FEDERAL STATE BUDGETARY
EDUCATIONAL INSTITUTION OF HIGHER EDUCATION
"AMUR STATE MEDICAL ACADEMY"
MINISTRY OF HEALTH OF THE RUSSIAN FEDERATION

AGREED
Vice-Rector for Academic Affairs,

_____N.V. Loskutova

April 17, 2025

Decision of the CCMC
April 17, 2025

Protocol No. 7

APPROVED
by decision of the Academic Council of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation

April 22, 2025

Protocol No. 15

Acting Rector of the FSBEI HE Amur SMA of the Ministry of Health of the Russian Federation

_____I.V. Zhukovets

April 22, 2025

ДОКУМЕНТ ПОДПИСАН ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 50AB2242604E64520B52614FA420034A
Владелец: Жуковец Ирина Валентиновна
Действителен: с 15.04.2025 до 09.07.2026

EDUCATIONAL PROGRAM

discipline «Faculty Therapy»

Specialty: 31.05.01General Medicine
Course: 4
Semester: 7, 8
Total hours: 288hrs.
Total credits: 8credit units
Control form: examination, 8 semester

Blagoveshchensk, 2025

The educational program of the discipline is designed in accordance with the requirements of the Federal State Educational Standard of Higher Education - specialist in specialty 31.05.01 General Medicine, approved by the order of the Ministry of Education and Science of Russia dated 08.12.2020 No. 988 (registered with the Ministry of Justice of Russia on 08.26.2020 No. 59493), BPEP HE (2021).

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Deputy Chief Physician for Medical Affairs of the State Autonomous Healthcare Institution of the Amur Region «Blagoveshchensk City Clinical Hospital» T.S. Orlova

APPROVED at the meeting of the Department of Faculty and Polyclinic Therapy, Protocol No.6 dated April 03, 2025

Head of the Department of Faculty and Polyclinic Therapy, Holder of an Advanced Doctorate in Medical Sciences, Associate Professor _____ **V.I. Pavlenko**

Conclusion of the Expert Commission on the review of the Educational Programs: Protocol No. 1 dated April 16, 2025

Expert of the expert commission, Holder of an Advanced Doctorate in Medical Sciences, Associate Professor _____ **E.E. Molchanova**

APPROVED at the meeting of the CMC No.3 : Protocol No.6 dated April 17, 2025

Chairman of the CMC No. 1
Holder of an Advanced Doctorate in Medical Sciences, Professor
_____ **V.V. Voitsekhovsky**

AGREED: Dean of the Faculty of Medicine, Ph.D. of Medical Sciences, Associate Professor _____ **N.G. Brush**

May 27, 2025

CONTENT

1. EXPLANATORY NOTE

1.1. Characteristics of the discipline

The reform of healthcare and higher medical education requires the training of qualified doctors capable of solving complex issues of early recognition, rational treatment and prevention of various diseases. Knowledge of the basics of clinical medicine, which are taught at the Department of Faculty and Outpatient Therapy, is important for the training of doctors of all specialties. When studying the discipline, a picture of clinical thinking, medical deontology is formed, skills are mastered in examining patients, making decisions on prescribing treatment and providing emergency care in life-threatening conditions. The physician's thought process, from the moment of meeting a patient or receiving the first preliminary information about him to the moment of his recovery or death, the result of which is the formation of a clinical diagnosis, an examination plan, treatment and its practical implementation, is usually called clinical thinking.

The practical course of the discipline begins with the teaching of this most important medical task. When presenting a lecture course of a discipline, the connection between the topics and sections of the program emphasized, while ensuring the perception of the discipline as a single, integral science.

Classes in faculty therapy are held in 2 semesters: 15 clinical practical classes in the 7th semester and 10 classes in the 8th semester and 48 hours of lectures.

In the 8th semester, an exam (midterm assessment) is held, consisting of a theoretical part - testing in the Moodle system , questioning the student on tickets, and a practical part - interpretation of clinical and biochemical tests, ECG, radiographs, spirograms, ultrasound, solving situational problems (checking the assimilation of competencies). Classes on the discipline are held in accordance with the curriculum in classrooms, hospital wards, and the accreditation and simulation center (ASC).

1.2. The purpose and educational objectives of the discipline

The purpose of teaching the discipline is to deepen basic knowledge and form systemic knowledge about the mechanisms of formation of the main diseases of internal organs, their diagnosis, treatment, prevention and the ability to generalize and apply the acquired knowledge in practical activities.

Learning objectives of the discipline:

- To provide knowledge of the etiology, pathogenesis, classification, clinical manifestations, complications, diagnosis, treatment and prevention of major diseases of the respiratory , cardiovascular, digestive, urinary and hematopoietic systems.
- Consolidation and improvement of the ability to examine a medical patient.
- To teach how to use the method of differential diagnostics within the framework of the nosological forms being analyzed.
- Formation of independent clinical thinking (ability to make and justify a clinical diagnosis based on collected information about the patient, reasonably prescribe an examination, treatment, conduct a differential diagnosis, and provide assistance in emergency situations).

- To teach the basic principles of treatment and prevention of major diseases of internal organs, provision of emergency care in urgent conditions within the studied nosological forms.
- Consolidation and improvement of communication skills with the patient, taking into account ethics and deontology, depending on the identified pathology and characterological features of the patient.
- Deepening skills in the preparation of medical documentation, working with educational scientific, reference, medical, scientific literature and official statistical reviews, including on the Internet.

1.3. The place of the discipline in the structure of the main professional educational program of higher education

In accordance with the Federal State Educational Standard of Higher Education, a specialist in the specialty 31.05.01 General Medicine (2020), the discipline "Faculty Therapy" refers to the disciplines of the basic part of Block 1. The total workload is 8 credits (288 hours).

The discipline contains the following sections:

1. Pulmonology
2. Cardiology
3. Gastroenterology
4. Nephrology
5. Hematology

1.4 Requirements for students

To study the discipline "Faculty Therapy", a student must have the necessary knowledge, skills and abilities formed by previous disciplines:
Latin
Knowledge **:** Basic medical and pharmaceutical terminology in Latin.
Skills: apply knowledge to solve professional problems (II - III level)
Skills: applies medical and pharmaceutical terminology in Latin in professional activities
Professional foreign language
Knowledge: basic medical and pharmaceutical terminology in a foreign language (II - III level)
Skills **:** apply knowledge to communication and obtaining information from foreign sources
Skills: applies medical and pharmaceutical terminology in a foreign language in professional activities
History of Medicine
Knowledge: outstanding figures in medicine and health care, Nobel laureates, outstanding medical discoveries in the field of therapy, the influence of humanistic ideas on medicine (II - III level)
Skills: competently and independently present and analyze the contribution of domestic scientists to the development of therapy
Skills: applies knowledge about Nobel laureates, scientists, discoveries in the field of therapy, in professional activities
Philosophy
Knowledge: methods and techniques of philosophical analysis of problems; forms and methods of scientific knowledge, their evolution; basic patterns and trends in the development of the world historical process; laws of dialectical materialism in medicine (II - III level)
Skills: to correctly and independently express, analyze the forms and methods of scientific knowledge and the laws of dialectical materialism in medicine
Skills: applies methods and techniques of philosophical analysis in the work of a doctor

Bioethics
Knowledge: moral and ethical standards, rules and principles of professional medical conduct, rights of the patient and the doctor, basic ethical documents regulating the activities of the doctor (II - III level)
Skills: build and maintain working relationships with patients and other team members
Skills: observes moral and ethical standards and principles of medical conduct, in accordance with documents regulating the activities of a doctor
Histology, embryology, cytology
Knowledge: embryogenesis, histological structure of tissues and systems (II - III level)
Skills: determine age-related patterns of development of organs and systems analyze the results of histophysiological research
Skills: uses knowledge of histological structure, embryogenesis of tissues and systems in professional activities
Microbiology, virology
Knowledge: the impact of microbes, viruses, rickettsia, fungi on the body. Microbiological diagnostics of infectious diseases (II level)
Skills: analyze the results of microbiological diagnostics of infectious diseases
Skills: interprets the results of microbiological diagnostics of infectious diseases
Modern problems of regeneration
Knowledge: biological essence, main forms and phases of the main types of regeneration - physiological and reparative; general ideas about the possibility of stimulating regenerative processes occurring in the body; main types of stem cells, sources of their production, application in medicine (II - III level).
Skills: analyze the patterns of physiological and reparative regeneration and the importance of the immune system
Skills: applies knowledge about the functioning of the immune system and the patterns of physiological and reparative regeneration in professional activities
Physics, Mathematics. Medical informatics. Medical biophysics
Knowledge: Mathematical methods for solving intellectual problems and their application in medicine; theoretical foundations of computer science; collection, storage, search, processing, transformation, distribution of information in medical and biological systems; use of information computer systems in medicine and health care; principles of operation and design of equipment used in medicine; fundamentals of physical and mathematical laws that are reflected in medicine (II - III level)
Skills: use educational, scientific, popular science literature, the Internet for professional activities, work with equipment taking into account safety regulations
Skills: uses educational, scientific, popular science literature in the work of a doctor, observes safety rules when working with equipment
Chemistry . Bioorganic chemistry in medicine
Knowledge : chemical and biological essence of processes occurring in a living organism at the molecular and cellular levels (II - III level)
Skills : analyze the contribution of chemical processes to the functioning of the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems.
Skills: applies knowledge of chemical processes occurring in the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems in diagnosing diseases
Biochemistry
Knowledge: blood composition, biochemical blood constants, hormones, buffer systems, hemoglobin oxygenation factors, erythrocyte metabolism (II - III level)

Skills: analyze the contribution of biochemical processes to the functioning of organs and the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems; interpret the results of the most common laboratory diagnostic methods to identify disorders in diseases of internal organs and occupational diseases.
Skills: applies laboratory diagnostic methods to identify changes in the functioning of internal organs during medical practice
Biology
Knowledge: laws of genetics and its importance for medicine; patterns of heredity and variability in individual development as the basis for understanding the pathogenesis and etiology of hereditary and multifactorial diseases; biosphere and ecology, the phenomenon of parasitism and bioecological diseases (II - III level)
Skills: analyze patterns of heredity and variability in the development of diseases of internal organs and occupational diseases
Skills: applies knowledge of genetic patterns in the diagnosis of hereditary diseases
Anatomy
Knowledge: anatomical and physiological features of the respiratory, cardiovascular, digestive, hematopoietic systems (II - III level)
Skills: analyze age-gender characteristics of the structure of organs and systems
Skills: uses knowledge of the anatomical and physiological characteristics of the respiratory, cardiovascular, digestive, and hematopoietic systems in the diagnosis of internal diseases
Normal Physiology
Knowledge: reflex arc, conditioned and unconditioned reflexes, physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in the norm (II - III level)
Skills : analyze the importance of regulation of biological processes in the human body on the functioning of the cardiovascular, digestive, urinary, respiratory, and hematopoietic systems.
Skills: applies knowledge of the physiology of the cardiovascular, digestive, urinary, respiratory and hematopoietic systems in the diagnosis of diseases of internal organs
Topographic anatomy, operative surgery
Knowledge: structure, topography of cells, tissues, organs and systems of the body in interaction with their function in norm and pathology (II level)
Skills: analyze the functional features of the cardiovascular, respiratory, digestive, urinary, and hematopoietic systems in normal and pathological conditions.
Skills: applies functional research methods taking into account the characteristics cardiovascular, respiratory, digestive, urinary, hematopoietic systems
Pathophysiology, clinical pathophysiology
Knowledge: morphological changes in tissues organism in pathologies of the cardiovascular, respiratory, digestive, urinary and blood systems (II level)
Skills: determine the contribution of pathophysiological processes to the development of diseases of internal organs
Skills: applies knowledge of morphological knowledge of tissues of organs and systems in the diagnosis of diseases
Pharmacology
Knowledge : mechanism of action and side effects the influence of various drugs on the body (II - III level)
Skills: be able to write prescriptions for prescribed drugs, know the indications and contraindications for their use
Skills: writes prescriptions for medications taking into account indications and contraindications
Propaedeutics of internal diseases
Knowledge: methods of collecting complaints, anamnesis **,** objective methods of examining patients (palpation, percussion, auscultation (II - III level)

Skills: collect complaints, medical and life history, conduct a physical examination, identify the main syndromes and symptoms of internal organ diseases
Skills: collects complaints, anamnesis of life and illness from patients, uses objective methods of examining patients
Radiation diagnostics
Knowledge: basic methods of radiation diagnostics for the diagnosis of cardiovascular diseases, respiratory, digestive, urinary and blood systems (II - III level)
Skills: describe X-ray symptoms and syndromes of diseases of the lungs, digestive and urinary systems
Skills: uses basic methods of radiation diagnostics to diagnose cardiovascular diseases, respiratory, digestive, urinary and blood systems
Pathological anatomy, clinical pathological anatomy
Knowledge: structural foundations of diseases, their etiology, development mechanisms (pathogenesis), diagnostic principles; morphological features of the disease at the subcellular, cellular, tissue, organ, systemic and organismic levels (Level II)
Skills: compare morphological and clinical manifestations of diseases of internal organs at all stages of their development
Skills: applies knowledge of the etiology and pathogenesis of diseases in the diagnosis and treatment of diseases

1.5 Interdisciplinary links with subsequent disciplines

The knowledge and skills acquired in the discipline "Faculty Therapy" are necessary for studying the following disciplines:

No. p/p	Name of subsequent disciplines	Section/module numbers of the discipline "Faculty Therapy" required for studying subsequent disciplines				
		1	2	3	4	5
1.	Hospital therapy	+	+	+	+	+
2.	Phthisiology	+			+	
3.	Public health and healthcare, health economics	+	+	+	+	+
4.	Infectious diseases	+		+		
5.	Ophthalmology		+			
6.	Forensic medicine	+	+	+	+	+
7.	Oncology, radiation therapy	+		+	+	+
8.	Outpatient therapy	+	+	+	+	+
9.	Anesthesiology, resuscitation, intensive care	+	+	+	+	+
10.	Clinical pharmacology	+	+	+	+	+
11.	Hospital surgery, pediatric surgery	+	+	+	+	+
12.	Functional diagnostics	+	+	+	+	+
13.	Obstetrics and gynecology	+	+	+	+	+
14.	Pediatrics					
15.	Restorative therapy	+	+	+	+	+
16.	Endocrinology		+		+	
17.	Emergency conditions in the practice of a local therapist	+	+	+	+	+

18.	Differential diagnostics in cardiology		+			

1.6. Requirements for the results of mastering the discipline

The study of the discipline "Faculty Therapy" is aimed at the formation/improvement of the following competencies: universal (UC-4), general professional (GPK-1,2,4,5,7) and professional (PK-1,2,3,5,12,14).

No. p/p	Code and name of the competence (or part)	Code and the name of the indicator of achievement of competence	As a result of studying the academic discipline, the student must:		
			Know	**Be able to**	**To own**
	UC-4. Able to apply modern communication technologies…. for academic and professional interaction	AI UC-4.1. Uses communicative and linguistic tools to build effective partnerships with patients and colleagues; selects a communication style.	Basic methods of building interaction between a doctor and a patient, colleagues	Establish contact with patients to obtain reliable information	Possess modern communication skills with patients and medical staff
General professional competencies					
	GPC-1. Capable of implementing moral and legal norms, ethical and deontological principles in professional activities	ID GPC -1.1. Carries out professional activities in accordance with ethical standards and moral principles.	Ethical and deontological aspects of the relationship "doctor-doctor", "doctor-patient"	Conduct a physical examination of the patient taking into account ethical and deontological principles	Have communication skills with the patient and relatives colleagues, junior staff
	GPC -2. Capable of conducting and monitoring the effectiveness of measures for prevention, healthy lifestyle formation and sanitary and hygienic education of the population	ID GPC -2.4. Performs ranking of risk factors for public health, selects and justifies optimal measures to minimize and eliminate health risks.	Causes of development, symptoms and syndromes of diseases of internal organs	To identify modifiable and non-modifiable risk factors for internal organ diseases in a specific patient	Conduct a discussion about the influence of risk factors in the development of diseases of the cardiovascular, respiratory, digestive, urinary and hematopoietic systems
	GPC -4. Capable of using medical products provided for by the procedure for providing medical care, as	ID GPC -4.1. Uses modern medical technologies, specialized equipment and medical products, disinfectants, drugs, including immunobiological and	-Groups of drugs, indications and contraindications for their use, included in	-Use medical equipment and interpret the results of laboratory and	Skills in using medical equipment when examining patients, prescribing

	well as conducting patient examinations in order to establish a diagnosis	other substances and their combinations when solving professional problems from the standpoint of evidence-based medicine. ID GPC -4.2. Knows the indications and contraindications for the appointment of instrumental, functional and laboratory examination methods, possible complications during the examination, emergency care and their prevention. ID GPC -4.3. Interprets the results of the most common methods of instrumental, laboratory and functional diagnostics, thermometry to identify pathological processes. ID GPC -4.4. Proficient in methods of general clinical examination of patients of various ages. ID GPC -4.5. Formulates a preliminary diagnosis and clinical diagnosis according to ICD.	the standards for the provision of specialized care. - The course of some examination methods (spirography, ECG, peak flowmetry, oximetry) - The norm of the main indicators of clinical and biochemical blood tests, general sputum analysis, general urine analysis, urine according to Nechiporenko, Zimnitsky, spirogram indicators, ECG -rules for establishing and formulating a clinical diagnosis	instrumental studies -to make a preliminary and clinical diagnosis according to ICD-10	medications and their combinations taking into account indications and contraindications, conducting a patient examination with the appointment of additional research methods
	GPC-5. Capable of assessing morphofunctional, physiological states and pathological processes in the human body to solve professional problems	ID GPC -5.2. Knows the etiology, pathogenesis, morphogenesis, pathomorphosis of disease development, basic concepts of nosology. ID GPC -5.3. Knows the indicators of the morphofunctional, physiological state of a healthy person and can measure/determine them. ID GPC -5.4. Uses indicators of	Syndromes, symptoms of diseases of internal organs, nosological forms of diseases in accordance with ICD - 10 (within the topics under consideration)	Formulate a clinical diagnosis	The ability to make a clinical diagnosis and justify it

		morphofunctional, physiological state and pathological process to examine the human body in order to establish a diagnosis, prescribe treatment and monitor its effectiveness and safety.			
	GPC -7. Capable of prescribing treatment and monitoring its effectiveness and safety	ID GPC -7.1. Selects a drug based on the totality of its pharmacokinetic and pharmacodynamic characteristics for the treatment of patients with various nosological forms in outpatient and inpatient settings. ID GPC -7.2. Selects the optimal minimum of the most effective means, using convenient methods of their application. ID GPC -7.4. Prescribes medications for the treatment of diseases and correction of pathological conditions, based on the characteristics of the pharmacokinetics and pharmacodynamics of drugs . ID GPC -7.7. Assesses the effectiveness and safety of drug therapy using a combination of clinical, laboratory, instrumental and other diagnostic methods.	-The main groups of drugs used in the treatment of cardiovascular, pulmonary, nephrological diseases, diseases of the digestive system -Rules for prescribing prescription and non-prescription drugs	-prescribe a prescription drug, select the most effective remedy -to evaluate clinical effectiveness	- have the skills to prescribe treatment and monitor its effectiveness and safety
Professional competencies					
	PC-1 Capable of providing medical assistance in urgent and emergency situations	ID PC - 1.1. Identifies clinical signs of conditions requiring emergency medical care ID PC -1.2. Provides emergency medical care to patients with sudden	Symptoms, syndromes sudden acute diseases and conditions, exacerbations of	Prescribe treatment for diseases of internal organs taking into account medical standards	The ability to prescribe treatment, predict the outcome of the disease, and prevent

		acute illnesses, conditions, exacerbation of chronic diseases without obvious signs of a threat to the patient's life	chronic diseases (within the topics discussed)		complications
	PC-2. Capable of collecting and analyzing complaints, life history and medical history of the patient in order to establish a diagnosis	ID PC-2 .1. Establishes contact with the patient. ID PC- 2.2. Collects complaints, specifies them, highlighting the main and secondary ones. ID PC- 2.3. Collects and analyzes information about the onset of the disease, the presence of risk factors, the dynamics of the development of symptoms and the course of the disease. ID PC -2.5 . Collects and evaluates information about the medical history, including data on past illnesses, injuries and surgeries, hereditary, professional, epidemiological history.	Methods of collecting complaints, medical history	Analyze complaints, medical history, and physical examination data.	Ability to analyze anamnestic and physical data.
	PC-3. Capable of conducting a physical examination of a patient, analyzing the results of additional examination methods in order to establish a diagnosis	ID PC-3.1. Conducts a complete physical examination of the patient (inspection, palpation, percussion, auscultation) and interprets its results ID PC-3.2. Justifies the necessity, volume, sequence of diagnostic measures (laboratory, instrumental) and referral of the patient to specialist doctors for consultations ID PC-3.3. Analyzes the results of the patient examination, if necessary, justifies and plans the scope of	Objective examination methods: external examination, examination of the respiratory, cardiovascular, urinary systems, gastrointestinal tract.	Interpret the data obtained and justify the need for additional research methods, conduct differential diagnostics with other diseases	Ability to examine patients, interpret physical findings and results of additional investigations

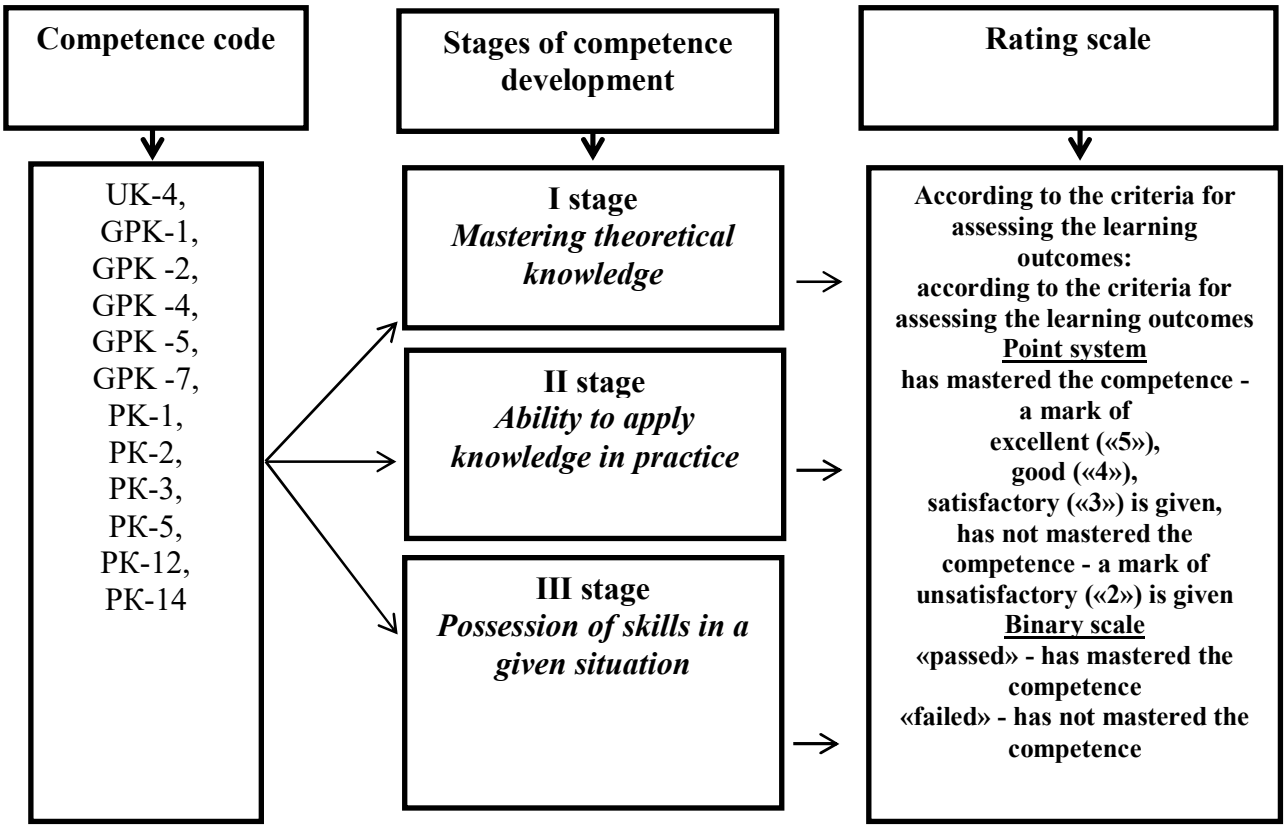
		additional studies. ID PC-3.6. Conducts differential diagnostics of internal organ diseases from other diseases			
	PC-5. Able to prescribe treatment to patients	ID PC-5. 1. Draws up a treatment plan for the patient taking into account the diagnosis, age of the patient, clinical picture of the disease, presence of complications, concomitant pathology, in accordance with the current procedures for the provision of medical care, clinical recommendations (treatment protocols) on issues of providing medical care, taking into account the standards of medical care ID PC-5. 2. Prescribes medications, medical devices and therapeutic nutrition taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care ID PC-5. 3. Prescribes non-drug treatment taking into account the diagnosis, age and clinical picture of the disease in accordance with the current procedures for the provision of medical care, clinical recommendations, taking into account the standards of medical care	Principles of drug and non-drug treatment of diseases of internal organs (within topics under discussion)	Prescribe treatment for diseases of internal organs taking into account medical standards.	The ability to prescribe treatment, predict the outcome of the disease, and prevent complications

	PC-12. Ready to maintain medical records, including in electronic form	ID PC-12.1 . Fills out medical documentation, including in electronic form. ID PC-12.2 . Works with personal data of patients and information constituting a medical secret.	Basic medical documentation (in hospital)	Fill out a medical history form	Ability to maintain medical records
	PC-14. Capable of participating in research activities.	ID PC-14. 1. Participates in scientific research ID PC-14. 2. Analyzes medical information based on evidence-based medicine	Main scientific directions of the department	To formalize the results of scientific research and report them	Willingness to participate in scientific research

Sections of the discipline "Faculty Therapy" and the code of the competence being formed

Item No.	*Section name*	*Code of the competence being formed*
1	Pulmonology	UC-4, GPK-1,2,4,5,7, PK-1,2,3,5,12,14
2	Cardiology	UC-4, GPK-1,2,4,5,7, PK -1,2,3,5,12,14
3	Gastroenterology	UC-4, GPK-1,2,4,5,7, PK -1,2,3,5,12,14
4	Nephrology	UC-4, GPK-1,2,4,5,7, PK -1,2,3,5,12
5	Hematology	UC-4, GPK-1,2,4,5,7, PK -1,2,3,5,12.

1.7 Stages of competencies development and description of assessment scales



1.8 Forms of training organization and types of control

Forms of organization of students' education	Types of control
1.Lectures. 2.Clinical practical classes. 3.Independent work at the patient's bedside. 4.Work in diagnostic rooms (functional diagnostics, X-ray room, clinical and biochemical laboratories). 5.Classes at the Accreditation and Simulation Center (ASC) 6.Active and interactive forms: (clinical analyses of thematic patients, work in the ASC, business games, brainstorming, interactive surveys, discussions, computer simulations, peer review	Current (entrance, initial, exit, milestone) . *Entrance control of the level of preparedness before studying the discipline (testing, interview.* *Initial and final control on the subject of the discipline:* - frontal survey (oral or written) - testing, including computer testing - checking homework - solving situational problems - checking the acquisition of practical skills (work at the patient's bedside, interviews on situational tasks, the educational history of a thematic patient, work

of educational case histories, defense of educational case histories). 7. Internet class. 8.Training duty. 9.Participation in patient rounds with the head of the department, professor, and associate professors. 10.Participation in the research work of the department.	with regulatory documents) - checking the design of the medical history, abstract - report on training duty *Rubicon control:* Control lesson by sections (testing, defense of educational medical history, interview on situational tasks), defense of educational medical history *Midterm assessment:* exam

Explanation. Students receive theoretical knowledge on the discipline at lectures, practical classes, taking part in the research work of the department, patient rounds with the head of the department, professor, associate professors, work in the functional diagnostics department, X-ray room, clinical and biochemical laboratories. During clinical practical classes, the learned material is consolidated and controlled. **Active and interactive forms** of training are used in the training process: work in the SAC, business games, computer simulations, the method of small groups, etc. Practical application of theoretical material in everyday work is logical in the process of cognition, helps to acquire practical skills and abilities. In the process of patient supervision, training duty, students consolidate and improve the basics of patient examination, the skills of interpreting the results of clinical, laboratory and instrumental examination, formulating a clinical diagnosis, prescribing an examination and treatment plan, medical deontology, medical ethics.

Current control:

- entrance control *– is carried out at the first lesson. It is designed to determine the level of preparedness of students and includes testing on previously completed disciplines;*

- initial and final control - is conducted at each practical lesson and includes an assessment of the theoretical knowledge and practical skills developed by students during the lesson and includes: an oral and test survey (similar theoretical and test questions will be offered during the midterm control), solving situational problems; control over the acquisition of practical skills (interpretation of the results of clinical, laboratory and instrumental examination results, formulation of a clinical diagnosis, drawing up a plan for examination and treatment of the patient), a duty report with a patient's report (complaints, medical history, life, physical examination data, formulation, justification of a clinical diagnosis, diagnostics, differential diagnostics, treatment taking into account individual characteristics), as well as control over the supervision of the patient and filling out the educational medical history.

The midterm assessment includes a control lesson on sections in the 6th and 7th semesters and consists of an assessment of the practical skills and theoretical knowledge developed by students during the cycle of lessons.

Interim assessment includes an exam in the 7th semester and consists of an assessment of the theoretical knowledge and practical skills developed by students during the course and includes a theoretical and practical part: testing in the Moodle system , an oral answer to the exam ticket (3 theoretical questions) and interpretation of laboratory and instrumental indicators (blood and urine tests, ECG, R -gram), solving situational problems.

2. STRUCTURE AND CONTENT OF THE DISCIPLINE

2.1. Scope of the discipline and types of educational activities

Types of educational work	Total hours	Semesters	
		7 semester	8 semester
Lectures	48	28	20
Practical classes	120	68	52
Independent work of students	84	48	36
Exam	36	-	36
Total labor intensity in hours	**288**	**144**	**144**
Total workload in credit units	**8**	**4**	**4**

Explanation: The training program for the discipline "Faculty Therapy" includes theoretical (lecture course) and practical training (practical classes). The training is conducted over 2 semesters (7 and 8) and includes 48 hours of lectures (28 hours in the 7th semester and 20 hours in the 8th semester), 120 hours of classroom practical training (68 hours in the 7th semester and 52 hours in the 8th semester); 84 hours of independent work (48 hours in the 7th semester and 36 hours in the 8th semester); type of midterm assessment - exam (36 hours in the 8th semester).

2.2. Thematic plan of lectures and their brief content

Item No.	Lecture topics	Codes of formed competencies	Labor intensity (hours)
	7th semester		
1	**IBS. Angina pectoris.** The concept of ischemic heart disease. Relevance. Atherosclerosis of the coronary arteries as a morphological basis of ischemic heart disease. Evaluation of factors risk of coronary heart disease. Classification of coronary heart disease. Clinical manifestations. Pathogenesis pain syndrome in angina pectoris. Clinical variants. Diagnostics. Treatment. Indications for surgical treatment. Prognosis. Prevention.	GPK- 4, 5, 7, PC-1,2,3,5	2
2	**Myocardial infarction.** Etiology. Pathogenesis. Classification. Clinical features in different periods diseases. Atypical forms of myocardial infarction. Diagnostics. Course. Complications early and late. Treatment of myocardial infarction and its complications. Rehabilitation of patients. Prognosis. Prevention.	GPK- 4, 5, 7, PC-1,2,3,5	2
3	**Hypertension.** Prevalence. Etiology and pathogenesis. Classification. Clinic of hypertension depending on the stage and degree of arterial hypertension. Stratification of the risk of developing cardiovascular diseases. Complications. Hypertensive crises. Treatment. Relief of hypertensive crises. Outcomes. Prognosis. Prevention.	GPK- 4, 5, 7, PC-1,2,3,5	2
4	**Acute rheumatic fever. Chronic rheumatic heart disease.** Etiology. The role of beta-hemolytic streptococcus in the development of the disease. Pathogenesis of rheumatism. Morphology of various stages of rheumatism. Classification. Criteria for ARF. Clinical picture of the main manifestations of ARF: carditis, arthritis, chorea, skin manifestations, serositis. Variants of the course of rheumatic fever (acute rheumatic fever, recurrent rheumatic fever, chronic rheumatic heart disease without heart defects or with heart defects). Treatment. Prognosis. Prevention. Anti-relapse treatment.	GPK- 4, 5, 7, PC-1,2,3,5	2
5	**Acquired mitral and aortic heart defects.** Etiology. Pathogenesis of hemodynamic disorders. Clinical picture. Stages of the course . Importance of instrumental research methods. Treatment. Prognosis. Indications for surgical treatment.	GPK- 4, 5, 7, PC-2,3,5	2
6	**Heart rhythm disturbance.** Impulse formation disorders. Sinus tachycardia, bradycardia. Atrial fibrillation and flutter. Supraventricular and ventricular extrasystole. Supraventricular tachycardia. Sick sinus syndrome. Etiology. Pathogenesis. Classification. Clinical symptoms. Changes in hemodynamics. Diagnostics. Complications. Impulse conduction disorders: sinoatrial, atrial, atrioventricular, intraventricular blocks. Etiology. Pathogenesis. Changes in hemodynamics in various conduction disorders. Classification. Clinical manifestations. Diagnostics. Complications	GPK- 4, 5, 7, PC-2,3,5	2
7	**Treatment of arrhythmias.**	OPK- 4, 5, 7,	2

	Indications for antiarrhythmic therapy (AAT). Classification of AAT. Mechanism of action, indications, contraindications for AAT, side effects. Algorithms for providing emergency care for arrhythmias. Non-drug methods of treating arrhythmias. Indications for electropulse therapy. Management of patients after rhythm restoration. Prevention recurrence of atrial fibrillation. Indications for implantation of an artificial pacemaker. Prognosis.	PC-1. 2, 3, 5 GPK- 4, 5, 7, PC-2,3,5	
8	**Chronic heart failure.** Modern concepts of the pathogenesis of heart failure. Changes in myocardial metabolism in CHF. Provoking and contributing factors. Classification of CHF. Clinical manifestations of acute and chronic failure, left and right ventricular. The concept of latent heart failure. Diagnostics. Clinical and additional research methods. Complications. Treatment of CHF. Treatment acute left ventricular heart failure (cardiac asthma and pulmonary edema). Prognosis.	GPK- 4, 5, 7, PC-2,3,5	2
9	**Acute glomerulonephritis.** Definition of glomerulonephritis. Etiology and pathogenesis. Classification. Pathogenesis of the main syndromes (edematous, hypertensive, urinary). Variants of the course of glomerulonephritis. Diagnostics. Complications. Treatment. Outcomes. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
10	**Chronic glomerulonephritis.** Definition of glomerulonephritis. Etiology and pathogenesis. Classification. Clinic. Pathogenesis of the main syndromes (edematous, hypertensive, urinary). Variants of the course of glomerulonephritis. Diagnostics. Complications. Treatment. Outcomes. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
11	**Chronic pyelonephritis.** Relevance of the problem. Etiology. Pathogenesis. The importance of infection in the development of pyelonephritis. Risk factors. Classification. Clinical symptoms. Diagnostics. Treatment. Outcomes. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
12	**Iron deficiency anemia.** Modern classification of anemic conditions. Iron deficiency anemia. Iron transport pathways in the body, iron deposition, daily iron requirement. Main etiologic factors. Stages of iron deficiency development in the body. Sideroachrestic conditions. Clinical picture, main syndromes, diagnostic criteria. Treatment. Outcomes. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
13	**Community-acquired pneumonia** Community-acquired pneumonia: epidemiology, etiology and pathogenesis, classification . Main symptoms and syndromes. Features of the course depending on severity and age category. Complications. Methods of laboratory and instrumental diagnostics. Diagnostic criteria. Choice of treatment site - CURB -65/ CRB -65 scale . Antibacterial therapy. Principles of step therapy. Criteria for evaluating the effectiveness of antibacterial therapy. Symptomatic agents. Criteria for evaluating recovery. Outcomes. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2

14	**Suppurative lung diseases.** Abscess and gangrene of the lungs. Etiology, pathogenesis. Classification. Clinical manifestations and features depending on the stage, localization, severity of the course. Diagnostics. Complications. Treatment. Indications for surgical treatment. Prognosis. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
VIII semester			
15	**Chronic obstructive pulmonary disease.** Etiology and pathogenesis. The importance of smoking, hypothermia, infection and professional factors. Classification. Symptomatology, course, complications. Diagnostic criteria. Treatment. Prevention. Prognosis. Educational programs.	GPK- 4, 5, 7, PC-2,3,5	2
16	**Bronchial asthma.** Relevance of the problem. Prevalence of the disease. Etiology. Pathogenesis. The role of infectious and non-infectious allergens in the origin of bronchial asthma. The importance of the functional state nervous system, heredity, professional factors in the development of bronchial asthma. Classification. Clinic. Diagnostics. Complications. Diagnostic criteria and stages of asthmatic status.	GPK- 4, 5, 7, PC-2,3,5	2
17	**Treatment of exacerbation of bronchial asthma.** The goal of treatment, principles of treatment of asthma exacerbation. Main groups of drugs. Drug therapy in accordance with asthma stages. Relief of asthma attack. Treatment of asthmatic status. Prevention. Educational programs.	GPK- 4, 5, 7, PC-2,3,5	2
1 8	**Chronic gastritis.** Definition. Prevalence. Etiology (leading exogenous and endogenous factors, the role of Helicobacter pylori). Pathogenesis (meaning disorders of the secretory and motor functions of the stomach). Clinical picture. Main syndromes. Classification. Diagnosis. Diagnostics. Evaluation of gastric secretory function. Treatment. Course. Prognosis. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
19	**Peptic ulcer of the stomach and duodenum.** Etiology. Main and predisposing factors factors. Multifactoriality of pathogenesis. Clinical picture, its dependence on ulcer localization. Diagnostics. Peculiarities of the course of ulcer disease stomach and duodenum. Complications: perforation, bleeding, penetration, pyloric or duodenal stenosis, perigastritis, Periduodenitis, malignancy. Treatment. Emergency care for bleeding. Prognosis. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
20	**Irritable bowel syndrome.** Intestinal dyskinesia, primary and secondary. The role of neurogenic and psychogenic effects, reflex influences. Main options intestinal motility disorders. Clinical picture. Diagnosis. Syndrome irritable bowel syndrome. Differential diagnosis with organic bowel lesions. The role of radiological and endoscopic research methods. Treatment. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
21	**Chronic cholecystitis and biliary dyskinesia.**	GPK- 4, 5, 7,	2

	Etiology and pathogenesis. Variants of biliary dyskinesia. Classification. Clinic. Diagnostics. Complications. Treatment. Prognosis. Prevention.	PC-2,3,5	
22	**Chronic pancreatitis.** Etiology and pathogenesis. The role of infection, alcoholism, gallstones diseases, duodenitis, peptic ulcer in the development of chronic pancreatitis. Classification. Clinical variants. Diagnostics. Treatment. Indications for surgical treatment. Prognosis. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
23	**Chronic hepatitis.** Etiology (viral "B", "C", "D", autoimmune, various medications). Pathogenesis. Classification. Features of the course of various forms of hepatitis. Clinical and laboratory (inflammation, cytolysis, cholestasis, cellular failure) syndromes. Complications. Diagnostics. Course and outcomes of the disease. Treatment, features of therapy of viral, autoimmune and drug-induced hepatitis. Prognosis. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
24	**Liver cirrhosis.** Definition. Etiology. Pathogenesis. The role of immunological disorders in the development of the disease. Classification. Clinical and morphological syndromes. Diagnostics. Complications of liver cirrhosis: cirrhosis-cancer, hepatic coma, portal hypertension, bleeding, anemia, hypersplenism. Treatment. Prognosis. Prevention.	GPK- 4, 5, 7, PC-2,3,5	2
Total hours			**48**

2.3.Thematic plan of practical classes and their content

Topic No. p/p	Name of the topics of practical classes	Contents of practical classes of the discipline	Codes of formed competencies	Type of control	Labor intensity (hours)
7 semester					
1	**IBS. Angina pectoris**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Differential diagnostics. Treatment and prevention of the disease. **Practical part:** analysis of a thematic patient or an archival medical history, supervision of patients, solving situational problems, designing a workbook, an educational medical history, working with handouts, educational, scientific, educational, scientific, medical and reference literature, specialized standards medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the clinical and biochemical laboratory, ECG room , completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
2	**Myocardial infarction (MI)**	**Theoretical part:** Etiology, pathogenesis of the disease, classification and severity classes. Clinic. ECN depending on the period of MI. Early and late complications. Diagnostics. Differential diagnostics of MI and angina. Treatment and prevention. Indications for surgical treatment. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the clinical and biochemical laboratory, ECG room , completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
3	**Treatment of ACS (class at ASC)**	**Theoretical part:** Briefing Definition of ACS. Classification. Diagnostics. Emergency care. Debriefing (analysis of results) **Practical part:** practicing practical skills in the accreditation and simulation center on a simulator.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5:	Current	4.53

			AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2		
4	**Hypertension (HT)**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Complications. Treatment and prevention of the disease. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, interpreting laboratory and instrumental indicators, working with handouts, educational, scientific, medical and reference literature, specialized standards medical care, the Procedure for providing medical care, clinical recommendations (protocols) , participation in the work of the ECG room , completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
5	**Acute rheumatic fever (ARF) and chronic rheumatic heart disease (CRHD)**	**Theoretical part:** Etiology and pathogenesis of ARF. Classification. Clinical manifestations. Main diagnostic criteria. Treatment and prevention of the disease. Outcomes. Definition of CRHD. Course variants. **Practical part:** analysis of a thematic patient or an archival medical history, supervision of patients, solving situational problems, designing a workbook, an educational medical history, working with handouts, educational, scientific, educational, scientific, medical and reference literature, specialized standards medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the ultrasound room, clinical and biochemical laboratory , completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
6	**Acquired mitral and aortic heart defects**	**Theoretical part:** causes of acquired heart defects. Hemodynamics in mitral valve insufficiency and stenosis, aortic valve insufficiency, aortic orifice stenosis. Clinical manifestations. Diagnostic criteria. Complications. Treatment and prevention of the disease. Indications for surgical treatment. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook , educational medical history, working with handouts, educational, scientific, medical and reference materials, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the ultrasound room , completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
7	**Control lesson by sections**	Checking the acquisition of competencies (testing, interviews on situational tasks, defense of the educational medical history).		Rubicon	4.53

8	**Heart rhythm disturbance**	**Theoretical part:** modern concepts of the pathogenesis of cardiac rhythm and conduction disorders. Classification of arrhythmias. ECG signs of sinus tachycardia and bradycardia, supraventricular and ventricular extrasystoles, supraventricular tachycardia, atrial fibrillation and flutter, sick sinus syndrome. ECG signs of conduction disturbances (atrioventricular and intraventricular blocks). Drug and non-drug treatment, prevention. Indications for temporary cardiac pacing and implantation of pacemakers. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, designing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the ECG room , completing tasks according to the model.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	
9	**Chronic heart failure (CHF)**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Diagnostic criteria. Complications. Treatment and prevention of the disease. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the ultrasound room , completing tasks according to the sample. Duty report .	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
10	**Acute and chronic glomerulonephritis**	**Theoretical part:** Etiology and pathogenesis of diseases. Classification. Clinical manifestations, complications. Diagnostic criteria. Treatment and prevention. Extracorporeal methods of treatment. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, designing a workbook, educational medical history, working with handouts, with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , (participation in the work of the ultrasound room, clinical and biochemical laboratory , completing tasks according to the sample, completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
11	**Chronic**	**Theoretical part:** Etiology and pathogenesis of diseases. Classification. Clinical	UC-4: AI- 4.1; GPK-1: AI-	Current	4.53

	pyelonephritis	manifestations, complications. Diagnostic criteria. Treatment and prevention. Extracorporeal methods of treatment. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the ultrasound room, clinical and biochemical laboratory , completing assignments according to the sample, Duty Report.	1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2		
12	**Iron deficiency anemia (IDA)**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Differential diagnostics. Treatment and prevention of the disease. Indications for surgical treatment. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, interpreting laboratory and instrumental indicators, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, participation in the work of a clinical and biochemical laboratory , completing assignments based on a model.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
13	**Community-acquired pneumonia**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Complications. Treatment and prevention. **Practical part:** analysis of a subject patient or an archived medical history, supervision of patients, solving situational problems, preparing a workbook, an educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, participation in the work of the X-ray room, clinical and biochemical laboratory , completing assignments according to the sample, completing assignments according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	4.53
14	**Suppurative lung diseases**	**Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the X-ray room, clinical and biochemical laboratory , completing assignments according to the model, completing assignments according to the model. Duty	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5:	Current	4.53

		report. **Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Complications. Treatment and prevention. Indications for surgical treatment.	AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2		
1 5	**Control lesson by sections**	Checking the acquisition of competencies (testing, interviews on situational tasks, defense of the educational medical history).		Rubicon	4.53
		8 semester			
1 6	**Chronic obstructive pulmonary disease (COPD)**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Complications. Treatment and prevention. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the spirography room , completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	5.2
1 7	**Bronchial asthma (BA)**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Complications. Treatment of bronchial asthma depending on its severity. Disease prevention. **Practical part:** analysis of a case study or archived medical history, patient supervision, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the spirography room , completing assignments according to the sample, completing assignments according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	5.2
18	**Chronic gastritis. Gastric ulcer and duodenal ulcer**	**Theoretical part:** Etiological factors leading to the development of chronic gastritis, peptic ulcer. Pathogenesis. Classification. Clinical manifestations. Methods of instrumental and laboratory diagnostics. Treatment and prevention of diseases. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, designing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5:	Current	5.2

		of medical care, clinical recommendations (protocols) , participation in the work of the FGS office, completing tasks according to the model.	AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2		
19	**Diagnosis and treatment of respiratory diseases (class at the ASC)**	**Theoretical part:** Briefing . Differential diagnostics of respiratory diseases (pneumonia, bronchial asthma, chronic obstructive pulmonary disease). Diagnostics. Treatment. Solving clinical problems. Debriefing (analysis of results) **Practical part:** practicing practical skills in the accreditation and simulation center on a simulator.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	5.2
20	**Chronic pancreatitis**	Etiological factors leading to the development of the disease Pathogenesis. Classification. Clinical manifestations. Complications. Methods of instrumental and laboratory diagnostics. Treatment and prevention of the disease. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, designing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	5.2
21	**Chronic cholecystitis and biliary dyskinesia**	**Theoretical part:** Etiological factors leading to the development of diseases Pathogenesis. Classification. Clinical manifestations. Complications. Emergency care in urgent conditions. Methods of instrumental and laboratory diagnostics. Treatment and prevention of diseases. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, designing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the FGS office, completing tasks according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	5.2
22	**Chronic hepatitis**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria, immunodiagnostics of hepatitis.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4:	Current	5.2

		Complications. Treatment and prevention. **Practical part:** analysis of a thematic patient or medical history, supervision of patients, solving situational problems, designing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, The procedure for providing medical care, clinical recommendations (protocols) , participation in the work of the ultrasound room, clinical and biochemical laboratory, performing tasks according to the sample. Duty report.	AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2		
23	**Liver cirrhosis**	**Theoretical part:** Etiology and pathogenesis of the disease. Classification. Clinical manifestations. Main diagnostic criteria. Complications. Emergency care in urgent conditions. Treatment and prevention. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the ultrasound room, clinical and biochemical laboratory , completing assignments according to the sample, completing assignments according to the sample. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	5.2
24	**Irritable bowel syndrome**	**Theoretical part:** Etiology and pathogenesis of irritable bowel syndrome and dysbacteriosis. Classification. Clinical manifestations. Complications. Methods of laboratory and instrumental diagnostics. Treatment, prevention. **Practical part:** analysis of a case study or archived medical history, supervision of patients, solving situational problems, preparing a workbook, educational medical history, working with handouts, educational, scientific, medical and reference literature, the standard of specialized medical care, the Procedure for the provision of medical care, clinical recommendations (protocols) , participation in the work of the ultrasound room, clinical and biochemical laboratory , completing assignments according to the model, completing assignments according to the model. Duty report.	UC-4: AI- 4.1; GPK-1: AI-1.1; GPK-2: AI-2.4; GPC-4: AI -4.1-4.5; GPC -5: AI -5.2-5.4; GPC-7: AI -7.1, 7.2, 7.4, 7.7; PC-1: AI 1.1, 1.2; PC-2: AI -1.1, 1.2; PC-2.1-2.3, 2.5; PC-3: AI -3.1-3.3, 3.6; PC-5: AI -5.1-5.3; PC-12: AI -12.1, 12.2; PC-14: AI -14.1, 14.2	Current	5.2
25	**Control lesson by sections**	Checking the acquisition of competencies (testing, interviews on situational tasks, defense of the educational medical history).		Rubicon	5.2

Note: Classes at the ASC are held according to the schedule.

2.4 Interactive forms of learning

In order to activate students' cognitive activity, **interactive teaching methods are widely used in practical classes** (discussions, interactive surveys, computer simulations, classes in the accreditation and simulation center, etc.).

Item No.	Topic of the practical lesson	Labor intensity in hours	Interactive form of learning	Labor intensity in hours, in % of the lesson
7th semester				
1	IBS. Angina pectoris	4.53	Brainstorming. Computer simulations Testing in Moodle	40 min. (0.88 hours)/19.4%
2	Myocardial infarction	4.53	Role play Testing in Moodle	40 min. (0.88 hours)/19.4%
3	Treatment at the OKC (class at the ASC)	4.53	Working in the interactive survey system Quizdom Working on a dummy. Testing in the Moodle system	4.53 hours (100%)
4	Hypertension	4.53	Small group method. Testing in Moodle	40 min. (0.88 hours)/19.4%
5	Acute rheumatic fever and chronic rheumatic heart disease	4.53	Small group method . Testing in the Moodle system	40 min. (0.88 hours)/19.4%
6	Acquired mitral and aortic heart defects	4.53	Interactive survey. Peer review of case histories. Testing in Moodle	40 min. (0.88 hours)/ 19.4%
7	Control lesson by sections	4.53	Brainstorming. Defense of the educational medical history. Testing in the Moodle system	40 min. (0.88 hours)/ 19.4%
8	Rhythm disturbance	4.53	Interactive survey. Computer simulations. Testing in the Moodle system	40 min. (0.88 hours)/ 19.4%
9	Chronic heart failure	4.53	Brainstorming. Testing in Moodle	40 min. (0.88 hours)/19.4%
10	Acute and chronic glomerulonephritis	4.53	Computer Simulations. Testing in Moodle	40 min. (0.88 hours)/19.4%
1 1	Chronic pyelonephritis	4.53	Brainstorming. Testing in Moodle	40 min. (0.88 hours)/19.4%
1 2	Iron deficiency anemia	4.53	Small Group Method. Testing in Moodle	40 min. (0.88 hours)/19.4%
1 3	Community-acquired pneumonia	5.2	Computer Simulations Peer Review of Case Study Cases Testing in Moodle	40 min. (0.88 hours) /19.4%
14	Suppurative lung diseases	5.2	Computer Simulations Peer Review of Case Study Cases Testing in Moodle	20 min. (0.44 hours)/19.4%
1 5	Control lesson by sections	4.53	Defense of the educational medical history. Testing in the Moodle system	40 min. (0.88 hours)/19.4%
VIII semester				
16	Chronic obstructive pulmonary disease	5.2	Computer Simulations. Testing in Moodle	40 min. (0.88 hours)/17.6%

14	Bronchial asthma	4.53	Brainstorming. Testing in Moodle	40 min. (0.88 hours)/17.6%
18	Chronic gastritis . Peptic ulcer of the stomach and duodenum	5.2	Brainstorming. Computer simulations. Testing in the Moodle system	40 min. (0.88 hours)/17.6%
19	Diagnosis and treatment of respiratory diseases (class at the ASC)	5.2	Interactive survey Computer simulations. Exercise on a mannequin.	40 min. (0.88 hours)/17.6%
20	Chronic pancreatitis	5.2	Small Group Method. Testing in Moodle	40 min. (0.88 hours)/17.6%
21	Chronic cholecystitis and biliary dyskinesia	5.2	Small Group Method. Testing in Moodle	40 min. (0.88 hours)/17.6%
22	Chronic hepatitis	5.2	Small Group Method. Testing in Moodle	20 min. (0.44 hours)/13.5%
23	Liver cirrhosis	5.2	Interactive survey. Computer Simulations. Testing in Moodle	40 min. (0.88 hours)/17.6%
24	Irritable bowel syndrome	5.2	Interactive survey. Computer Simulations. Testing in Moodle	40 min. (0.88 hours)/17.6%
25	Control lesson by sections	5.2	Defense of the educational medical history. Testing in the Moodle system	40 min. (0.88 hours)/17.6%

2.5 Criteria for assessing students' knowledge

The basis for determining the level of knowledge, skills, and abilities are the assessment criteria

-completeness and correctness:
-correct, precise answer;
-correct but incomplete or imprecise answer;
-incorrect answer;
-no answer.

When assigning marks, the classification of errors and their quality are taken into account:

- gross errors;
- similar errors;
- minor errors;
- shortcomings.

- ***Distribution of grades in classes (table)***

Criteria for assessing learning outcomes
7th semester

No. p/p	**Topic of the practical lesson**	**Theoretical part**	**Practical part**	**Overall rating**
1	IBS. Angina pectoris	2-5	2-5	2-5
2	Myocardial infarction	2-5	2-5	2-5
3	Treatment of ACS	2-5	2-5	2-5
4	Hypertension	2-5	2-5	2-5
5	Acute and chronic rheumatic fever	2-5	2-5	2-5
6	Acquired mitral and aortic	2-5	2-5	2-5

	heart defects			
7	Control lesson on the section	2-5	2-5	2-5
8	Heart rhythm disturbance	2-5	2-5	2-5
9	Chronic heart failure	2-5	2-5	2-5
10	Acute and chronic glomerulonephritis	2-5	2-5	2-5
11	Chronic pyelonephritis	2-5	2-5	2-5
12	Iron deficiency anemia	2-5	2-5	2-5
13	Community-acquired pneumonia	2-5	2-5	2-5
14	Suppurative lung diseases	2-5	2-5	2-5
15	**Control lesson by sections**	2-5	2-5	2-5
Duty				2-5
Study medical history				2-5
Average score				

8th semester

No. p/p	**Topic of the practical lesson**	**Theoretical skaya part**	**Practical part**	**General rating**
1	COPD	2-5	2-5	2-5
2	Bronchial asthma	2-5	2-5	2-5
3	Chronic gastritis. Peptic ulcer of the stomach and duodenum	2-5	2-5	2-5
4	Diagnosis and treatment of respiratory diseases	2-5	2-5	2-5
5	Chronic pancreatitis	2-5	2-5	2-5
6	Chronic cholecystitis and biliary dyskinesia	2-5	2-5	2-5
7	Chronic hepatitis	2-5	2-5	2-5
8	Liver cirrhosis	2-5	2-5	2-5
9	Irritable bowel syndrome	2-5	2-5	2-5
10	**Control lesson by sections**	2-5	2-5	2-5
Duty				2-5
Study medical history				2-5
Average score				

-Rating scales for ongoing knowledge control

The success of students in mastering the discipline (topics), practical skills and abilities is characterized by a qualitative assessment and is assessed on a 5-point scale: "5" - excellent, "4" - good, "3" - satisfactory, "2" - unsatisfactory. The conversion of the mark into a point scale is carried out according to the following scheme:

Success rate	Mark on a 5-point scale
90 - 100%	"5"
80 - 89%	"4"
70 - 79%	"3"
Below 70%	"2"

Assessment criteria (grades) of the theoretical part

"5" - for the depth and completeness of mastery of the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones, express and justify their judgments, correctly and logically present the answer; when testing, allows up to 10% of erroneous answers.

"4" - the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing, allows up to 20% of erroneous answers.

"3" - the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; when tested, allows up to 30% of erroneous answers.

"2" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and the secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers when tested.

Based on the results of different assessments, an average grade is given in favor of the student.

Assessment criteria for the practical part

"5" - the student supervises a subject patient on a daily basis, has fully mastered the practical skills and abilities provided for by the course work program (correctly interprets the patient's complaints, anamnesis, objective examination data, formulates a clinical diagnosis, prescribes examination and treatment, interprets clinical, laboratory and instrumental indicators taking into account the norm).

"4" – the student supervises the subject patient on a daily basis, has fully mastered the practical skills and abilities provided for by the course work program, but allows for some inaccuracies.

"3" - the student does not regularly supervise the patient; the student has only some practical skills and abilities.

"2" - the student has visited the supervised patient less than 4 times, performs practical skills and abilities with gross errors.

Duty assessment criteria and duty report

"5" - the student worked on duty without any comments, took an active part in carrying out medical procedures, emergency care, competently and correctly presents the medical history of the supervised patient, formulates a clinical diagnosis, prescribes examination and treatment, skillfully combines theoretical knowledge with practical skills.

"4" - the student worked on duty without any comments, took an active part in carrying out medical procedures, emergency care, but makes some inaccuracies in presenting the medical history of the supervised patient, making a clinical diagnosis, prescribing examination and treatment.

"3" - the student worked on duty without any comments, but was passive, made inaccuracies in presenting the medical history of the supervised patient, making a clinical diagnosis, prescribing examinations and treatment.

"2" **–** the student was not on duty or was on duty with comments, was passive, does not know how to present the medical history of the supervised patient, make a clinical diagnosis, prescribe examination and treatment.

Criteria for evaluation of educational medical history

"5" – preparation of the educational medical history in accordance with the requirements.

"4" - in the student's medical history, the student makes some inaccuracies in the formulation of a detailed clinical diagnosis, examination and treatment.

"3" - the medical history is filled with errors, written in illegible handwriting, there are inaccuracies in the formulation of the detailed clinical diagnosis, treatment, the pathogenesis of the disease is not fully covered.

"2" - the medical history is written in illegible handwriting, with gross errors (a detailed clinical diagnosis is not made and not substantiated, treatment is not prescribed correctly, the pathogenesis of

the disease is not covered.

-Working off disciplinary debts

If a student misses a class for a valid reason, he/she has the right to make it up and receive the maximum grade provided for by the course work program for that class. A valid reason must be documented.

If a student misses a class for an unjustified reason or receives a grade of "2" for all activities in the class, he is required to make it up.

If a student is excused from a class at the request of the dean's office (participation in sports, cultural and other events), then he is given a grade of "5" for this class, provided that he submits a report on the completion of mandatory extracurricular independent work on the topic of the missed class.

-Assessment criteria for midterm assessment

Interim certification is carried out in 3 stages:

1. Test control in the Moodle system.
2. Passing practical skills (competencies).
3. Answers to exam tickets.

Criteria for final assessment (midterm assessment)

Excellent - for the depth and completeness of mastering the content of the educational material, in which the student easily navigates, for the ability to connect theoretical questions with practical ones, express and justify their judgments, correctly and logically present the answer; when testing, allows up to 10% of erroneous answers. Practical skills and abilities provided for by the working program of the discipline are fully mastered.

"Good" - the student has fully mastered the educational material, is oriented in it, correctly states the answer, but the content and form have some inaccuracies; during testing allows up to 20% of erroneous answers. Completely practical skills and abilities provided by the working program of the discipline, but allows some inaccuracies

"Satisfactory" - the student has mastered the knowledge and understanding of the main provisions of the educational material, but presents it incompletely, inconsistently, does not know how to express and justify his/her judgments; during testing, allows up to 30% of erroneous answers. Has only some practical skills and abilities.

"Unsatisfactory" - the student has fragmented and unsystematic knowledge of the educational material, is unable to distinguish between the main and secondary, makes mistakes in defining concepts, distorts their meaning, presents the material in a disorderly and uncertain manner, and makes more than 30% of erroneous answers during testing. Performs practical skills and abilities with gross errors.

Based on the results of different assessments, an average grade is given in favor of the student.

A student can claim to receive an "excellent" grade automatically if he/she has won a prize in disciplinary or interdisciplinary Olympiads (university, regional) and has an average grade for the current academic performance of at least 4.8 points **.** A student can refuse the "automatic" grade and take an exam or test together with a group on a general basis.

2.6 Independent work of students: in-class and out-of-class.

Independent work of students consists of two components: classroom and extracurricular (mandatory for all students and optional) work.

Students' independent work in the classroom makes up 25% of the time allocated for the lesson. Classroom work includes **:** the main didactic tasks of independent work of students under the guidance of a teacher: consolidation of knowledge and skills acquired during the study of the academic discipline in lectures and practical classes; prevention of their forgetting; expansion and deepening of

educational material; formation of the ability and skills of independent work; development of independent thinking and creative abilities of students.

The students' classroom work includes: checking their current knowledge on the topic of the practical lesson in the form of an oral or written survey, test control, solving situational problems, interpreting laboratory and instrumental indicators, drawing up an examination and treatment plan. Familiarization with the department's available methodological manuals, tables, diagrams, stands, tablets. Supervision of patients and preparation of the educational medical history, practicing practical skills and abilities in the SAC. Individual work with the development and implementation of practical skills.

The following can be used as the main forms of extracurricular independent work: studying the main and additional educational and scientific literature; solving situational problems, test assignments, working in an Internet class; preparing oral reports; writing an educational medical history; being on duty at the clinic; preparing a report on duty, performing diagnostic manipulations; observing and self-observing specific clinical phenomena being studied, etc. This type of educational activity should be based on the activity, initiative, consciousness and independent activity of students.

Extracurricular independent work of students

Topic of the practical lesson	**Time for student preparation for the lesson (hour.)**	**Forms of extracurricular independent work**	
		Mandatory and the same for all students	**At the student's choice**
		On-call duty (once per semester), duty report	
IBS. Angina pectoris	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Making a table or tablet or **on the topic:** Methods for detecting hidden coronary insufficiency
Myocardial infarction	**3.4**	Preparation on theoretical issues (lectures, basic and additional literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solution (or composing) tasks, tests, writing recipes, algorithms, completing assignments according to a sample, filling out a medical history, workbook, working in an online classroom.	Preparation of a presentation or table **on the topic:** Surgical methods of treatment in cardiology
Treatment of ACS	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, drawing up notes, diagrams, algorithms, etc.).	Presentation on the topic: Treatment of elderly patients with ACS NP ST
Hypertension	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, drawing up notes, diagrams, algorithms, etc.). Solution (or composing) tasks, tests, writing recipes, algorithms, completing tasks according to a sample, completing a medical history, workbook, working in an Internet class	Preparation of a presentation, or an abstract review, review of Internet sources **on the topic:** Symptomatic arterial hypertension

Acute rheumatic fever and chronic rheumatic heart disease	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an Internet classroom.	Preparation of a presentation, making a tablet **on the topic:** Damage to the nervous system and joints in rheumatism
Acquired mitral and aortic heart defects	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Making a presentation or making a table, tablet **on the topic:** Differential diagnostics of heart defects
Control lesson by sections	**4**	Preparation for the test, preparation of the medical history, workbook, preparation for the defense of the medical history	
Heart rhythm disturbance	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Drawing up an algorithm, making a table, a tablet **on the topic:** Emergency care for paroxysmal supraventricular tachycardia
Chronic heart failure	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparation of a presentation or compilation of an algorithm, or production of a tablet **on the topic:** 1. Methods of saturation and cardiac glycosides. 2. Emergency care for digitalis intoxication
Acute and chronic glomerulonephritis	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparing a presentation or drawing up an algorithm or making a table/tablet **on the topic:** Treatment of acute renal failure
Chronic pyelonephritis	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a	Making a table, tablet, or abstract review, review of Internet sources **on the topic:** Non-drug methods of treating chronic pyelonephritis

		medical history, workbook, working in an online classroom.	
Iron deficiency anemia	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Making a table or tablet **on the topic:** Differential diagnostics of anemia
Community-acquired pneumonia	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Making a table, tablet or abstract review, review of Internet sources **on the topic:** Extrapulmonary complications of pneumonia
Suppurative lung diseases	**3.4**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparing a presentation or review **paper topic:** Surgical treatment of suppurative lung diseases
Control lesson by sections	**3.4**	Preparation for the test, preparation of the medical history, workbook, preparation for the defense of the medical history	
COPD	**3.2**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparation of a presentation or review of Internet sources **on the topic:** Systemic effects of COPD
Bronchial asthma.	**3.2**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Drawing up an algorithm, making a table, a tablet **on the topic:** Treatment of status asthmaticus
Chronic gastritis. Peptic ulcer of the stomach and duodenum	**3.1**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing	Report or computer presentation **on the topic:** Diet for chronic gastritis or Treatment of peptic

		prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	ulcer disease not associated with HP.
Diagnosis and treatment of respiratory diseases	**3.2**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, drawing up notes, diagrams, algorithms, etc.).	Report or computer presentation **on the topic:** Differential diagnostics of COPD and bronchial asthma
Chronic pancreatitis	**3.2**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparation of a presentation or making a table, tablet **on the topic:** Enzyme preparations in the treatment of chronic pancreatitis
Chronic cholecystitis and biliary dyskinesia	**3.3**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Making a tablet or table **on the topic:** Dysfunction of the sphincter of Oddi
Chronic hepatitis	**3.2**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparation of a presentation **on the topic:** Immunodiagnostics of hepatitis
Liver cirrhosis	**3.2**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparation of a presentation, or an abstract review **on the topic:** Portal hypertension
Irritable bowel syndrome	**3.2**	Preparation on theoretical issues (lecture reading, primary and secondary literature, methodological recommendations, abstracting, compiling notes, diagrams, algorithms, etc.). Solving (or compiling) problems, tests, writing prescriptions, algorithms, completing assignments according to a model, completing a medical history, workbook, working in an online classroom.	Preparation of a presentation, table, tablet **on the topic:** Normal composition of human microflora

Control lesson by sections	**4**	Preparation for the test, preparation of the medical history, workbook, preparation for the defense of the medical history	
Labor intensity in hours	**84**	**62**	**22**
Total labor intensity in hours	**84**		

2.7 Research (project) work

Research work (project) of students is a mandatory section of the discipline and is aimed at the comprehensive formation of general cultural and professional competencies of students and involves the study of specialized literature and other scientific and technical information on the achievements of domestic and foreign science and technology in the relevant field of knowledge, participation in scientific research, etc.

The topics of research can be chosen by students independently in consultation with the teacher or from the list below (taking into account the scientific direction of the department.

Sample topics of students' research work

1. Structure of respiratory diseases in the Amur region.
2. Adherence of COPD patients to treatment.
3. Modern approaches and achievements in the treatment of cardiovascular diseases.
4. Quality of life of patients with combined cardiopulmonary pathology.

To evaluate research work, a binary assessment scale is adopted: “passed”, “failed”.

3. Educational, methodological, material, technical and informational support of the discipline

3.1. Main literature

1.Internal diseases: in 2 volumes. Vol. I: textbook: in 2 volumes / edited by A. I. Martynov, Zh. D. Kobalava, S. V. Moiseev. - 4th ed. reworked - Moscow: GEOTAR-Media, 2023. - 784 p. - ISBN 978-5-9704-7231-6. - Text: electronic // EBS “Student Consultant”: [website]. - URL: https://www.studentlibrary.ru/book/ISBN9785970472316.html (date of access: 10/31/2024). - Access mode: by subscription.

2.Internal diseases: in 2 volumes. Vol. II: textbook / edited by A. I. Martynov, Zh. D. Kobalava , S. V. Moiseev. - 4th ed. reworked - Moscow: GEOTAR-Media, 2023. - 704 p. - ISBN 978-5-9704-7232-3. - Text: electronic // EBS “Student Consultant”: [website]. - URL: https://www.studentlibrary.ru/book/ISBN9785970472323.html (date of access: 10/30/2024). - Access mode: by subscription.

3.Makolkin , V. I. Internal Medicine: textbook / Makolkin V. I., Ovcharenko S. I., Sulimov V. A. - 6th ed., revised . and additional. Moscow: GEOTAR-Media, 2017. - 768 p. - ISBN 978-5-9704-4157-2. - Text: electronic // EBS "Student Consultant": [site]. - URL: https://www.studentlibrary.ru/book/ISBN9785970441572.html (date of access: 11/14/2024). - Access mode: by subscription.

3.2. Further reading

1.Pavlenko, V. I. Acid-dependent and associated with Helicobacter pylori diseases in the practice of a district general practitioner : a tutorial / V. I. Pavlenko, O. M. Goncharova, I. P. Soluyanova . - Blagoveshchensk: Amur State Medical Academy of the Ministry of Health of Russia, 2021. - 171 p. - Text: electronic // Lan: electronic library system. - URL: https://e.lanbook.com/book/192848 (date accessed: 12/14/2022). - Access mode: for authorized users.

2.Ganceva , H.H. Clinical examination of the patient / Ganceva H.H. , Ishmuratova R. Sh., Kzyrgalin Sh. R., Gainullin A. Kh. - Moscow: GEOTAR-Media, 2021. - 208 p. (Oncology Series) - ISBN 978-5-9704-6035-1. - Text: electronic // EBS “Student Consultant”: [website]. - URL: https://www.studentlibrary.ru/book/ISBN9785970460351.html (date of access: 11/14/2024). - Access mode: by subscription.

3.Internal diseases (selected sections): a teaching aid / compiled by S. L. Zharsky [et al.]; edited by S. L. Zharsky . - Khabarovsk: DVGMU, 2020. - 260 p. - Text: electronic // Lan: electronic library system. - URL: https://e.lanbook.com/book/166382 (date accessed: 12/14/2022). - Access mode: for authorized users.

3.3 Educational and methodological support for the discipline prepared by the department staff:

- Educational aids (UMO)

1	Pavlenko V.I., Kulik E.G. Clinical pulmonology. Part 1 / Study guide. - Blagoveshchensk. - 2025. - 170 p. (UMO stamp)
2	Sulima M.V., Kulik E.G. Clinical gastroenterology. Part 1. – Blagoveschensk. -2025. -160 p. (UMO stamp)
3.	Pavlenko V.I., Kulik E.G. Latin terms and catchphrases in clinical practice. Study guide. Blagoveshchensk. - 2015. - 32 p. Access mode: https://www.amursma.ru/zakrytaya-chast-sayta/4-k urs/

- Electronic and digital technologies:

1. Multimedia presentations for lectures posted in the Electronic Information and Educational System of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy.
Access mode: https://educ-am u rsma.ru/course/view.php?id=362

2. Videos:
1. Arterial hypertension.
2. Patients with coronary artery disease.

3. Photographic materials
1. Photo album “X-ray diagnostics in internal diseases”.
2. Photo album “Ultrasound diagnostics of internal organ diseases”.
3. Photo album “ECG in ischemic heart disease”.

4. Electronic teaching aids:
(posted on the website of the Federal State Budgetary Educational Institution of Higher Education Amur State Medical Academy. Access mode: https://www.amursma.ru/zakrytaya-chast-sayta/4-kurs/

3.4. Equipment used for the educational process

Item No.	Name	Quantity
	Practical Skills Room	
1	Table	1
2	Chairs	4
3	Couch	1
4	X-ray sets	18
5	ECG kits	24
6	Peak flow meter	1
7	Personal spirometer	1
8	Sphymograph " Vassera-1000 " (Japan)	1
9	Pedometer	1
	Self-study room	
10	School board	1
11	Tables	3
12	Chairs	16
13	Visual aids	12
14	Laptop	1
	Study rooms #1-3	
15	School board	**3**
16	Table	**24**
17	Chairs	**47**
18	Visual aids	**66**
19	Video projector	**1**
20	Laptop	**3**
21	Stands	**7**
	In the functional department, X-ray room, laboratory of the State Autonomous Healthcare Institution of the Arkhangelsk City Clinical Hospital	
22	Electrocardiograph 12-channel E CG 9110 k	**1**
23	Ultrasound device " Aloka " 3500 (Japan)	**1**
24	HD 11 XE diagnostic ultrasound system with accessories	**1**
25	Fibrogastroscope « Olympus GIF - Q 30», « Olympus GIF - Q 40» (Japan)	**2**
26	X-ray tomograph RKT GE BRIGHT SPEED 16 SLICE (Germany)	**1**
27	X-ray machine "Electron" (Russia)	**1**
28	Spirograph " Super Spiro " (United Kingdom)	**1**
29	Electrolyte analyzer « Ciba Corning » (UK)	**1**
30	Biochemical analyzer "VTS-370" (Spain)	**1**
31	Hematology analyzer ADVIA-60 (Germany)	**1**
	Accreditation and Certification Center	
	Table	**1**
	Bedside table	**1**
	Video monitoring and recording system for the simulation training process	**1**

	Medical table	Medical table
	Treatment table	Treatment table
	Patient simulator simulating an adult male for ECG skills training	Patient simulator simulating an adult male for ECG skills training

3.5. Professional databases, information and reference systems, electronic educational resources.

Name resource	Resource Description	Access	Resource address
ELECTRONIC LIBRARY SYSTEMS			
"Student consultant. Electronic library of the medical university"	For students and teachers of medical and pharmaceutical universities. Provides access to electronic versions of textbooks, teaching aids and periodicals.	Remote access after registration under the university profile	https://www.studentlibrary.ru/
Reference and information system " MedBaseGeotar ".	The reference and information system " MedBaseGeotar " is intended for practicing medical specialists, researchers, teachers, postgraduate students, residents, senior students, and healthcare managers for the rapid search, selection, and reading of medical literature necessary for work in a single data source.	Remote access after registration under the university profile	h https://mbasegeotar.ru/pages/index.html
EBS « Bookup »	Large medical library - information and educational platform for the joint use of electronic educational, educational and methodological publications of medical universities of Russia and the CIS countries	Remote access after registration under the university profile	https://www.books-up.ru/
EBS "Lan"	Network electronic library of medical universities - an electronic database of educational and scientific works on medical topics, created for the purpose of implementing network forms of professional educational programs, open access to educational materials for partner universities	Remote access after registration under the university profile	https://e.lanbook.com/
Scientific electronic library " CyberLeninka "	CyberLeninka is a scientific electronic library built on the paradigm of open science (Open Science), the main objectives of which are the popularization of science and scientific activity, public control over the quality of scientific publications, the development of interdisciplinary research, a modern institute of scientific review, increasing the citation of Russian science and building a knowledge infrastructure. Contains more than 2.3 million scientific articles.	free access	https://cyberleninka.ru/
Oxford Medicine	A collection of Oxford medical publications, bringing	free access	http://www.oxfordmedicine.com

Online	together over 350 titles into a single, cross- searchable resource. Publications include The Oxford Handbook of Clinical Medicine and The Oxford Textbook of Medicine , electronic versions of which are constantly updated.		
Human Biology Knowledge Base	Reference information on physiology , cell biology , genetics , biochemistry , immunology , pathology . (Resource of the Institute of Molecular Genetics of the Russian Academy of Sciences .)	free access	http://humbio.ru/
Medical online library	Free reference books, encyclopedias, books, monographs, abstracts, English-language literature, tests.	free access	https://www.medlib.ru/library/library/books
INFORMATION SYSTEMS			
Clinical Guidelines Rubricator	A resource of the Russian Ministry of Health that contains clinical recommendations developed and approved by medical professional non-profit organizations of the Russian Federation, as well as methodological guidelines, nomenclatures and other reference materials.	Link to download the application	https://cr.minzdrav.gov.ru /# ! /
Federal Electronic Medical Library (FEMB)	The Federal Electronic Medical Library is part of the unified state information system in the field of healthcare as a reference system **.** FEMB was created on the basis of the funds of the Central Scientific Medical Library named after I.M. Sechenov.	free access	https :// femb.ru /
Russian Medical Association	Professional Internet resource . Objective: to promote the implementation of effective professional activities of medical personnel. Contains the charter, personnel, structure, rules of entry, information about the Russian medical union.	free access	http://www.rmass.ru/
Web -medicine	The site presents a catalog of professional medical resources, including links to the most authoritative subject sites, journals, societies, as well as useful documents and programs. The site is intended for doctors, students, employees of medical universities and scientific institutions.	free access	http : // webmed.irkutsk.ru /
DATABASES			

World Health Organization	The site contains news, statistics on countries that are members of the World Health Organization, fact sheets, reports, WHO publications and much more.	free access	http://www.who.int/ru/
Ministry of Science and Higher Education of the Russian Federation	The website of the Ministry of Science and Higher Education of the Russian Federation contains news, newsletters, reports, publications and much more.	free access	http://www.minobrnauki.gov.ru
Ministry of Education of the Russian Federation	The website of the Ministry of Education of the Russian Federation contains news, newsletters, reports, publications and much more .	free access	https://edu.gov.ru/
Federal portal "Russian education"	A single window for access to educational resources. This portal provides access to textbooks on all areas of medicine and health care.	free access	http : // www.edu.ru/
Polpred.com	Electronic library system Business media. Media review	free access	https://polpred.com/news
BIBLIOGRAPHICAL DATABASES			
Database "Russian Medicine"	It is created in the Central Scientific and Methodological Library , and covers the entire collection, starting in 1988. The database contains bibliographic descriptions of articles from domestic journals and collections, dissertations and their abstracts, as well as domestic and foreign books, collections of institute proceedings, conference materials, etc. Thematically, the database covers all areas of medicine and related areas of biology, biophysics, biochemistry, psychology, etc.	free access	https://rucml.ru/
PubMed	A text database of medical and biological publications in English. The PubMed database is an electronic search engine with free access to 30 million publications from 4,800 indexed journals on medical topics. The database contains articles published from 1960 to the present day, including information from MEDLINE , PreMEDLINE , NLM . Each year, the portal is replenished with more than 500 thousand new works.	free access	https :// pubmed . ncbi . nlm . nih . gov /

eLIBRARY.RU	eLIBRARY.RU platform provides electronic versions of more than 2,000 Russian scientific and technical journals, including more than 1,000 open access journals.	Full functionality of the site is available after registration	http://elibrary.ru/defaultx.asp
Electronic library of dissertations (RGB)	Currently, the Electronic Library of Dissertations of the Russian State Library contains more than 919,000 full texts of dissertations and abstracts.	free access	http://diss.rsl.ru/ ? menu = disscatalog /
Medline.ru	Medical and biological portal for specialists. Biomedical journal.	free access	https://journal.scbmt.ru/jour/index
Official Internet portal of legal information	The single official state information and legal resource in Russia	free access	http://pravo.gov.ru/

3.6. Licensed and freely distributed software used in the educational process.

List of software (commercial software products).

No. p/p	List of software (commercial software products)	Details of confirming documents documents
1.	MS Operating System Windows 7 Pro	License number 48381779
2.	MS Operating System Windows 10 Pro	CONTRACT No. UT-368 from 09.21.2021
3 .	MS Office	License number: 43234783, 67810502, 67580703, 64399692, 62795141, 61350919
4.	Kaspersky Endpoint Security for business – Standard Russian Edition . 50-99 Node 1 year Educational Renewal License	Agreement No. 7 AA dated 02/07/2025
5.	1C Accounting and 1C Salary	LICENSE AGREEMENT 612/L dated 02.02.2022 (additional licenses)
6.	1C: PROF University	LICENSE AGREEMENT No. KrTsB-004537 dated 12/19/2023
7.	1C: PROF Library	LICENSE AGREEMENT No. 2281 dated 11.11.2020
8.	Consultant Plus	Contract No. 41AA dated 12/27/2024
9.	Contour.Tolk	Agreement No. K213753/24 dated 13.08.2024
10.	E-learning environment 3KL (Russian Moodle)	Agreement No. 1362.5 dated November 20, 2024
11.	Astra Linux Common Edition	Agreement No. 142 A dated September 21, 2021
12.	Information system "Plans"	Agreement No. 2873-24 dated June 28, 2024
13.	1C: Document Management	Agreement No. 2191 dated 10/15/2020
14.	R7-Office	Agreement No. 2 KS dated 12/18/2020
15.	License "OS ROSA CHROME workstation"	Agreement No. 88A dated 08/22/2024
16.	Alt Virtualization Server 10 (for secondary specialized and higher professional education)	Agreement No. 14AK dated 09/27/2024
17.	Dr.Web Desktop Security Suite Comprehensive protection + Control Center for 12 months.	Agreement No. 8 dated October 21, 2024
18.	Software "Schedule for educational institutions"	Agreement No. 82A dated July 30, 2024

List of freely distributed software

No. p/p	The list is free Distributed software	Links to license agreement
1.	Yandex Browser	Freely distributed License Agreement for the Use of Yandex Browser Programs https://yandex.ru/legal/browser_agreement/
2.	Yandex.Telemost	Freely distributed License agreement for the use of programs https://yandex.ru/legal/telemost_mobile_agreement/
3.	Dr.Web CureIt !	Freely distributed License Agreement:

		https://st.drweb.com/static/new-www/files/license_CureIt_ru.pdf
4.	OpenOffice	Freely distributed License: http://www.gnu.org/copyleft/lesser.html
5.	LibreOffice	Freely distributed License: https://ru.libreoffice.org/about-us/license/
6.	VK Calls	Freely distributed https://vk.com/license
7.	Kaspersky Free Antivirus	Freely distributed https://products.s.kaspersky-labs.com/homeuser/Kaspersky4Win2021/21.16.6.467/english-0.207.0/3830343439337c44454c7c4e554c4c/kis_eula_en-in.txt

3.7. Resources of the information and telecommunications network "Internet"

-Library of Amur State Medical Academy. Access mode:
https://amurgma.ru/obuchenie/biblioteki/biblioteka-amurskoy-gma/
-Electronic library system "Student consultant". Access mode:
https://www.studentlibrary.ru

4. ASSESSMENT FACILITIES FUND

4.1. Current test control (input, initial, final), final.

4.1.1 Examples of entrance control test tasks (with standard answers)
Test assignments are located in the Moodle system.
Access mode: https://educ-amursma.ru/course/view.php?id=362

Please indicate one correct answer.

1. THE MAIN ETIOLOGICAL FACTOR OF RHEUMATIC DISEASE IS
   1) staphylococcus
   2) β-hemolytic streptococcus group C
   3) pneumococcus
   4) β-hemolytic streptococcus group A
   5) the pathogen is unknown

2. TYPICAL FOR DRESSLER'S SYNDROME IS
   1) increase in body temperature
   2) pericarditis
   3) pleurisy
   4) increase in the number of eosinophils
   5) all of the above

3. THE MOST ATHEROGENIC LIPOPROTEIN
   1) HDL
   2) VLDL
   3) LDL
   4) HM
   5) triglycerides

Answer samples: 1 – 4 2 – 5 3 – 2

4.1.2 Examples of test tasks for initial control (with standard answers)
Test assignments are located in the Moodle system.
Access mode: https://educ-amursma.ru/course/view.php?id=362

1. THE AREA OF THE LEFT ATRIOVENTRICULAR ORIFICE IS NORMALLY EQUAL
   1) 7-8 cm ^{2}
   2) 6-7 cm ^{2}
   3) 4-6 cm ^{2}
   4) 3-4 cm ^{2}
   5) 1-2 cm ^{2}

2. OPTIMAL BLOOD PRESSURE NUMBERS IN ADULTS
   1) systolic pressure is 139 мм.Hg, and diastolic pressure is 89 mmHg.
   2) systolic pressure is below 120 мм.Hg, and diastolic pressure is below 80 mmHg.
   3) systolic pressure is below 150 мм.Hg, and diastolic pressure is 90 mmHg.
   4) systolic pressure is equal to or higher than 150 мм. Hg, and diastolic pressure is higher than 90 mm.Hg
   5) systolic pressure up to 160 мм.Hg, and diastolic pressure up to 95 mm.Hg

3. A FORM OF ANGINA IN WHICH PAIN ARISES DURING PHYSICAL EXERCISE
   1) voltage
   2) peace
   3) variant
   4) rest and tension
   5) atypical

4. IN MITRAL STENOSIS THEY HYPERTROPHY
   1) left ventricle, left atrium
   2) right ventricle, right atrium
   3) right ventricle, left atrium
   4) left ventricle, right atrium
   5) interatrial septum

Standards of correct answers : 1-3, 2-1, 3-1, 4-3

4.1.3 Examples of midterm assessment test tasks (with standard answers)
Test assignments are located in the Moodle system.
Access mode: https://educ-amursma.ru/course/view.php?id=362

VIII semester
Option 1
Please indicate one correct answer.

1.TO RESTRICT AN ATTACK OF BRONCHIAL ASTHMA YOU CAN USE
   1) inhaled anticholinergic drugs anticholinergics and beta 2 - agonists
   2) intal (sodium cromoglycate)
   3) inhaled glucocorticoids
   4) nitroglycerin
   5) morphine

2.BRONCHIAL ASTHMA IS CHARACTERISTIC
1) night attacks of suffocation with shallow, rapid breathing, may be accompanied by foamy sputum
2) attacks of suffocation with difficulty exhaling, after the end of the attack, glassy viscous sputum is released
3) weakened vesicular breathing
4) outside of an attack, small bubbling, silent, moist rales are heard in the lower parts of the lungs
5) attacks of suffocation with difficulty breathing

3. THE ALLERGIC FORM OF BRONCHIAL ASTHMA IS CHARACTERIZED BY REACTIONS:
1) cytotoxic type
2) reaginic type
3) all types of allergic reactions
4) delayed allergy
5) damage by immune complexes

Standards of correct answers: *1-1, 2-2, 3-2*

4.1.4 Examples of test tasks for the final assessment (with standard answers)
Test assignments are located in the Moodle system.
Access mode for semester 8: https://educ-amursma.ru/course/view.php?id=362

Choose one correct answer

1.LIVER SIGNS INCLUDE THE FOLLOWING SIGNS
1) palmar palms, "head of Medusa"
2) "head of medusa", xantholasma
3) acrocyanosis, hemorrhagic rash
4) xantholasma, alopecia
5) facial puffiness, "drumsticks"

2. MOST EFFECTIVE IN THE TREATMENT OF ULCER DISEASE CAUSED BY HELICOBACTER INFECTION PYLORI ARE
1) antibiotics
2) reparants
3) H2 -histamine receptor blockers
4) antacids
5) m-cholinomimetics

3. A 50-YEAR-OLD PATIENT HAS CHOLELITHIASIS. ANOTHER ATTACK OF BILIARY COLIC ARISES. TO RELIEVE THE PAIN, THERE IS A MEDICATION
1) captopril
2) indomethacin
3) kagocel
4) clopidogrel
5) atropine

4. IN THE DIAGNOSIS OF LIVER CIRRHOSIS, THE DECISIVE POINT IS
1) albumin level
2) bilirubin level
3) AST, ALT, LDH

4) liver biopsy
5) Ultrasound of the liver

5. LIVER CIRRHOSIS DIFFERS FROM CHRONIC HEPATITIS
1) increased bilirubin
2) hepatomegaly
3) portocaval and caval anastomoses
4) asthenovegetative syndrome
5) dyspeptic syndrome

Standards of correct answers: 1-1, 2-1, 3-5, 4-4, 5-3

4.2. Situational tasks

Example No. 1

Patient M., 38 years old, was admitted to the clinic complaining of paroxysmal cough with difficult to separate viscous mucous sputum (single spitting), attacks of suffocation with difficulty exhaling, occurring both during the day and at night every day, shortness of breath with minor physical exertion, nasal congestion. The patient's sister suffers from polypous rhinosinusitis, the patient's mother has a food allergy in the form of urticaria to citrus fruits. The patient works as a knitter at a textile plant, has constant contact with wool. Over the past few years, she has noted frequent acute respiratory infections - 2-3 times a year.

The anamnesis includes allergic reactions to ampicillin - nasal congestion, lacrimation; citrus fruits and strawberries - urticaria. From the anamnesis of the disease it is known that for many years she has been bothered by almost constant nasal congestion, 2 years ago she was diagnosed with polypous rhinosinusitis, nasal polypotomy was performed. A year ago, after an acute respiratory infection, the patient had a long-term paroxysmal cough. The condition worsened in the spring, in April an attack of suffocation developed for the first time, relieved by intravenous administration of euphyllin. Subsequently, the patient independently took antihistamines, euphyllin with effect. The last deterioration was again after an acute respiratory infection, the frequency of suffocation attacks during the daytime increased sharply, night attacks appeared. The patient was admitted to the clinic for examination and selection of therapy.

On admission: the condition is relatively satisfactory, respiratory rate 22 per minute, eczematous plaques on the skin of the hands. Nasal breathing is severely impaired. Diffuse "warm" cyanosis is noted. Percussion of the lungs reveals a box-like sound, auscultation reveals a large number of dry whistling and buzzing rales over the entire surface of the lungs. Heart rate 96 per minute. Blood pressure 110/70 mm Hg. Heart sounds are rhythmic, muffled. The abdomen is soft, painless, the liver and spleen are not enlarged.

Blood test: hemoglobin 120 g/l; erythr. 4.5 million, CI 0.79; leuk. 8.0 thousand; segmental 63%. lymph. 21%; eosin. 13%; mon. 3%, ESR 10 mm/hour.

General sputum analysis : viscous consistency, mucous character, leukocytes 1-5 in the field of view; eosinophils 20-40-60 in the field of view; no erythrocytes; Curschmann spirals - 1-3 in the preparation, Charcot-Leyden crystals - 5-7 in the preparation; atypical cells, elastic fibers, BK not found.

FVD study: VC 84%; FEV1 $_{55}$ %; MEF $_{25}$ 66%; MEF $_{50}$ 42%; MEF $_{75}$ 38%. After inhalation of 400 mcg salbutamol: FEV1 $_{84}$ %; MEF $_{25}$ 68%; MEF $_{50}$ 59%; MEF $_{75}$ 58%. X-ray examination of the chest organs did not reveal focal or infiltrative changes, but revealed flattening of the diaphragm dome, increased airiness of the lung tissue, and thickening of the bronchial walls.

Please provide written answers to the following questions:

1. Formulate a preliminary diagnosis.

2. Determine the examination plan and the need for additional research.
3. Formulate a clinical diagnosis and indicate diagnostic criteria.
4. Prescribe treatment and justify it.

Standard solution for example No. 1

Based on complaints, anamnesis and examination results, it is possible to make a diagnosis the following diagnosis: Bronchial asthma, infectious-allergic, severe in the acute phase. Emphysema of the lungs. DN II st.

Treatment: Given the severity of the disease and its exacerbation, it is advisable to prescribe nebulizer therapy to the patient: inhaled glucocorticosteroids 4 mg/day (Pulmicort 2 mg 2 times a day) in combination with short-acting β_{2}- agonists (Ventolin 5 mg 4 times a day). It is also necessary to prescribe mucosecretolytics (ambroxol via nebulizer). Given the pronounced general allergic response, it is also possible to prescribe antihistamines (loratadine).

After the exacerbation of the disease has been stopped, the patient needs long-term treatment with inhaled glucocorticosteroids (1000 mcg/day) in combination with prolonged β_{2}- agonists: formoterol (Oxis) 4.5 mcg 1 IV 2 times a day. Treatment should be carried out under the control of peak expiratory flow rate (PEF) measurement based on peak flowmetry results.

Example No. 2.

Patient P., 54 years old, sought medical help due to attacks of pain in the chest, radiating to the left shoulder blade, occurring during moderate physical exertion (when climbing 4 flights of stairs), accompanied by shortness of breath. The pain goes away after stopping the exertion. She noted the onset of these complaints in the last month. The patient smoked 10 cigarettes a day for 20 years, and has not smoked for the last 8 years. Over the past 15 years, she has noted increases in blood pressure up to 170/110 mm Hg, does not regularly take antihypertensive drugs, and takes dibazol for subjectively felt increases in blood pressure. The patient's father and mother are alive, the father suffers from hypertension, a year ago he suffered from a stroke, the mother suffers from angina pectoris. The gynecological anamnesis includes postmenopause for 5 years, she receives hormone replacement therapy with kliogest.

On examination: the patient's condition is satisfactory, body temperature is 36.7°C, the skin is of normal color and moisture. The peripheral lymph nodes are not enlarged, there is no edema. The patient is overnourished, BMI is 32.6 kg/m2. Respiratory rate is 20 per min., vesicular breathing in the lungs is conducted to all sections, there are no wheezing. Heart sounds are muffled, rhythmic, the accent of the second sound is over the projection of the aorta, HR is 82 per min., BP is 164/92 mm Hg. The abdomen is soft, accessible to palpation in all sections, the liver and spleen are not enlarged. Peristalsis is auscultated. There are no dysuric disorders.

In the blood tests: hemoglobin - 13.4 g / l; erythrocytes - 4.2 million; hematocrit - 42%; leukocytes - 6.2 thousand; p / y - 2%; s / y - 72%; lymphocytes - 18%; eosinophils - 2%; monocytes - 6%; ESR - 10 mm / h. In the biochemical blood test: glucose - 118 mg / dl; creatinine - 1.0 mg / dl; total bilirubin - 0.9 mg / dl, total cholesterol - 274 mg / dl; triglycerides - 336 mg / dl. On the ECG: sinus rhythm, heart rate - 78 bpm, normal position of the EOS, amplitude criteria of left ventricular hypertrophy.

Treadmill exercise test: A 5 MET exercise was performed. Total exercise time was 4 min 16 sec. HR from 86 to 120 bpm. BP from 152/86 to 190/100 mmHg. The test was stopped due to the patient's fatigue. No ischemic ST changes were registered. The response to exercise was hypertensive. Conclusion: The test did not reach the diagnostic criteria for ischemia. Exercise tolerance was average.

Please provide written answers to the following questions:

1. Formulate a preliminary diagnosis.
2. Determine the examination plan and the need for additional research.
3. Formulate a clinical diagnosis and indicate diagnostic criteria.
4. Prescribe treatment and justify it.

Standard solution for example No. 2

At the first stage of diagnostic search, the analysis of the patient's complaints allows us to suspect the presence of typical angina pectoris (retrosternal pain radiating to the left shoulder blade, occurring during physical exertion and passing after its cessation). Angina pectoris corresponds to functional class II , therefore, in this case, the clinical manifestations cannot be considered within the framework of unstable angina. Analysis of the anamnesis data allows us to identify the presence of risk factors for coronary atherosclerosis in the patient (smoking, arterial hypertension, postmenopause). Hormone replacement therapy cannot be considered as a cardioprotective agent in this case.

The data of ***the second stage of diagnostic search*** (physical examination) in angina are of little information. Excess body weight is another risk factor for coronary heart disease

At the third stage of diagnostic search, the results of laboratory research methods demonstrate the presence of hyperlipidemia type 4. Doctors often tend to associate chest pain syndrome in middle-aged women with non-cardiac causes, especially since they more often have false-positive results of stress tests. In this case, the test with physical activity turned out to be uninformative, it is impossible to judge the presence or absence of myocardial ischemia based on its results. Therefore, to diagnose the patient's ischemia, either stress echocardiography or myocardial scintigraphy with dipyridamole (which is preferable in patients with arterial hypertension) should be performed. If the test result is positive, the presence of chronic coronary insufficiency (taking into account the complaints and risk factor profile) will be practically beyond doubt.

General measures include following a hypolipidemic diet and losing weight. Blood pressure control is extremely important. The patient is prescribed beta-blockers, aspirin, ACE inhibitors, and statins.

The effectiveness of therapy should be assessed based on the dynamics of the clinical picture (elimination of clinical manifestations) and the results of a control stress test (according to scintigraphy data).

4.3. List of practical skills that a student should have after mastering the discipline

In the section nephrology:

1. Interpret complaints, medical history, life history and objective examination data (palpation of the kidneys, “tapping” symptom, determination of edema, blood pressure) in a patient with kidney disease ;
2. Identify the main symptoms and syndromes of the nosological form and explain their pathogenesis.
3. Make a plan for examining a patient with kidney disease taking into account the standard;
4. Interpret taking into account the norm:
- urine analysis (general, Amburger, Zimnitsky, Nechiporenko, Addis- Kakovsky, Reberg tests);
- clinical blood test and biochemical blood test (urea, creatinine, electrolytes, sialic acid density, plasma fibrinogen, C-reactive protein, plasma fibrinogen, pH, coagulogram) ;
- results of general radiography and excretory urogram, ultrasound of the kidneys);
5. Based on the information obtained, formulate and substantiate a clinical diagnosis of acute and chronic glomerulonephritis, chronic pyelonephritis, and chronic renal failure;
6. Prescribe treatment for the patient taking into account the standard and individual characteristics.
7. Write prescriptions for prescribed medications and characterize the main groups of drugs.
8. Describe the methods of prevention and give the patient recommendations on diet and lifestyle.
9. Diagnose complications and provide assistance in case of acute renal failure, coma.
10. Complete the educational medical history.

In the section of gastroenterology:

1. Interpret complaints, medical history, life history and objective examination data (palpation of the liver, spleen, intestines, pancreas) in a patient with a gastrointestinal disease ; determination of the size of the liver, spleen, fundus of the stomach), symptoms **of pancreatitis** (Chauffard, De Jardin, Gubergritz, Grott, Tuzhilin, Mayo- Robson); **cholecystitis** (Ker, Ortner, Georgievsky-Mussy, Murphy); **peptic ulcer**

(Mendel, Boas, Openkovsky, Lainek); **enterocolitis** (Porges, Obraztsov, Waal, Remgald, Shterberg); **liver cirrhosis** (ascites, "floating" ice cube symptom, liver signs).
2. Identify the main symptoms and syndromes of each nosological form and explain their pathogenesis.
3. Draw up a plan for examining a patient with gastrointestinal diseases taking into account the standard;
4. Interpret taking into account the norm:
- clinical blood test, biochemical blood test (ALT, AST, bilirubin, alkaline phosphatase, blood and urine amylase, thymol and sublimate tests, serum albumin, serum protein electrophoresis, blood glucose, urea, creatinine, electrolytes, coagulogram);
- coprogram, stool analysis for dysbacteriosis;
- general urine analysis;
- markers of hepatitis viruses (HB_sAg, $anti\ HB_c$, $anti\ HCV$);
- data from urease and breath tests;
- results of X -ray of the stomach, cholecystography, colonoscopy, rectoscopy, irrigoscopy, FGDS, pH-metry, ultrasound of the abdominal organs.
5. Based on the information received, formulate and justify a clinical diagnosis of chronic gastritis, peptic ulcer, pancreatitis, cholecystitis, biliary dyskinesia, hepatitis, alcoholic liver disease, liver cirrhosis, functional bowel disease, dysbacteriosis.
6. Prescribe treatment for the patient taking into account the standard and individual characteristics.
7. Write prescriptions for prescribed medications and characterize the main groups of drugs.
8. Describe the methods of prevention and give the patient recommendations on diet and lifestyle.
9. Diagnose complications and provide emergency care in case of gastrointestinal bleeding, acute liver failure.
10. Complete the educational medical history.

In the section pulmonology:
1. Interpret complaints, medical history, life history and objective examination data (comparative and topographic percussion, auscultation, gamma sonority, bronchophony, vocal tremor).
2. Identify the main symptoms and syndromes of the nosological form and explain their pathogenesis.
3. Make a plan for examining a patient with respiratory diseases, taking into account the standard.
4. Interpret taking into account the norm:
- sputum analysis (cytological, cultural);
clinical blood test and biochemical blood test (sialic acid density, plasma fibrinogen, C-reactive protein, $pO2$, $pCO2$);
- results of X-ray examination, spirography, bronchodilator test, peak flowmetry, 6 MWD indicators).
5. Based on the information received, formulate and justify a clinical diagnosis of pneumonia, COPD, bronchial asthma, and suppurative lung diseases.
6. Prescribe treatment for the patient taking into account the standard and individual characteristics.
7. Write prescriptions for prescribed medications and characterize the main groups of drugs.
8. Describe the methods of prevention and give the patient recommendations on diet and lifestyle.
9. Diagnose complications and provide emergency care in case of an attack of bronchial asthma, asthmatic status, hemoptysis
10. Complete the educational medical history.

In the cardiology section:
1. Interpret the data of an objective examination in a patient with a cardiovascular disease (comparative percussion and auscultation of the heart, width of the vascular bundle, characteristics of the apical impulse, blood pressure, heart rate, pulse).
2. Identify the main symptoms and syndromes for each nosological form and explain their pathogenesis.
3. Draw up a plan for examining a patient with cardiovascular diseases, taking into account the standard.

3. Take and interpret ECG data.
4. Interpret taking into account the norm:
- clinical and biochemical blood tests (sialic acid density, plasma fibrinogen, prothrombin index, AST , ALT, CRP, blood lipid spectrum, trop test, antistreptokinase, antistreptolysin-O, antihyaluronidase);
- data from daily Holter ECG monitoring, cardiac ultrasound, and fundus examination.
5. Based on the information received, formulate and substantiate a clinical diagnosis of angina pectoris, myocardial infarction, hypertension, cardiomyopathy, cardiac arrhythmia and conduction disorders, heart defects, acute respiratory failure, and chronic renal failure.
6. Prescribe treatment for the patient taking into account the standard and individual characteristics.
7. Write prescriptions for prescribed medications and characterize the main groups of drugs.
8. Describe the methods of prevention and give the patient recommendations on diet and lifestyle.
9. Diagnose complications and provide emergency care in case of an attack of angina pectoris, myocardial infarction, cardiogenic shock, cardiac asthma, acute left ventricular failure, hypertensive crisis, paroxysmal supraventricular tachycardia, paroxysmal atrial fibrillation, Morgagni-Adams-Stokes syndrome, digitalis intoxication.
10. Complete the educational medical history.

In the hematology section:
1. Interpret the complaints, medical history, and objective examination data (palpation and size of the spleen) of a patient with a blood disease.
2. Identify the main symptoms and syndromes of the disease and explain their pathogenesis.
3. Make a plan for examining a patient with a blood disease, taking into account the standard.
4. Interpret taking into account the norm:
- clinical blood test, biochemical blood test (serum iron, TIBC, saturation coefficient);
-Ultrasound of the spleen.
5. Based on the information received, formulate and justify the clinical diagnosis of IDA.
6. Prescribe treatment for the patient taking into account the standard and individual characteristics.
7. Write prescriptions for prescribed medications and characterize the main groups of drugs.
8. Describe the methods of prevention and give the patient recommendations on diet and lifestyle.
9. Complete the educational medical history.

4.4. List of questions for the exam

1.Etiology and pathogenesis of community-acquired pneumonia.
2.Classification and diagnosis of pneumonia.
3.Pulmonary and extrapulmonary complications of pneumonia.
4.Principles of antibacterial therapy of pneumonia.
5.Etiology and pathogenesis of bronchial asthma.
6.Classification of bronchial asthma.
7.Clinic, diagnostics and treatment of bronchial asthma.
8.Clinic, diagnosis and treatment of pneumonia.
9.Clinic, diagnostics, emergency therapy for exacerbation of bronchial asthma.
10.Etiology and pathogenesis of lung abscess.
11.Etiology and pathogenesis of lung gangrene.
12.Classification of suppurative lung diseases.
13.Clinic, diagnosis and treatment of lung abscess.
14.Clinic, diagnostics and treatment of lung gangrene.
15.Etiology, pathogenesis, classification of obstructive pulmonary disease.
16.Clinic, diagnostics and treatment of obstructive pulmonary disease.
17.Clinic, diagnostics and treatment of angina pectoris.
18.Clinic, diagnostics and treatment of anginal form of myocardial infarction.
19.Clinic, diagnostics and treatment of atypical forms of myocardial infarction.
20.Clinic, diagnostics and treatment of hypertension.

21.Clinic, diagnosis and treatment of rheumatic carditis.
22.Clinic, diagnosis and treatment of rheumatic arthritis.
23.Clinic, diagnosis and treatment of heart failure.
24.Clinic, diagnostics of mitral valve insufficiency.
25.Clinic, diagnostics of mitral stenosis.
26.Clinic, diagnostics of aortic insufficiency.
27.Clinic, diagnosis of aortic stenosis.
28.Clinic, diagnostics and treatment of hypertensive crises.
29.Pulmonary edema: classification, clinical features, emergency care.
30.Clinic, diagnostics of early complications of myocardial infarction.
31.Late complications of myocardial infarction: clinical presentation, diagnosis, treatment.
32.Etiology and pathogenesis of hypertension.
33.Etiology and pathogenesis of angina pectoris.
34.Etiology and pathogenesis of myocardial infarction.
35.Classification, ECG signs of heart rhythm disturbances.
36.ECG signs, treatment of extrasystoles (supraventricular and ventricular).
37.ECG signs, treatment of atrial fibrillation.
38.Classification of antiarrhythmic drugs.
39.Etiology, pathogenesis and treatment of acute rheumatic fever (ARF).
40.Diagnostic criteria for chronic rheumatic heart disease.
41.Etiology and pathogenesis of chronic heart failure.
42.Etiology and hemodynamics in mitral valve insufficiency.
43.Etiology and hemodynamics in mitral stenosis.
44.Etiology and hemodynamics in aortic insufficiency.
45.Etiology and hemodynamics in aortic stenosis.
46.Classification of coronary heart disease.
47.Classification of hypertension .
48.Classification of ARF, diagnostic criteria.
49.Classification of chronic heart failure.
50.Classification, clinical picture of hypertensive crises.
51.Etiology, pathogenesis, clinical features, emergency care for cardiac asthma.
52.Etiology and pathogenesis of peptic ulcer disease.
53.Etiology and pathogenesis of chronic gastritis.
54.Etiology and pathogenesis of chronic pancreatitis.
55.Etiology and pathogenesis of IBS.
56.Etiology and pathogenesis of chronic cholecystitis.
57.Etiology and pathogenesis of chronic hepatitis.
58.Etiology and pathogenesis of liver cirrhosis.
59.Classification and diagnosis of chronic gastritis.
60.Classification and diagnosis of peptic ulcer disease.
61.Classification and diagnosis of chronic pancreatitis.
62.Classification and diagnosis of chronic cholecystitis.
63.Classification and diagnosis of chronic hepatitis.
64.Classification and diagnosis of liver cirrhosis.
65.Classification and diagnosis of IBS.
66.Clinic, diagnosis and treatment of chronic cholecystitis.
67.Clinic, diagnostics and treatment of chronic gastritis.
68.Clinic, diagnostics and treatment of chronic gastritis.
69.Clinic, diagnostics and treatment of peptic ulcer disease.
70.Clinic, diagnosis and treatment of IBS.
71.Clinic, diagnosis and treatment of chronic pancreatitis.
72.Clinic and diagnostics of complications of peptic ulcer disease.

73.Clinic, diagnostics and treatment of chronic hepatitis.
74.Clinic, diagnostics and treatment of IBS with constipation.
75.Clinic, diagnostics and treatment of chronic viral hepatitis.
76.Clinic, diagnosis and treatment of IBS with diarrhea.
77.Clinic, diagnostics and treatment of liver cirrhosis.
78.Clinic, diagnostics and treatment of complications of liver cirrhosis.
79.Clinic, diagnostics and treatment of portal hypertension.
80. Clinic, diagnostics and treatment of hepatocellular insufficiency in liver cirrhosis.
81.Clinic, diagnostics of hepatic coma.
82.Objective symptoms in diseases of the digestive organs.
83.Etiology, pathogenesis and classification of acute glomerulonephritis.
84.Etiology, pathogenesis and classification of chronic glomerulonephritis.
85.Clinic, diagnostics and treatment of acute glomerulonephritis.
86.Clinic, diagnostics and treatment of chronic glomerulonephritis.
87.Etiology, pathogenesis, classification of chronic pyelonephritis.
88.Clinic, diagnostics, treatment of chronic pyelonephritis.
89.Etiology and pathogenesis of iron deficiency anemia.
90.Classification and diagnosis of iron deficiency anemia.
91.Clinic and treatment of iron deficiency anemia.