

**MINISTRY OF SCIENCE AND HIGHER EDUCATION OF THE RUSSIAN FEDERATION, MINISTRY  
OF SCIENCE, HIGHER EDUCATION AND INNOVATION  
OF THE KYRGYZ REPUBLIC**

Kyrgyz-Russian Slavic University  
named after the first President of the Russian Federation B.N. Yeltsin



## PROFESSIONAL CYCLE

### Propaedeutics of Internal Diseases

#### Work program of the discipline (module)

Assigned to the	<b>Therapies No1 (Pediatrics and Dentistry)</b> 310501_23_3 ld in.plx Specialty 560001 - KR General Medicine
Qualification	<b>Doctor</b>
Form of study	<b>Full-time</b>
Total labor intensity	<b>10 ZET</b>
Hours according to the including:	360
classroom classes	208
independent work	115,7
	35,5
	Types of control in semesters: Credit 3 Exam 4

**Distribution of hours of the discipline by semesters**

Semester (<Course>.<Semester of course>)	3 (2.1)		4 (2.2)		Total	
	UP	WP	UP	WP	UP	WP
Weeks	19		18			
Type of classes						
Lectures	32	32	32	32	64	64
Practical	64	64	80	80	144	144
Contact work during the period of theoretical training	0,3	0,3			0,3	0,3
Contact work during the examination session			0,5	0,5	0,5	0,5
Including int.	4	4	4		8	4
Total room.	96	96	112	112	208	208
Contact work	96,3	96,3	112,5	112,5	208,8	208,8
Himself. Work	83,7	83,7	32	32	115,7	115,7
Watches for control			35,5	35,5	35,5	35,5
<b>Total</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>180</b>	<b>360</b>	<b>360</b>

The program was compiled by:



Reviewer(s):

Doctor of Medicine. Doctor of Medicine, Professor  
Mamatov S.M



Candidate of Medical Sciences Dzhailobaeva K.A.



Work program of the discipline

developed in accordance with the Federal State Educational Standard 3++:

Federal State Educational Standard of Higher Education - Specialist in the Specialty 31.05.01

General Medicine (Order of the Ministry of Education and Science of Russia dated 21.09.2021 No 1578/1)

Compiled on the basis of the curriculum:

Specialty 560001 - KR General Medicine

(for international students)

approved by the Academic Council of the University of \_\_\_\_\_ Minutes No \_\_\_\_\_

The work program was approved at the meeting of the department

Minutes of \_\_\_\_\_ 2025 No \_\_\_\_\_

Program duration: academic year

Head. Head of the Department



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**Approval of the RPD for execution in the next academic year**

Chairman of the International Council

\_\_ \_\_\_\_\_ 2026

The work program was revised, discussed and approved for  
in the 2026-2027 academic year at the meeting of the Department

Minutes of \_\_ \_\_\_\_\_ 2026 № \_\_  
Head. Head of the Department

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**Approval of the RPD for execution in the next academic year**

Chairman of the International Council

\_\_ \_\_\_\_\_ 2027

The work program was revised, discussed and approved for  
in the 2027-2028 academic year at the meeting of the Department

Minutes of \_\_ \_\_\_\_\_ 2027 № \_\_  
Head. Head of the Department

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**Approval of the RPD for execution in the next academic year**

Chairman of the International Council

\_\_ \_\_\_\_\_ 2028

The work program was revised, discussed and approved for  
in the 2028-2029 academic year at the meeting of the department

Minutes of \_\_ \_\_\_\_\_ 2028 № \_\_  
Head. Head of the Department

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**Approval of the RPD for execution in the next academic year**

Chairman of the International Council

\_\_ \_\_\_\_\_ 2029

The work program was revised, discussed and approved for  
in the 2029-2030 academic year at the meeting of the department

Minutes of \_\_ \_\_\_\_\_ 2029 № \_\_  
Head. Head of the Department

## 1. OBJECTIVES OF MASTERING THE DISCIPLINE

1.1	The purpose of mastering the academic discipline "Propaedeutics of Internal Diseases" is to form students' theoretical and practical knowledge, skills, and professional competencies necessary for the examination of both healthy and sick patients. Important attention is paid to the development of clinical thinking, the development of the basics of medical ethics and deontology, as well as the improvement of diagnostic skills in identifying symptoms, syndromes, and diseases of internal organs. This knowledge and these skills contribute to the preparation of students for further study and professional activities in the field of "General Medicine," corresponding to the competencies established by the Federal State Educational Standard 3++. In addition, the discipline is aimed at preparing
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## 2. THE PLACE OF THE DISCIPLINE IN THE STRUCTURE OF THE EDUCATIONAL PROGRAM

Cycle (section) of the PLO:	B1.O.03
<b>2.1</b>	<b>Requirements for the preliminary training of the student:</b>
2.1.1	Nursing
<b>2.2</b>	<b>Disciplines and practices for which the development of this discipline (module) is necessary as a previous:</b>

## 3. COMPETENCIES OF THE STUDENT FORMED AS A RESULT OF MASTERING THE DISCIPLINE (MODULE)

**PC-4: Able and ready to conduct pathophysiological analysis of clinical syndromes, substantiate pathogenetically justified methods (principles) of diagnosis, treatment, rehabilitation and prevention among the population, taking into account age and sex groups.**

<b>Know:</b>	
Level 1	Etiology, pathogenesis, clinical presentation of the main diseases with various nosological forms
Level 2	Methods of management and treatment of patients on an outpatient basis and in a day hospital
Level 3	Main directions and problems and management of patients with various diseases
<b>Be able to:</b>	
Level 1	To compare different types and methods of treatment of patients with different nosological forms, to develop a plan for the treatment of diseases
Level 2	Manage and treat patients on an outpatient basis and in a day hospital;
Level 3	Monitor the effectiveness and safety of the prescribed treatment at all stages of its implementation.
<b>Own:</b>	
Level 1	• Skills in analyzing various types of treatment of patients with various nosological forms;
Level 2	Methods of search and comparison of different methods of treatment of patients with different nosological forms
Level 3	Skills in managing and treating patients with various diseases on an outpatient basis and in a day hospital.

**PC-5: Able and willing to conduct and interpret interviews, physical examinations, clinical examinations, results of modern laboratory and instrumental tests, write a medical record of an outpatient and inpatient adult and child.**

<b>Know:</b>	
Level 1	Methods of conducting research to identify the main pathological conditions, symptoms, disease syndromes, nosological forms.
Level 2	Specifics of identifying various types of pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the ICD X revision.
Level 3	The main syndromes of damage to organs and systems and their specificity in the differential diagnosis of various nosological forms in accordance with the ICD X revision.
<b>Be able to:</b>	
Level 1	To comprehend the results of the study of the main nosological forms of diseases;
Level 2	Analyze various types of pathological conditions, symptoms, disease syndromes, nosological forms in accordance with the ICD.
Level 3	To note the practical value in comparing specific pathological syndromes and symptoms of diseases.

<b>Own:</b>	
Level 1	Skills in identifying the main pathological conditions, symptoms, disease syndromes.
Level 2	Methods of searching, identifying and systematizing the main pathological conditions, symptoms of disease syndromes , nosological forms in accordance with the ICD X revision.
Level 3	Skills of self-justification of combining various symptoms and syndromes into nosological forms in accordance with the (ICD X revision).

**PC-14: Able and ready to make a diagnosis based on the results of biochemical and clinical studies, taking into account the course of pathology in organs, systems and the body as a whole.**

<b>Know:</b>	
Level 1	List and characteristics of accounting and reporting medical documentation in medical organizations of a medical profile

**PC-8: Able and willing to apply up-to-date information on health indicators at the health care facility level.**

<b>Know:</b>	
Level 1	Regulatory documentation adopted in healthcare, as well as documentation for assessing the quality and efficiency of medical organizations.

**PC-14: Able and ready to make a diagnosis based on the results of biochemical and clinical studies, taking into account the course of pathology in organs, systems and the body as a whole.**

<b>Be able to:</b>	
Level 1	Conduct a medical and statistical analysis of the health indicators of the attached population;
Level 2	Maintain medical records, including in electronic form
<b>Own:</b>	
Level 1	• Work skills and methods of maintaining accounting and reporting documentation of various nature in medical institutions;
Level 2	Skills of comparative characterization of medical documentation of various nature in medical institutions

**PC-26: Able and willing to use the regulatory documentation adopted in the health care of the Kyrgyz Republic, as well as used in international practical medicine.**

<b>Know:</b>	
Level 1	Legislation of the Republic of Kazakhstan in the field of health care
Level 2	Orders of the Ministry of Health of the Republic of Kazakhstan, clinical protocols
Level 3	International clinical guidelines (WHO, ESC, ADA), ICD-10/ICD-1
<b>Be able to:</b>	
Level 1	Apply the clinical protocols of the Ministry of Health of the Republic of Kazakhstan in practice
Level 2	Use international recommendations for diagnosis and treatment
Level 3	Fill out medical documentation (medical history, outpatient card)
<b>Own:</b>	
Level 1	Skills in working with electronic databases of regulatory documents
Level 2	Ability to compare national and international standards
Level 3	Skills to critically evaluate updates to clinical guidelines

**SLK-2: Able and ready to master the techniques of professional communication; build interpersonal relationships, work in a group, constructively resolve conflict situations, tolerate social, ethnic, religious and cultural differences.**

<b>Know:</b>	
Level 1	Fundamentals of Medical Psychology and Deontology
Level 2	Principles of doctor-patient communication. Active listening techniques
Level 3	Ethics of working in a medical team
<b>Be able to:</b>	
Level 1	Connect with patients of different ages and cultures
Level 2	Work in a multidisciplinary team. Give and receive feedback
Level 3	Resolve conflict situations

<b>Own:</b>	
Level 1	Empathic communication skills
Level 2	Mediation skills in conflicts
Level 3	Culturally sensitive care skills. Reflection of one's own communicative activity

**As a result of mastering the discipline, the student must**

<b>3.1</b>	<b>Know:</b>
3.1.1	methods of collecting anamnesis, general and physical examination of the patient;
3.1.2	the main syndromes of internal diseases and their diagnostic criteria;
3.1.3	methods of laboratory and instrumental examination (ECG, ultrasound, X-ray, spirometry);
3.1.4	health indicators of the population at the level of health care facilities and principles of epidemiological analysis;
3.1.5	regulatory documentation of the health care of the Kyrgyz Republic and international clinical guidelines;
3.1.6	Fundamentals of Medical Psychology, Deontology and Doctor-Patient Communication.
3.1.7	Be able to:
<b>3.2</b>	<b>Be able to:</b>
3.2.1	conduct interviews, physical examinations and clinical examinations of adults and children;
3.2.2	interpret the results of laboratory and instrumental tests;
3.2.3	formulate a syndromic diagnosis based on clinical and laboratory data;
3.2.4	fill out medical documentation (medical history, outpatient card);
3.2.5	apply clinical protocols of the Ministry of Health of the Kyrgyz Republic and international recommendations in practice;
3.2.6	establish professional contact with patients of different ages and cultures.
<b>3.3</b>	<b>Own:</b>
3.3.1	skills of percussion, auscultation, palpation of organs and determination of physical constants;
3.3.2	experience in interpreting ECG, X-rays, spirometry and ultrasound results;
3.3.3	the skills of making a syndromic diagnosis, taking into account the pathology of organs and systems;
3.3.4	the ability to work with electronic databases of regulatory documents and critical assessment of clinical guidelines;
3.3.5	skills of empathic communication, working in a medical team and resolving conflict situations;
3.3.6	the experience of culturally sensitive care and reflection on one's own professional activity.

**4. STRUCTURE AND CONTENT OF THE DISCIPLINE (MODULE)**

Lesson code	Name of sections and topics /type of lesson/	Semester / Course	Hours	The competence	References	Inté Rakt.	Pr. podg.	Note
	<b>Section 1. The Subject and Tasks of Propaedeutics of Internal Diseases. Methods of Examination of the Respiratory System.</b>			SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.1	Introduction. Subject and objectives of PVB. General methodology of clinical examination of	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.2	Introduction. Subject and objectives of PVB. General methodology of clinical examination of the patient, questioning. Guidelines for Writing History Sections	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.3	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with lung diseases.	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			

1.4	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with lung diseases.	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.5	Bronchial obstructive syndrome. Syndrome of pathological bronchial dilation. Syndrome of increased airiness of lung tissue. /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.6	Bronchial obstructive syndrome. Syndrome of pathological bronchial dilation. Syndrome of increased airiness of lung tissue. /Pr/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.7	Pulmonary tissue thickening syndrome . Lung tissue cavity syndrome	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-	L1.1L2.1L3.1			
1.8	Lung tissue thickening syndrome . Lung tissue cavity syndrome /Pr/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-	L1.1L2.1L3.1			
1.9	Syndrome of lung tissue collapse. Atelectasis (obturation and compression) /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.10	Syndrome of lung tissue collapse . Atelectasis (obturation and compression) /Pr/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.11	Fluid accumulation syndrome in the pleural cavity. Pleural gas syndrome	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.12	Fluid accumulation syndrome in the pleural cavity. Syndrome of the presence of gas in	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1	2		
1.13	Respiratory distress syndrome. Pulmonary hypertension syndrome. Chronic pulmonary insufficiency syndrome. /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.14	Respiratory distress syndrome. Pulmonary hypertension syndrome. Chronic pulmonary insufficiency syndrome. RKNol /Pr/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.15	2. Medical ethics and deontology. /IND work/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-	L1.1L2.1L3.1			
1.16	3. General examination of the patient: methodology, diagnostic value. Pathological forms of the chest.	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.17	4. Body temperature. Nature of the temperature curve. Types. Importance in somatic diseases. /IND work/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			

1.18	5. Determination of body mass index (Quetelet), overweight and obesity. Abdominal and gluteal femoral types of obesity. /IND work/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.19	6. The history of the development of percussion as a research method. The role of Leopold Auenbrugger and Jean-Nicolas Corvisard in its implementation. /IND work/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.20	7. History of the development of auscultation as a research method . Biophysical foundations of auscultation. Methods and means of auscultation.	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.21	8. Diagnostic value of laboratory research methods in pulmonology: complete blood count, clinical sputum analysis, pleural effusion study. /IND work/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.22	9. Diagnostic value of laboratory research methods in pulmonology: acute-phase proteins, immunoglobulin E. /IND work/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
1.23	10. Diagnostic value of instrumental research methods in pulmonology: X-ray research. Bronchoscopy. /IND work/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
	<b>Section 2. Methods of studying the cardiovascular system. Syndromes in cardiology</b>			SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.1	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with cardiovascular diseases.	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.2	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with cardiovascular diseases. BP measurement	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.3	Principles of ECG examination. Methods of interpretation of normal ECG. Myocardial hypertrophy and dilatation syndrome. ECG criteria for GLP, PG, HLP, LVH /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			

2.4	Principles of ECG examination. Methods of interpretation of normal ECG. Syndrome of hypertrophy and dilatation of the myocardium. ECG criteria for GLP,	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1	2		
2.5	Endocardial damage syndrome. Mitral valve stenosis and insufficiency syndrome . Aortic valve stenosis and insufficiency syndrome /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.6	Endocardial damage syndrome. Mitral valve stenosis and insufficiency syndrome . Aortic valve stenosis and insufficiency syndrome /PR/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.7	Myocardial damage syndrome. Rhythm disorder syndrome (arrhythmia). Disorders of automatism (tahi, bradyarhythmia) and excitability (extrasystoles). /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.8	Myocardial damage syndrome. Syndrome of arrhythmia. Disorders of automatism (tachy, bradyarhythmia) and excitability (extrasystoles). /Pr/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.9	Myocardial damage syndrome. Rhythm disorder syndrome (arrhythmia). Conduction disorders	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.10	Myocardial damage syndrome. Rhythm disorder syndrome (arrhythmia). Conduction disorders	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.11	Pericardial syndrome. Fibrinous "dry" pericarditis syndrome. Fluid accumulation syndrome in the pericardial cavity. Cardiac tamponade syndrome /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.12	Pericardial syndrome. Fibrinous "dry" pericarditis syndrome. Fluid accumulation syndrome in the pericardial cavity. Cardiac tamponade syndrome. RKN02 /Pr/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.13	1. Laennec's contribution to auscultation of the heart and blood vessels.	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-	L1.1L2.1L3.1			
2.14	2. Invention of the ECG by Willem Einthoven. Introduction of the ECG into clinical practice.	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			

2.15	3. The contribution of Academician M.M. Mirrakhimov to the study of the heart through scientific research and organizational	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.16	4. Diagnostic value of instrumental research methods in cardiology: echocardiography (echocardiography).	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.17	5. Diagnostic value of instrumental research methods in cardiology: X-ray studies of the heart. /IND work/	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.18	6. Diagnostic value of instrumental research methods in cardiology: /IND work/	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.19	7. Diagnostic value of instrumental research methods in cardiology: ECG monitoring. /IND work/	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.20	8. Diagnostic value of instrumental research methods in cardiology: Computed tomography. /IND work/	3	3	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.21	9. Diagnostic value of instrumental research methods in cardiology: Magnetic resonance imaging. . /IND work/	3	3,5	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
2.22	10. Diagnostic value of measuring pressure on the lower extremities. Value of the ankle-brachial index /Avg/	3	3,5	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
	<b>Section 3. Methods of studying the cardiovascular system. Syndromes in cardiology.</b>			SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
3.1	Coronary insufficiency syndrome. Acute coronary insufficiency syndrome. Acute myocardial infarction syndrome. ECG criteria /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
3.2	Coronary insufficiency syndrome. Acute coronary insufficiency syndrome. Acute myocardial infarction syndrome. ECG criteria /PR/	3	4	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			
3.3	Arterial hypertension syndrome. Vascular insufficiency syndrome /Lek/	3	2	SLK-2 PK-4 PK-5 PK-8 PK-14 PK-26	L1.1L2.1L3.1			

3.4	Arterial hypertension syndrome. Vascular insufficiency syndrome /PR/	3	4					
3.5	Heart failure syndrome /Lek/	3	2					
3.6	Heart failure syndrome . RKN03 /Pr/	3	4					
3.7	Submission and defense of the medical	3	0,3					
3.8	1. Changes in arterial pulse in various diseases of the cardiovascular system. /IND work/	3	3					
3.9	2. Diagnostic value of laboratory research methods in cardiology: complete blood count, lipid spectrum, C reactive protein /IND work/	3	3					
3.10	3. Diagnostic value of laboratory research methods in cardiology: blood enzymes - troponin I and T, myoglobin, croteinphosphokinase, LDH. /IND work/	3	3					
3.11	4. Diagnostic value of laboratory research methods in cardiology: sodium uretic peptides. /IND work/	3	3					
3.12	5. Diagnostic value of functional studies: test with a 6-minute walk. /IND work/	3	3					
3.13	6. Diagnostic value of functional research methods : bicycle ergometry, treadmill test /Sr/	3	3					
3.14	7. Diagnostic value of BP monitoring. Phenotypes of high blood pressure. /IND work/	3	3					
3.15	8. Diagnostic value of instrumental pulse examination: sphygmography, plethysmography. /IND work/	3	3					
3.16	9. Rules for applying electrodes for posterior myocardial infarction and right ventricular infarction. /IND work/	3	3,7					
3.17	10. Diagnostic value of the study of pleural effusion. /IND work/	3	3,5					

3.18	11. Diagnostic value of sputum examination. Presence of Koch's bacilla (CD), atypical cells (AC) in sputum. /IND work/	3	3,5					
	<b>Section 4. Methods of examination of the gastrointestinal tract. Syndromes in gastroenterology.</b>							
4.1	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) (oral cavity , pharynx, abdomen) of patients with diseases of the gastrointestinal tract. Superficial Indicative and in-depth methodical sliding palpation according to Obraztsov Strazhesko. Diagnostic value. Syndrome of impaired secretory function of the stomach (hyperacid and hypoacid gastric syndrome) /Lek/	4	2					
4.2	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) (oral cavity , pharynx, abdomen) of patients with diseases of the gastrointestinal tract. Superficial Indicative and in-depth methodical sliding palpation according to Obraztsov Strazhesko. Diagnostic value. Syndrome of impaired secretory function of the stomach (hyperacid and hypoacid gastric syndrome) /Pr/	4	5					
4.3	Pancreatic exocrine syndrome Maldigestia syndrome. Gallbladder and biliary tract inflammation syndrome .Cholestasis syndrome. /Lek/	4	2					
4.4	Pancreatic exocrine syndrome .Maldigestia syndrome. Syndrome of inflammation of the gallbladder and biliary tract. Cholestasis syndrome. /Pr/	4	5					
4.5	Enteral syndrome. Malabsorption syndrome. Colitic syndrome /Lek/	4	2					

4.6	Enteral syndrome. Malabsorption syndrome. Colitis syndrome /Pr/	4	5					
4.7	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with diseases of the hepatobiliary system. Jaundice syndrome. /Easy/	4	2					
4.8	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with diseases of the hepatobiliary system. Jaundice syndrome. /Pr/	4	5					
4.9	Hepatic cell failure syndrome. Portal hypertension syndrome. /Easy/	4	2					
4.10	Hepatic cell failure syndrome. Portal hypertension syndrome. RKNo4	4	5					
4.11	1. Diagnostic value of the study of H. pylory, /IND work/	4	3					
4.12	2. Diagnostic value of gastroopia examination. /IND work/	4	3,5					
4.13	3. Diagnostic value of duodenal probing (duodental contents) /IND work/	4	3,5					
	<b>Section 5. Methods of examination of the urinary system. Syndromes in nephrology</b>							
5.1	Subjective (complaints, anamnesis) and objective examinations (examination, palpation, percussion, auscultation - OPPA) of patients with diseases of the urinary	4	2					
5.2	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with diseases of the urinary system /PR/	4	5					
5.3	Tubular dysfunction syndrome : Urinary tract infection syndrome . Dysuric syndrome. /Lek/	4	2					

5.4	Urinary tract syndrome Urinary tract infection syndrome .Dysuric syndrome. /Pr/	4	5					
5.5	Syndromes of renal parechima lesions: Isolated urinary syndrome Nephritic syndrome. Nephrotic syndrome. Renal hypertension syndrome (renovascular and renovascular hypertension) /Easy/	4	2					
5.6	Syndromes of renal parechima lesions: Isolated urinary syndrome Nephritic syndrome. Nephrotic syndrome Renal hypertension syndrome (renovascular and renovascular hypertension) /Pr/	4	5					
5.7	Global renal dysfunction syndrome : Acute renal failure syndrome . Chronic renal failure syndrome.	4	2					
5.8	Global renal dysfunction syndrome : Acute renal failure syndrome . Chronic renal failure syndrome.	4	5					
5.9	1. Diagnostic value of laboratory research methods in diseases of the urinary system: protein, protein fractions, lipid spectrum /IND work/	4	3					
5.10	2. Features of the distribution of edema in a patient with kidney disease. Pathogenetic mechanisms of their development. Differences from edema of other origin. . /IND work/	4	3,5					
5.11	3. Diagnostic value of mineral and bone disorders in chronic kidney disease. Importance of vitamin D, calcium, phosphorus. /IND work/	4	3,5					
	<b>Section 6. Methods of examination of hematopoietic organs. Syndromes in</b>							

6.1	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion, auscultation - OPPA) of patients with diseases of the hematopoietic system (lymph nodes, spleen) /Lek/	4	2					
6.2	Subjective (complaints, anamnesis) and objective studies (examination, palpation, percussion - AKI) of patients with diseases of the hematopoietic system (lymph nodes, spleen) /PR/	4	5					
6.3	Anaemic syndrome Posthemorrhagic anemias. Dyserythropoietic anemias (Iron deficiency anemias. B12 folate deficiency anemias Hemolytic anemias /Lek/	4	2					
6.4	Anaemic syndrome Posthemorrhagic anemias. Dyserythropoietic anemias (Iron deficiency anemias. B12 folate deficiency anemias Hemolytic anemias /PR/	4	5					
6.5	Hyperplastic syndrome in reactive diseases of the hematopoietic system. Proliferative syndrome in hemoblastosis.	4	2					
6.6	Hyperplastic syndrome in reactive diseases of the hematopoietic system. Proliferative syndrome in hemoblastosis.	4	5					
6.7	Hemorrhagic syndrome. DIC syndrome /Lek/	4	2					
6.8	Hemorrhagic syndrome. DIC syndrome /PR/	4	5					
6.9	1. Hematopoiesis scheme. The importance of cell differentiation and proliferation in the clinic. /IND work/	4	4					
	<b>Section 7. Methods of examination of the endocrine system. Syndromes in endocrinology</b>							
7.1	Subjective (complaints, anamnesis) and objective (examination, palpation) methods of examination of patients with thyroid diseases	4	2					

7.2	Subjective (complaints, anamnesis) and objective (examination, palpation) methods of examination of patients with thyroid diseases . Hypothyroidism syndrome. Hyperthyroidism syndrome. /Pr/	4	5					
7.3	Pancreatic intrasecretory syndrome : Hyperglycemia syndrome (diabetes mellitus) Hypoglycemia syndrome. /Lek/	4	2					
7.4	Pancreatic intrasecretory syndrome : Hyperglycemia syndrome (diabetes mellitus) Hypoglycemia syndrome. /Pr/	4	5					
	<b>Section 8. Methods of examination of the musculoskeletal system</b>							
8.1	Subjective (complaints, anamnesis) and objective (examination, palpation) methods of examination of patients with diseases of the musculoskeletal system /Lek/	4	2					
8.2	Subjective (complaints, anamnesis) and objective (examination, palpation) methods of examination of patients with diseases of the musculoskeletal system.	4	5					
8.3	Pre-examination consultation /KrEk/	4	0,5					
8.4	1. Diagnostic values of instrumental methods of musculoskeletal system research - X-ray examination in deforming osteoarthritis /IND work/	4	2					
8.5	2. Diagnostic values of instrumental methods of research of the musculoskeletal system - X-ray studies in rheumatoid arthritis. /IND work/	4	2					
8.6	3. Diagnostic values of instrumental methods of musculoskeletal system research - X-ray examination for gout. /IND work/	4	2					
8.7	4. Diagnostic values of instrumental methods of research of the musculoskeletal system - ultrasound of joints in inflammation of joints. /IND work/	4	2					

8.8	/Exam/	4	35,5				
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## 5. FUND OF ASSESSMENT TOOLS

### 5.1. Control questions and tasks

Control questions:

1. A brief history of the development of the doctrine of diagnostic methods and internal diseases.
2. Types of diagnostics. Methodology of diagnosis.
3. Outline of the medical history. The importance of the case history as a scientific, medical and legal document.
4. General examination of a healthy patient.
5. Examination of the chest of a healthy patient.
6. Chest shape: normosthenic, hypersthenic, asthenic.
7. Types of breathing (thoracic, abdominal, mixed), their diagnostic criteria.
8. Examination of the oral cavity.
9. Examination of the abdomen.
10. Physique. The concept of constitutional type.
11. Palpation of organs of a healthy person. Significance of the method.
12. Palpation of lymph nodes.
13. Palpation of the thyroid gland.
14. Palpation of the joints.
15. Palpation of the chest.
16. Palpation of the heart area.
17. Examination of peripheral arteries, pulse properties.
18. Oriented superficial palpation, technique.
19. Deep methodical sliding palpation according to the method of V.P. Obratsov, N.D. Strazhesko.
20. Palpation of the abdominal cavity organs (stomach, intestinal sections).
21. Palpation of the abdominal cavity organs (liver, spleen).
22. Palpation of the kidneys.
23. Percussion as a research method, biophysical foundations of percussion.
24. General rules and techniques of percussion.
25. Basic percussion sounds are normal.
26. Comparative percussion of the lungs, methodology.
27. Topographic percussion of the lungs, methodology.
28. Projection of the lobes of the lungs on the chest.
29. Determination of lung boundaries, mobility of inferior pulmonary margins, Kroenig's fields
30. Percussion of the heart, rules and technique of percussion.
31. Boundaries of relative cardiac dullness, method of determination.
32. Boundaries of absolute cardiac dullness, method of determination.
33. Projection of various parts of the heart on the anterior wall of the chest.
34. Projection of the heart valves on the anterior wall of the chest.
35. Percussion of the great vessels of a healthy person.
36. Vascular bundle, method of determination.
37. Percussion of the abdomen, diagnostic value.
38. Liver percussion, methodology, liver size according to Kurlov.
39. Percussion of the gallbladder, technique, diagnostic value.
40. Percussion of the spleen, methodology, spleen size.
41. Bladder percussion.
42. Auscultation of organs of a healthy person - the history of the development of auscultation as a research method.
43. Methods and means of auscultation. General rules and technique of auscultation.
44. Auscultation of the lungs: rules and procedure for auscultation.
45. Basic respiratory sounds are normal.
46. Study of bronchophony.
47. Auscultation of the heart, biophysical foundations of sound phenomena in the heart.
48. Heart sounds, the mechanism of their occurrence, the basic sounds are normal.
49. Physiological bifurcation of the I and II heart sounds.
50. Auscultation of large arteries. Method of measuring blood pressure (according to WHO criteria). Standards of blood pressure.
51. Auscultation of the abdomen: auscultative-frictional determination of the gastric border.
52. Auscultation of the intestine. Mechanism of intestinal murmurs. Rules and procedure for auscultation of the intestine.
53. Body temperature. Types (types) of fevers.
54. The importance of laboratory methods of blood testing in the clinic of internal diseases.
55. The importance of laboratory methods of urine examination in the clinic of internal diseases.
56. The importance of laboratory methods of fecal examination in the clinic of internal diseases.
57. Electrocardiography, recording (leading) technique, standards of the cardiac cycle curve.
58. The importance of the phonocardiography method.
59. The importance of ultrasound research methods (including echocardiography) in the clinic of internal diseases.
60. The importance of the X-ray method of research, its main types.

61. Venous pressure, method of determination, diagnostic value.
62. The importance of endoscopic research methods in the clinic of internal diseases.
63. Diagnostic value of the method of organ biopsy, histological and cytological studies of biopsy material.
64. Features of questioning patients with respiratory diseases.
65. The main clinical symptoms in patients with respiratory diseases (cough, sputum, hemoptysis, pulmonary hemorrhage).
66. General examination of patients with diseases of the respiratory system, its diagnostic value.
67. Shortness of breath, attack of suffocation. Mechanisms of their occurrence and diagnostic value.
68. Fever, its clinical equivalents. Types of temperature curves.
69. Pathological forms of the chest (emphysematous, paralytic, navicular, rachitic, funnel-shaped).
70. Pathological types of percussion sound (blunted, dull, boxy, tympanic, blunted-tympanic).
71. Diagnostic value of comparative percussion of the lungs.
72. Adverse respiratory sounds, diagnostic value.
73. Sputum analysis and its diagnostic value.
74. Analysis of pleural fluid and its diagnostic value.
75. Technique of puncture of the pleural cavity.
76. Spirometry, spirometry, pneumotachometry, peak flowmetry.
77. Interpretation of a spirogram and its diagnostic value.
78. Bronchial obstruction syndrome.
79. Syndrome of increased airiness of the lungs.
80. Lung tissue infiltration syndrome.
81. Syndrome of fluid presence in the pleural cavity.
82. Syndrome of gas in the pleural cavity.
83. Cavity syndrome in the lung.
84. Syndrome of pathological bronchial dilation.
85. Pulmonary insufficiency syndrome, degrees and types of ventilation disorders.
86. Chronic cor pulmonale syndrome.
87. Questioning patients with diseases of the cardiovascular system.
88. Main clinical symptoms in patients with diseases of the cardiovascular system.
89. Pain in the heart area, the mechanism of their occurrence. Methods of cupping.
90. Shortness of breath. Mechanisms of the occurrence of "cardiac dyspnea".
91. Cough, hemoptysis in patients with diseases of the cardiovascular system. Nature and mechanism of their occurrence, diagnostic value.
92. General examination and examination of the heart area in patients with diseases of the cardiovascular system, diagnostic value.
93. Palpation of apical and cardiac impulses.
94. Characteristics of the "pathological" apical impulse: localization, strength, height, prevalence. Negative apical push.
95. Epigastric and precordial pulsations, their genesis. Diagnostic value.
96. Diagnostic value of changes in the boundaries of relative and absolute dullness of the heart.
97. Additional and pathological tones in systole and diastole (III and IV, mitral valve opening tone, systolic click-click).
98. Change of tones in pathology: weakening, strengthening, bifurcation, appearance of additional tones. Changes in the rhythm of alternating heart sounds "Quail rhythm", gallop rhythms, pendulum-like rhythm (embryocardia).
99. Tachycardia, bradycardia, arrhythmias
100. Heart murmurs. Mechanism of occurrence. Difference between organic murmurs and functional murmurs. Ratio of murmurs to phases of cardiac activity.
101. Systolic and diastolic murmurs, their variants. Places of best listening to murmurs, ways of conducting heart murmurs.
102. Pericardial friction murmur, pleuropericardial murmurs. Diagnostic value.
103. Examination of the peripheral pulse.
104. Arterial pulse: examination of it on the radial arteries, comparison of the pulse on both arms. Characteristics of the pulse (frequency, rhythm, filling, tension, magnitude, speed, shape of the pulse).
105. The concept of arterial hypertension and hypotension.
106. Examination of veins. Dilation of the veins of the chest, abdominal wall, extremities. Thickening and tenderness on palpation of the eyelids, varicose veins.
107. Laboratory methods of research in diseases of the cardiovascular system. General principles. Determination of enzyme activity. Interpretation of results in diseases of the heart and blood vessels.
108. Diagnostic value of hyperfermentemia. Determination of cholesterol, LDL, VLDL. Interpretation of the results in diseases of the heart and blood vessels.
109. The importance of determining total protein and protein fractions, C-reactive protein, seromucoid, sialic acids, antistreptolysin, antihyaluronidase, antistreptokinase. Interpretation of the results in diseases of the heart and blood vessels.
110. Clinical and ECG criteria for left ventricular hypertrophy.
111. Clinical and ECG criteria for right ventricular hypertrophy.
112. Disorders of excitability of the sinus node, clinical and ECG - manifestations, diagnostic value.
113. Extrasystole, clinical and ECG manifestations, diagnostic value.
114. Paroxysmal tachycardia, clinical and ECG manifestations, diagnostic value.
115. Atrial fibrillation and flutter, clinical and ECG manifestations, diagnostic value.
116. Conduction disorders, clinical and ECG - manifestations, diagnostic value.
117. Sphygmography. The concept of the polycardiographic method of research and its significance for judging the functional state of the heart.

117. Phonocardiography. General ideas about the phonocardiography technique. The importance of this technique for the diagnosis of heart and vascular diseases. Indications.
118. Ultrasound examination of the heart (echocardiography). Indications for the appointment of the study. Diagnostic value.
119. X-ray examination of the heart. Radioisotope research methods.
120. Blood flow velocity, diagnostic value.
121. Acute heart failure syndrome, diagnostic value.
122. Chronic heart failure syndrome, diagnostic value.
123. Arterial hypertension syndrome, diagnostic value.
124. Arterial hypotension syndrome, diagnostic value.
125. Syndrome of inflammatory changes in the heart (myocardium, endocardium, pericardium).
126. Acute coronary insufficiency syndrome.
127. Chronic coronary insufficiency syndrome.
128. Heart failure syndrome.
129. Cardiac asthma syndrome.
130. Mitral valve insufficiency.
131. Stenosis of the left atrioventricular foramen.
132. Stenosis of the aortic mouth.
133. Aortic valve insufficiency.
134. Insufficiency of the 3-leaflet valve.
135. Questioning patients with esophageal diseases, diagnostic value.
136. Questioning patients with diseases of the stomach and 12th duenum: diagnostic value.
137. Questioning of patients with pancreatic diseases, diagnostic value.
138. Questioning patients with intestinal diseases, diagnostic value.
139. Pain syndrome in patients with gastrointestinal tract disease: mechanism of occurrence, localization, radiation of pain, its nature and intensity, time of occurrence during the day, duration, relief of pain.
140. Appetite: preserved, reduced, increased (polyphagia), completely absent (anorexia). Aversion to food (fatty, meaty). Dry mouth, bitterness. Unpleasant taste, lack of taste. Drooling.
141. Stool: frequency per day, volume of bowel movements, color, shape, consistency, presence of particles of undigested fiber and food, impurities of blood, mucus.
142. Causes, diagnostic value of various types of diarrhea.
143. Constipation, mechanism of origin, diagnostic value.
144. Signs of esophageal, gastric, intestinal bleeding.
145. Examination of the oral cavity, pharynx, tonsils, posterior pharyngeal wall; the condition of the oral mucosa, teeth.
146. Examination of the abdomen in the vertical and horizontal position of the patient. Division of the abdomen into topographic areas.
- Abdominal configuration.
147. Development of venous collaterals on the anterior abdominal wall ("Medusa's head") and lateral walls.
148. Visible peristalsis and antiperistalsis of the stomach and intestines.
149. Percussion of the abdomen: determination of free and bagged fluid in the abdominal cavity. Method of determining ascites in the vertical and horizontal position of the patient.
150. On palpation Determination of areas of skin hypersensitivity (Zakharyin-Ged zones) and painful places of the abdomen. Determination of resistance and muscle defense, diagnostic value of this symptom. Symptom of Shchetkin-Blumberg peritoneal irritation.
151. Fecal analysis, diagnostic value.
152. Endoscopic examination of the gastrointestinal tract, diagnostic value.
153. Technique of duodenal (fractional) probing and its diagnostic value.
154. Gastric hyposecretion syndrome.
155. Gastric hypersecretion syndrome.
156. Pancreatic exocrine insufficiency syndrome.
157. Maldigestion syndrome, malabsorption, exudative enteropathy.
158. Syndrome of impaired evacuation from the stomach.
159. Gastrointestinal bleeding syndrome.
160. Intestinal dyspepsia syndrome.
161. Questioning patients with liver and gallbladder diseases.
162. Pain syndrome in liver disease: localization, radiation, nature, duration, conditions emergence. How the pain is relieved. The mechanism of pain, its diagnostic value.
163. Dyspeptic phenomena in liver disease: nausea, vomiting, belching, bloating and rumbling in the abdomen, changes in appetite and taste in the mouth, changes in stool.
164. Jaundice: discoloration of the skin, urine, feces. Skin itching. Diagnostic value.
165. General examination of patients with liver diseases, diagnostic value.
166. Laboratory methods for studying liver function.
167. Methods of laboratory and instrumental diagnostics characterizing the participation (impairment) of the liver in protein metabolism.
168. Methods of laboratory and instrumental diagnostics characterizing the participation (impairment) of the liver in fat metabolism.
169. Methods of laboratory and instrumental diagnostics characterizing the participation (impairment) of the liver in carbohydrate metabolism.
170. Methods of laboratory and instrumental diagnostics that characterize the neutralizing and excretory functions of the liver.

171. Instrumental methods of examination of the liver and gallbladder.
172. Parenchymal jaundice syndrome, diagnostic value.
173. Obstructive jaundice syndrome, diagnostic value.
174. Hemolytic jaundice syndrome, diagnostic value.
175. Portal hypertension syndrome.
176. Hepatolienal syndrome.
177. Cytolysis syndrome.
178. Syndrome of small hepatic signs.
179. Liver failure syndrome.
180. Hepatic colic syndrome and biliary dyskinesia.
181. Gallbladder inflammation syndrome.
182. Questioning of patients with kidney diseases, diagnostic value.
183. Mechanism of edema. Differences between renal edema and edema in a cardiac patient.
184. Dysuria, oliguria, polyuria, nocturia, pollakiuria, stranguria.
185. General examination of patients with kidney diseases, diagnostic value.
186. Features of the distribution of edema in kidney disease and their difference from edema of other origin.
187. Determination of the symptom of pounding along the XII rib, its diagnostic value.
188. Examination of pain points characteristic of diseases of the urinary tract.
189. Method of listening to the renal arteries. Detection of murmur in renal artery stenosis, its diagnostic value.
190. General urinalysis, diagnostic value.
191. Urine analysis according to Nechiporenko, Adiss-Kakovsky, diagnostic value.
192. Zimnitsky's test, Rehberg's test, diagnostic value.
193. Determination of urea, creatinine, residual nitrogen in the blood serum. Diagnostic value.
194. X-ray examination for kidney disease. General presentation and diagnostic value.
195. Kidney biopsy, indications and diagnostic value.
196. Features of fundus changes in kidney disease.
197. Edema syndrome.
198. Nephrotic syndrome.
199. Urinary syndrome.
200. Renal arterial hypertension syndrome.
201. Renal eclampsia.
202. Acute renal failure syndrome.
203. Chronic renal failure syndrome.
204. Renal colic syndrome.
205. Questioning patients with diseases of the blood system, diagnostic value.
206. Bleeding. Bleeding from the nose, gums, gastrointestinal tract, uterus and other organs.
207. General examination of patients with diseases of the blood system, diagnostic value.
208. Pain during bone percussion. Percutory determination of the size of the liver and spleen.
209. General blood analysis in health and pathology.
210. Blood coagulation, tests revealing changes in I, II, III phases of blood coagulation.
211. Bone marrow puncture, diagnostic value.
212. Trepanobiopsy, technique, diagnostic value.
213. Syndromes in iron deficiency anemia: circulatory-hypoxic, sideropenic, hematological.
214. Syndromes in B12-deficiency anemia: circulatory-hypoxic, gastroenterological, neurological, hematological.
215. Hemolytic syndrome.
216. Petechial-spotted type of bleeding.
217. Hematoma type of bleeding
218. Vasculitic-purpuric type of bleeding.
219. Questioning of patients with diseases of the endocrine glands, diagnostic value.
220. General examination of patients with diseases of the endocrine glands, diagnostic value.
221. Hypothyroidism syndrome.
222. Hyperthyroidism syndrome.
223. Syndrome of impaired glucose tolerance and hyperglycemia.
224. Syndrome of diabetic and hypoglycemic coma.
225. Chronic adrenal insufficiency syndrome.
226. Syndrome of fat metabolism disorders.
227. Questioning a patient in case of a disease of the musculoskeletal system and damage to the connective tissue.
228. General examination and palpation of patients with diseases of the musculoskeletal system and connective tissue lesions.
229. Trophic disorders of the skin and its derivatives, causes and genesis of pathology. Examination of the affected joints (configuration, swelling, redness of the skin, volume of active and passive movements in the joints).
230. Laboratory and instrumental methods of examination of patients with diseases of the musculoskeletal system and connective tissue lesions.
231. Arthritis syndrome.
232. Arthrosis syndrome.
233. Urticaria.
234. Anaphylactic shock.
235. Writing a study case history

### 5.2. Topics of term papers (projects)

Term papers in the discipline are not provided

### 5.3. Fund of Assessment Tools

#### TYPES AND CHARACTERISTICS OF SETS OF CONTROL AND EVALUATION TOOLS

1. Test tasks for current academic performance. A system of standardized tasks that allows you to automate the procedure for measuring the level of knowledge of a student.
2. Situational tasks. A means of checking the learned theoretical material.
3. Practical skills. A means of checking the formation of competencies in students as a result of mastering the discipline
4. Theoretical issues of practical (clinical) classes. A means of controlling the learned material of the topic, section (s), module(s) of the discipline by students.
5. Medical history. A means of control that allows you to assess the ability of the teacher to draw up medical documentation, formulate and substantiate a clinical diagnosis, and determine the principles of treatment.
6. Workbook. Didactic complex designed for independent work of the student and allowing to assess the level of assimilation of educational material.
7. Data of additional research methods (ECG fund, X-rays, a set of laboratory test samples).  
Means of control of the learned material, which allows you to assess knowledge.  
Technological map of the discipline. Scale for assessing knowledge control.

### 5.4. List of types of assessment tools

Writing and defending the academic medical history of the supervised patient.

- Assessment of practical skills and abilities to examine the patient.
- Solving a situational problem,
- Interpretation of analyses
- Interpretation of ECG, echocardiography, or radiograph
- Tests
- Report
- Abstract and presentations

## 6. EDUCATIONAL, METHODOLOGICAL AND INFORMATION SUPPORT OF THE DISCIPLINE (MODULE)

### 6.1. Recommended Literature

#### 6.1.1. References

	Authors, compilers	Title	Publisher, year
L1.1	Talley N.J., McGee S.R.	Clinical Examination: A Systematic Guide to Physical Evidence-Based Physical Diagnosis	Elsevier, 2018 Elsevier, 2018

#### 6.1.2. Further reading

	Authors, compilers	Title	Publisher, year
L2.1	Bates B.	Bates' Guide to Physical Examination and History Taking	Wolters Kluwer, 2017
	Swartz M.H.	Textbook of Physical Diagnosis: History and Examination	Elsevier, 2018
	Epstein O., Perkin G.D., Cookson J., de Bono D.P.	Clinical Examination	Mosby, 2020
	Douglas G., Nicol	Macleod's Clinical Examination	Elsevier, 2019

#### 6.1.3. Methodological developments

	Authors, compilers	Title	Publisher, year
	Lynn S. Bickley.	Bates' Pocket Guide to Physical Examination and	Wolters Kluwer, 2021
	Ball J.W., Dains	Seidel's Guide to Physical Examination	Elsevier, 2023

### 6.3. List of Information and Educational Technologies

#### 6.3.1 Competency-Oriented Educational Technologies

6.3.1.1	Traditional educational technologies include lectures and seminars that focus primarily on the communication of knowledge and methods of action, which are transmitted to students in a ready-made form and intended for the reproductive assimilation and analysis of specific examples.
6.3.1.2	Tests are designed to solve the following tasks: to teach students to work with tests of varying complexity, firstly, by identifying only the correct answers among the proposed options, and secondly, by teaching students to rationally distribute the regulated time allotted for working with tests.
6.3.1.3	Tests are used as: self-study test material (in the form of an appendix to homework), helping students to single out from the entire content of the textbook only the main, criterion-based provisions that reveal the central idea of the topic being studied.

6.3.1.4	Assessment of students' knowledge, which helps the teacher to determine the quality of the student's independent preparation and the effectiveness of the lesson (lecture) conducted by the teacher.
6.3.1.5	Modular (block) rating system for assessing students' knowledge.
6.3.1.6	Intermediate certification (examination in the discipline). To control the degree of mastery of the discipline, an examination in the discipline with a final grade is provided.
6.3.1.7	Scope of control tasks: writing and defending the academic medical history of the supervised patient; assessment of practical skills and abilities in examining the patient; theoretical answer to the examination ticket, including three questions from the curriculum of the discipline, solving a situational problem, tests (or ECG, X-ray, etc.).
6.3.1.8	Testing.
6.3.1.9	Innovative educational technologies form systematic thinking and the ability to generate ideas when solving various situational problems. These include situational tasks, brainstorming, role-playing games, work in small groups, scientific and practical conferences, analysis of audio and video tasks, analysis of specific clinical situations, in combination with extracurricular work in order to form and develop the professional skills of students.
6.3.1.10	Information educational technologies involve the independent use of computer equipment and Internet resources by a student to perform practical tasks and independent work. For better assimilation of the material and independent work, students prepare essays, reports and presentations.
<b>6.3.2 List of information reference systems and software</b>	
6.3.2.1	"Electronic Library" of the KRSU ( <a href="http://www.lib.krsu.kg">www.lib.krsu.kg</a> )
6.3.2.2	ST: 310501_24_2 ld in.plx p. 25
6.3.2.3	<a href="http://meduniver.com/Medical/Book/34.html">http://meduniver.com/Medical/Book/34.html</a>
6.3.2.4	<a href="http://www.jaypeebrothers.com">www.jaypeebrothers.com</a>
6.3.2.5	<a href="http://www.booksmed.com">www.booksmed.com</a>
6.3.2.6	<a href="http://www.bankknig.com">www.bankknig.com</a>
6.3.2.7	Blaufuss Multimedia: <a href="http://www.blaufuss.org">http://www.blaufuss.org</a>
6.3.2.8	The R.A.L.E. Repository: Respiratory sounds: <a href="http://www.rale.ca/Recordings.htm">http://www.rale.ca/Recordings.htm</a>
6.3.2.9	David Arnall: Pulmonary Breath Sounds: <a href="http://faculty.etsu.edu/arnall/www/public_html/heartlung/breathsounds/contents.html">http://faculty.etsu.edu/arnall/www/public_html/heartlung/breathsounds/contents.html</a>
6.3.2.10	Frontiers in Bioscience, Virtual Library: Heart Sounds: <a href="http://www.lf2.cuni.cz/Projekty/interna/heart_sounds/h14/sound.html">http://www.lf2.cuni.cz/Projekty/interna/heart_sounds/h14/sound.html</a>
6.3.2.11	McGill University: Heart Sounds: <a href="http://www.lf2.cuni.cz/Projekty/interna/heart_sounds/h6/heart_tables.html">http://www.lf2.cuni.cz/Projekty/interna/heart_sounds/h6/heart_tables.html</a>

## 7. MATERIAL AND TECHNICAL SUPPORT OF THE DISCIPLINE (MODULE)

7.1	The discipline is taught at City Clinical Hospital No. 1, a tertiary-level healthcare facility. The hospital has nine specialized departments, four of which are therapeutic: cardiology, rheumatology, endocrinology, and emergency therapy. There are eight standard-equipped classrooms with one hundred seats, with a total area of two hundred square meters, including desk blocks, couches, and blackboards. The department is equipped with a multimedia complex consisting of a laptop, a personal computer, and a projector. Students have access to four information stands, posters, an electronic library containing thirty textbooks, twenty educational films, and a database of clinical material including ECG and ultrasound data.
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## 8. METHODOLOGICAL INSTRUCTIONS FOR STUDENTS ON MASTERING THE DISCIPLINE (MODULE)

Current control involves the assimilation of educational material during classroom sessions (lectures and practical classes), with attendance and activity taken into account, as well as supervision of the patient, solving situational tasks, and performing mandatory assignments for independent work.

Midterm control assesses the completeness of knowledge and skills on the material of the module as a whole. The completion of modular control tasks is carried out in writing, in the form of tests.

Intermediate control represents a completed documented part of the academic discipline, carried out by summarizing the results of the medical history and solving situational problems. In the first semester, a test is held; in the second semester, an exam is conducted as the final form of control. The exam is not included in the intermediate control but is held separately at the end of the discipline.

#### Basic Requirements for Intermediate Control

When appearing for tests, students are required to have their record books with them and present them to the examiner. The teacher is given the right to award a passing grade without an oral examination to those students who scored more than sixty points for current and midterm control.

#### Exam

During the exam, the student must answer the questions correctly and demonstrate practical skills. In the theoretical part of the exam, the student must answer the questions on the ticket (demonstrating knowledge), correctly perform the situational task (demonstrating ability and proficiency), and interpret laboratory and instrumental studies (demonstrating ability and proficiency).

#### Assessment of Intermediate Control

A minimum of twenty points is awarded for questions at the "know" level (correct formulation of basic concepts). Twenty to twenty-five points are awarded for tasks at the "to be able" and "to possess" levels (correct formulation of the essence of the problem and recommendations). Twenty-five to thirty points are awarded for tasks at the "to be able" and "to possess" levels (full completion of the control task).

#### Basic Requirements for Routine Control

When constructing a practical lesson, teachers adhere to the following indicative plan:

Organizational stage of the lesson (up to two percent of the time): roll call; assignment of homework; motivation of the lesson topic; familiarization of students with the goals and plan of the lesson.

Control and correction of the initial level of knowledge (up to twenty percent): test variants of control; correction of theoretical knowledge by the teacher.

Stage of demonstration of practical skills and/or thematic patients (up to fifteen percent).

Independent work of students at the bedside (up to forty-five percent) or performing situational tasks in the absence of a thematic patient.

Final stage of the lesson (up to eighteen percent): final control of practical skills in patient analysis; final control of theoretical knowledge, including the solution of clinical problems; summing up the results of the lesson and individual assessment of students.

#### Recommendations for the Organization of Independent Student Work

Time organization (per week): studying the notes on the day of the lecture takes ten to fifteen minutes; reviewing the notes before the next lecture takes ten to fifteen minutes; study of theoretical material according to the textbook takes one hour; preparation for a practical lesson takes two hours. The total time is three hours and thirty minutes.

Sequence of actions: review and think about the notes after the lecture; review the material before the next lecture; allocate one hour weekly for work with literature; in preparation for practice, study key concepts; when solving problems, determine the requirements and make a plan.

Use of the CMT: it is recommended to rely on methodological instructions and texts of lectures.

Work with literature: combine lectures, notes, and textbooks; perform exercises after each paragraph. Ask questions: What is the paragraph about? What new concepts have been introduced? What is the practical significance?

Preparation for midterm and intermediate control: work with the textbook, understand the material, and perform tasks; for intermediate control, know the definitions and be able to solve typical problems.

Homework: study the concepts, make a plan for solving, and draw a conclusion.

Preparation for tests: study the theory and complete typical tasks.

#### Making Up for Missed Classes

Control of assimilation is carried out systematically and recorded in the journal. Unsatisfactory grades are worked out at an individual interview. A lecture missed without a valid reason is made up by oral questioning or essay within a month. Practical classes missed without a valid reason are mandatory. Make-up work takes place according to the schedule of the department. Missed classes must be worked out within ten days. With a valid reason, the work is carried out on thematic material without taking into account the hours. Absences due to a long illness are arranged on an individual schedule. In some cases (conferences, competitions, etc.), partial exemption from make-up work is possible.

#### Stages of Presentation Preparation

Draw up a plan (goals, objectives). Think through each slide: how it reveals the main idea; what content will be presented; what will be said orally; how the transition will be made.

#### Making a Presentation

Slides should be verified in fonts and indents. The title slide must be designed correctly. The number of slides should not exceed thirty. The use of figures, graphs, tables, and formulas is encouraged. The slide provides formal information, while its meaning is conveyed orally. The switching speed should be one to two minutes per slide. When explaining tables, indicate what the rows and columns mean. To avoid errors, it is recommended to type formulas in a Word object. The main font is Arial or similar. Formulas should have the same font size as the text.

The student is obliged to make a report at the set time.

#### Instructions for Speakers

Communicate new information; use technical means; be well versed in the topic; answer questions; comply with the time limit: report takes ten minutes, discussion takes five minutes.

#### Structure of the Speech

Introduction (title, idea, relevance, questions); main part (revealing the essence of the topic, the use of visualization); conclusion (brief conclusions).

#### Recommendations for Writing an Essay

The topic is chosen in agreement with the teacher. The essay should reflect the scientific and social aspects of the problem, contain theoretical provisions and specific examples, and be based on several sources.

Additional literature includes monographs, articles, and popular science magazines such as "Pediatric Surgery," "Bulletin of KRSU," "Health Care of Kyrgyzstan," "Bulletin of KSMA," and others.

The outline of the essay must be the author's own. All borrowings must be accompanied by references. Quotations must be made in quotation marks, indicating the source and page.

Design: A4 format; title page (name of the university, discipline, topic, surname of the student, group, year, city); table of contents; text divided into chapters and subchapters; use of graphs, tables, diagrams; sections "Conclusion" and "References."

#### Example of bibliographic references:

Author: I.O. Title of the book. — Place of publication: Publisher, Year. — Number of pages.

Author I.O. Title of the article // Title of the journal. — Year. — Volume, Issue. — Pages.

Author I.O. Title of the article / Title of the collection. — Place of publication: Publisher, Year.