signs, examination of the patient with diseases of the respiratory system,

cardiovascular system, diseases of the gastrointestinal tract, 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

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

Item no.	Software	number of licenses	Type of software	Manufacturer	Number in the unified register of Russian software	Contract No. and date
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovich	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 TECHNOLOGIES"	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 Subscription	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of Russia	170	Office Application	Microsoft		23618/HN10030 LLC "Softline Trade" from 04.12.2020

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
Endocrinology and internal medicine

CHANGE REGISTRATION SHEET

working program for the academic discipline
PROPAEDEITICS OF INTERNAL DISEASES

Field of study / specialty / scientific specialty: **31.05.01 GENERAL MEDICINE**

Training profile: **GENERAL PRACTITIONER**

Mode of study: **FULL-TIME**

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 _____2022

Head of the Department of
Endocrinology and internal medicine
Doctor of Medical Sciences, Professor _____ Pochinka I.G.