SYLLABUS
Working curriculum of the discipline "Clinical electrocardiography", 6th year, internship
Educational program 6B10120 - «Therapy»

1.	**General information about the discipline**		
1.1	Discipline code: - 6313	1.6	Academic year: 2025 - 2026
1.2	Course name: Clinical electrocardiography	1.7	Courses: 6
1.3	Prerequisites: internal medicine 1, internal medicine 2	1.8	Semester: 12
1.4	Postrequisites: residency disciplines	1.9	Number of credits (ECTS): 4
1.5	Cycle: PD	1.10	Component: EC

2.	**Content of the discipline (maximum 50 words)**
Improves knowledge and skills in ECG diagnostics of heart diseases; analysis of normal parameters of electrocardiographic examination in adults; diagnosis of ECG changes in various pathological conditions: myocardial infarction, myocardial ischemia, various arrhythmias, myocarditis, overload and hypertrophy of the heart, etc. Pharmacological tests during electrocardiographic examinations in adults; effective patient interaction; questions regarding the role of ECG in preventive medicine; AI tools for risk prediction and detection of hidden diseases.	

3.	**Summative Assessment Form**		
3.1	Testing	3.5	Coursework
3.2	Writing +	3.6	Essay
3.3	Oral	3.7	Project
3.4	Assessment of practical skills +	3.8	Other (specify)

4.	**Objectives of the discipline**
To develop in interns the knowledge, skills and practical abilities in recording, analyzing and clinically interpreting electrocardiograms, which are necessary for timely diagnosis and emergency care for cardiovascular diseases, as well as for the informed choice of patient management tactics in accordance with modern clinical guidelines.	

5.	**Final learning outcomes (LO of the discipline)**
LO1	Demonstrates knowledge of the rationale for conducting an electrocardiographic study in adults, the analysis of normative indicators and the identification of ECG changes in various pathological conditions, evaluates the results of electrocardiography in various pathological conditions of the heart and some extracardiac ECG changes and explains them clinically
LO 2	Makes decisions on the provision of emergency and urgent qualified medical care of the second category of complexity to adult cardiac patients.
LO 3	Possesses skills of professional ethics, effective communication with patients, their relatives when taking ECG and explaining its results.
LO 4	Utilizes modern digital technologies and artificial intelligence tools (including decision support systems and ChatGPT) to analyze medical information, teach, and improve clinical practice, is able to apply information technology in healthcare, and applies medical record-keeping skills in accordance with legal and regulatory requirements.

5.1	**LO of the discipline**	**Learning outcomes of the EP, which are associated with the discipline LO**
	LO1	**LO 2 -** Develops an individual examination plan, interprets the results of laboratory and instrumental studies, carries out diagnostics and differential diagnostics of common therapeutic diseases, formulates a clinical diagnosis using clinical reasoning and evidence-based approaches.

	LO2	**LO 4 –** Provides emergency care in acute and life-threatening conditions, including in conditions of limited resources (including sanitary and aviation medicine), and organizes timely hospitalization.
	LO3	**LO 5 –** Effectively interacts with patients, including those with disabilities, builds trusting relationships, uses an inclusive and patient-centered approach, and motivates adherence to treatment and a healthy lifestyle.
	LO4	**LO 7** - Maintains medical records (including electronic ones under the supervision of a mentor), utilizes modern digital technologies and elements of artificial intelligence, and participates in clinical discussions and interdisciplinary consultations, applying an analytical and research approach.

6. Detailed information about the discipline

6.1 Venue (building, auditorium):

Location of the department: Shymkent, Askarova street, 26, City Polyclinic No. 13, City Polyclinic No. 8
Email:femmed_SKMA@mail.ru
If you have any questions regarding training and/or technical support, please call and/or email the numbers listed on the SKMA JSC website in the CALL-Center section, Helpdesk on the main page of the website.

6.2

Number of hours	Lectures	Practical lessons	Laboratory classes	Independent work of an intern under the supervision of the teacher (IWIST)	Independent work of an intern (IWI)
	-	40	-	12	68-12 = 56

7. Information about the teachers:

№	surname, name	Academic Degree and Position	Email
1	Bektibayeva Nazipa Shakmanovna	Candidate of Medical Sciences, Associate Professor	Bnsh64@mail.ru

8. Thematic plan

Week/ Day	Topic Title	Summary	LO of the discipline	Number of hours	Teaching methods/technologies	Forms/ methods of assessment
1	**Practical Lesson. Topic:** Electrophysiological principles of ECG	Transmembrane action potential. Depolarization and repolarization in the heart muscle. ECG analysis. Normal ECG. Characteristics of waves and intervals.	LO1 LO3	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist

	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	1/6	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
2	**Practical** **Lesson. Topic:** Ischemic heart disease	ECG diagnostics of coronary heart disease. ECG changes in acute coronary syndrome with and without ST elevation. ECG changes in various stages and locations of myocardial infarction. Topographic ECG – diagnostics of MI. Stress tests to confirm coronary heart disease.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	2/5	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
3	**Practical** **Lesson. Topic:** Arrhythmias caused by dysfunction of the sinus node automaticity	Sinus tachycardia. Sinus bradycardia. Sinus arrhythmia. Sinus arrest. Atrial asystole. Sick sinus syndrome.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	2/5	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
4	**Practical** **Lesson. Topic:** Ectopic complexes and rhythms	I. Passive complexes or rhythms: atrial, from the atrioventricular junction, migration of the supraventricular pacemaker, from the ventricles, jump beats. II. Active complexes and rhythms: 1). Extrasystole: a). atrial; b). from the AV junction; c). ventricular.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist

		2). Parasystole. 3). Paroxysmal and non-paroxysmal tachycardia: a). atrial form; b). from the AV junction; c). ventricular form.				
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	1/5	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
		Midterm Control 1: Testing				
5	**Practical** **Lesson. Topic:** Types of Flickering and Fluttering	Atrial fibrillation. Atrial flutter. Ventricular flutter and fibrillation.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	1/5	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
6	**Practical** **Lesson. Topic:** Conduction dysfunction	Sinoatrial block. Intra-atrial block. Atrioventricular block. Intraventricular conduction disturbances. Bundle branch block. Premature ventricular excitation syndromes: WPW syndrome, short P-Q-interval syndrome.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	1/6	Clinical work in a general practitioner department Analysis of scientific articles by	Criteria-based assessment

					topic	
7	**Practical Lesson. Topic:** Conduction dysfunction	Sinoatrial block. Intra-atrial block. Atrioventricular block. Intraventricular conduction disturbances. Bundle branch block. Premature ventricular excitation syndromes: WPW syndrome, short P-Q-interval syndrome.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	1/6	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
8	**Practical Lesson. Topic:** Structural changes in the heart muscle	ECG signs of cardiac hypertrophy: right atrial hypertrophy, left atrial hypertrophy, left ventricular hypertrophy, right ventricular hypertrophy. Cardiac aneurysm. Congenital heart defects.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: taking ECGs and interpreting test results. Effective interaction with patients.	LO2 LO3	1/6	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
9	**Practical Lesson. Topic:** Electrolyte disturbances and other conditions	Electrolyte disturbances and other conditions: high potassium and low potassium, pulmonary embolism and specific and nonspecific ECG changes in hypertrophic cardiomyopathy, myocarditis, pericarditis, thyrotoxicosis, etc.	LO1 LO2	4	Clinical analysis of thematic patients with interpretation of ECG results	Checklist
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Work in a functional room: ECG recording, interpretation of test results. Effective patient interaction. Using AI for screening first-degree relatives of patients with dilated cardiomyopathy, screening for AF, and identifying patients with left ventricular dysfunction.	LO3 LO4	1/6	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
10	**Practical Lesson. Topic:** Stress tests during	Types of stress tests, indications and contraindications, and test termination criteria. Data interpretation. Functional stress tests.	LO1 LO4	4	Clinical analysis of thematic patients with interpretation	Checklist

	electrocardiographic examination in adults.	Pharmacological tests. Effective patient interaction. The role of ECG in preventive medicine. AI tools for risk prediction and detection of hidden diseases.			of ECG results	
	IWIST/IWI Consultation on completing IWI Assignment for the IWI: Interpretation of ECG results	Interpretation of long-term Holter ECG monitoring results, indications, advantages, and disadvantages, and interpretation of the obtained data. Transesophageal cardiac pacing: indications and contraindications, advantages, and disadvantages. Bicycle ergometry, treadmill. Results evaluation criteria. Clinical significance, challenges, and limitations in the use of AI for ECG-based diagnostics. Ethical principles of AI. Machine learning (ML) as a basic practice of using algorithms for prediction through data analysis and learning.	LO1 LO4	1/6	Clinical work in a general practitioner department Analysis of scientific articles by topic	Criteria-based assessment
Preparation and conduct of interim assessment			(10% of the total number of hours allocated to the discipline) – 12 hours			
Midterm Control 2: Testing						

9.	**Teaching and assessment methods:**	
9.1	Lectures	-
9.2	Practical lesson	Clinical analysis of thematic patients with interpretation of ECG results
9.3	Independent work of an intern under the supervision of the teacher (IWIST)/ Independent work of an intern (IWI)	Clinical work in a general practice department. Analysis of scientific articles by topic
9.4	Midterm Control	Testing
10.		**Evaluation criteria**
10.1		**Criteria for assessing the learning outcomes of the discipline**
№ LO		
LO 1	**Name of learning outcomes**	
	LO 1	**Demonstrates knowledge of the rationale for conducting an electrocardiographic study in adults, the analysis of normative indicators and the identification of ECG changes in various pathological conditions, evaluates the results of electrocardiography in various pathological conditions of the heart and some extracardiac ECG changes and explains them clinically**
	Excellent	Skilled in performing ECGs and functional tests on cardiac patients to identify pathological changes and assess physical activity tolerance. Can analyze normal ECG parameters in adults. Electrophysiologically evaluates ECG changes. Skilled in analyzing changes in ECG pathology in various cardiac pathologies and other conditions. Can substantiate their findings. When interpreting ECG results, demonstrates knowledge of the clinical significance of ECG changes. Utilizes knowledge obtained from scientific databases.
	Very good	Skilled in performing ECGs and functional tests on cardiac patients to identify pathological changes and assess physical activity

		tolerance. When analyzing normal ECG parameters in adults and performing electrophysiological assessments of ECG changes, minor errors are made. Skilled in analyzing changes in ECG pathology in various cardiac pathologies and other conditions. Skilled in interpreting ECG results and demonstrating their ability to explain clinical significance. Uses the literature presented in the syllabus.
	Satisfactory (Good)	Incomplete knowledge of performing ECGs and functional tests on cardiac patients to identify pathological changes and assess exercise tolerance. Errors in analyzing normal ECG parameters in adults and in electrophysiological assessment of ECG changes. Incomplete knowledge of analyzing changes in ECG pathological changes in various cardiac pathologies and other conditions. Makes serious errors in interpreting ECG results and cannot explain their clinical significance. Incomplete knowledge of the clinical protocols and literature presented in the program.
	Unsatisfactory	Lacks skills in performing ECGs and functional tests on cardiac patients to identify pathological changes and assess physical activity tolerance. Makes serious errors in analyzing normal ECG parameters in adults and in electrophysiologically assessing ECG changes. Lacks skills in analyzing changes in ECG pathological changes in various cardiac pathologies and other conditions. Cannot interpret ECG results. Has not consulted the literature presented in the syllabus.
	LO2	**Makes decisions on the provision of emergency and urgent qualified medical care of the second category of complexity to adult cardiac patients.**
	Excellent	Conducts a thorough, accurate, and consistent assessment of patients' conditions and correctly determines the appropriate treatment strategy. Fully versed in the use of algorithms for providing emergency and urgent qualified medical care of the second category of complexity to elderly cardiac patients in accordance with clinical guidelines. Can evaluate the effectiveness of these interventions and properly monitor patients' functional status after treatment. Utilizes knowledge gained from scientific databases.
	Very good	Conducts a comprehensive examination when assessing patients' condition, but does not fully adhere to the examination procedure. Correctly determines the appropriate treatment strategy. Fully versed in the use of algorithms for providing emergency and urgent qualified medical care of the second category of complexity to elderly cardiac patients in accordance with clinical protocols. When assessing the effectiveness of these measures, the intern makes unfounded errors, which are corrected. After providing care, properly monitors the functional status of patients. Uses the literature and clinical protocols presented in the program.
	Satisfactory (Good)	Conducts an incomplete and inconsistent assessment of patients' condition and makes inaccuracies in determining the appropriate treatment strategy. Makes errors in applying algorithms for providing emergency and urgent qualified medical care of the second category of complexity to elderly cardiac patients in accordance with clinical guidelines. Insufficient skills in assessing the effectiveness of these measures. After providing care, properly monitors patients' functional status. Incompletely followed the recommended literature and clinical guidelines.
	Unsatisfactory	Lacks the skills to conduct examinations when assessing patients' conditions and is unable to determine the appropriate treatment strategy. In accordance with clinical guidelines, he makes serious errors when applying algorithms for providing emergency and urgent qualified medical care of the second complexity category to elderly cardiac patients. He lacks the skills to evaluate the effectiveness of these measures. He has not consulted the literature and clinical guidelines recommended in the syllabus.
	LO 3	**Possesses skills of professional ethics, effective communication with patients, their relatives when taking ECG and explaining its results.**
	Excellent	Fully versed in communication skills and professional ethics when performing electrocardiographic examinations and functional tests on cardiac patients to identify pathological changes and assess exercise tolerance. Effectively establishes relationships with

		patients, family members, and colleagues when addressing patient needs. Applies knowledge gained from scientific databases.
	Very good	The intern has limited communication skills and professional ethics competencies when performing electrocardiographic examinations and functional tests on cardiac patients to identify pathological changes and assess exercise tolerance. The intern makes minor errors, which are corrected by the intern when establishing effective relationships with patients, their families, and colleagues when addressing the patient's needs, and overlooks certain communication issues. The intern applies knowledge gained from the literature recommended in the syllabus.
	Satisfactory (Good)	Insufficient communication skills and professional ethics competencies when performing electrocardiographic examinations and functional tests on cardiac patients to identify pathological changes and assess exercise tolerance. Difficulty interacting with patients, their families, and colleagues when addressing patient concerns and fails to consider certain important communication issues. Incomplete application of knowledge gained from the literature recommended in the syllabus.
	Unsatisfactory	Lacks communication skills and professional ethics competencies when performing electrocardiographic examinations and functional tests on cardiac patients to identify pathological changes and assess exercise tolerance. Errors in establishing effective communication with patients, their families, and colleagues when addressing patient concerns, but fails to consider certain communication aspects. Incompletely applies knowledge gained from the literature recommended in the syllabus.
	LO 4	**Utilizes modern digital technologies and artificial intelligence tools (including decision support systems and ChatGPT) to analyze medical information, teach, and improve clinical practice, is able to apply information technology in healthcare, and applies medical record-keeping skills in accordance with legal and regulatory requirements.**
	Excellent	Advanced technical literacy: integrates data from various digital systems (electronic medical records, laboratory results, research databases) to support decisions; critical interpretation of AI results: evaluates the applicability of data to a specific patient, identifies the limitations of AI analysis, combines with clinical experience; clinical practice improvement: develops and implements new forms of clinical work: the use of AI to predict outcomes, big data analysis to evaluate the effectiveness of therapy, optimize patient routing, and create personalized treatment plans; communication and training: develops training cases using AI, trains other interns, and fosters a culture of responsible technology use. Correctly uses skills in the work of the outpatient department in response to patient questions and in the preparation of medical documentation, including electronic ones.
	Very good	Higher-intermediate technical literacy, uses specialized medical databases (PubMed, Cochrane, eLibrary), digital tools for analyzing patient data; critical interpretation of AI results: compares AI responses with clinical protocols, recommendations of specialized associations; clinical practice improvement: applies AI to speed up routine processes: uses AI to support clinical decisions (anamnesis structuring, article analysis, report preparation, medical documentation preparation, translation of medical texts); critically evaluates results; communication and education: applies AI to explain complex information to patients in an accessible form. Allows inaccuracies and errors, which the intern corrects himself when working with the Health Information System on patient questions and when preparing medical documentation, including electronic ones.
	Satisfactory (Good)	Intermediate technical literacy, navigating digital resources, confidently using digital tools and AI, formulating queries, and verifying information against clinical guidelines; critical interpretation of AI results: trusting the information obtained without verification; clinical practice improvement: using digital technologies as a reference (e.g., clarifying dosages and treatment standards); communication and training: using AI to prepare reference materials. Patients are experiencing difficulties in working with the Health Information System.

	Unsatisfactory		Basic technical literacy: navigates digital resources, can search for clinical guidelines and reference information; critical interpretation of AI results: trusts the information obtained without verification; clinical practice improvement: uses digital technologies as a reference (e.g., clarifying dosages and treatment standards); communication and training: uses AI to prepare reference materials. Regarding patient questions, he does not know how to work with the Health Information System.
10.2	**Methods and criteria for evaluation**		
Checklist for the practical lesson			
		Grade	**Evaluation criteria**
1	**Clinical analysis of thematic patients with interpretation of ECG results**		
		Excellent corresponds to the assesment: A (4,0; 95 - 100%) A- (3,67; 90 - 94%)	Evaluation Parameters (each parameter is assessed according to the following criteria (assessment levels: lower - 4.5; upper - 5.0): complete completion of the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions): - identified the patient's main problems - assessed the anamnestic data - assessed the physical examination data - made a preliminary diagnosis - developed a laboratory test plan in accordance with the KPDiL - developed a laboratory test plan in accordance with the KPDiL and scientific advances on this issue - developed an instrumental test plan in accordance with the KPDiL - developed an instrumental test plan in accordance with the KPDiL and scientific advances on this issue Correctly interpreted ECG results: - assessed rhythm regularity - calculated heart rate - identified the source of automatism - identified ECG changes - correctly interpreted ECG changes - provided a conclusion - substantiated their conclusion - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area, taking into account: - drug pharmacodynamics - drug interactions - contraindications - age-related characteristics - comorbid conditions - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area
		Very good corresponds to the	Evaluation Parameters (each parameter is assessed according to the following criteria (assessment levels: lower

		assesment: B+ (3,33; 85 - 89%) B (3,0; 80 - 84%) B- (2,67; 75 - 79%) C+ (2,33; 70 - 74%)	- 3,5; upper - 4,45): complete completion of the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions) - identified the patient's main problems - assessed the anamnestic data - assessed the physical examination data - made a preliminary diagnosis - developed a laboratory test plan in accordance with the KPDiL - developed a laboratory test plan in accordance with the KPDiL and scientific advances on this issue - developed an instrumental test plan in accordance with the KPDiL - developed an instrumental test plan in accordance with the KPDiL and scientific advances on this issue Correctly interpreted ECG results: - assessed rhythm regularity - calculated heart rate - identified the source of automatism - identified ECG changes - correctly interpreted ECG changes - provided a conclusion - substantiated their conclusion - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area, taking into account: - drug pharmacodynamics - drug interactions - contraindications - age-related characteristics - comorbid conditions - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area
		Good corresponds to the assesment: C (2,0; 65 - 69%) C- (1,67; 60 - 64%) D+ (1,33; 55-59%) D- (1,0; 50-54%)	Evaluation Parameters (each parameter is assessed according to the following criteria (assessment levels: lower - 2,5; upper - 3,45): complete completion of the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions) - identified the patient's main problems - assessed the anamnestic data - assessed the physical examination data - made a preliminary diagnosis - developed a laboratory test plan in accordance with the KPDiL - developed a laboratory test plan in accordance with the KPDiL and scientific advances on this issue - developed an instrumental test plan in accordance with the KPDiL - developed an instrumental test plan in accordance with the KPDiL and scientific advances on this issue

			Correctly interpreted ECG results: - assessed rhythm regularity - calculated heart rate - identified the source of automatism - identified ECG changes - correctly interpreted ECG changes - provided a conclusion - substantiated their conclusion - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area, taking into account: - drug pharmacodynamics - drug interactions - contraindications - age-related characteristics - comorbid conditions - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area
		Does not meet the assessments satisfactorily: FX (0; 0 - 49%) F(0; 0 - 24%)	Assessment parameters (each parameter is assessed according to the following criteria (assessment levels: 2.45 and below): fully completed the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions): - identified the patient's main problems - assessed the anamnestic data - assessed the physical examination data - made a preliminary diagnosis - developed a laboratory test plan in accordance with the KPDiL - developed a laboratory test plan in accordance with the KPDiL and scientific advances on this issue - developed an instrumental test plan in accordance with the KPDiL - developed an instrumental test plan in accordance with the KPDiL and scientific advances on this issue Correctly interpreted ECG results: - assessed rhythm regularity - calculated heart rate - identified the source of automatism - identified ECG changes - correctly interpreted ECG changes - provided a conclusion - substantiated their conclusion - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area, taking into account: - drug pharmacodynamics

			- drug interactions - contraindications - age-related characteristics - comorbid conditions - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances in this area
		Checklists for IWIST/ IWI	
1	**Carrying out practical work in the general practitioner department**		
		Excellent corresponds to the assesment: A (4,0; 95-100%) A- (3,67; 90-94%)	Evaluation Parameters (each parameter is assessed according to the following criteria (assessment levels: lower - 4.5; upper - 5.0): complete completion of the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions): **Outpatient appointment:** - effectively using communication skills to identify the patient's primary concerns - effectively using communication skills to evaluate the patient's medical history - evaluated the physical examination data - made a preliminary diagnosis - developed a laboratory test plan in accordance with the Clinical and Practical Guidelines - developed a laboratory test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - correctly interpreted laboratory test results - correctly interpreted instrumental test results - made a final diagnosis - developed a treatment plan in accordance with the Clinical and Practical Guidelines - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - work in a day hospital or home hospital - work in a screening room - work with the KMIS - medical documentation **Work on the site:** - assets - patronage

Very good corresponds to the assesment: B+ (3,33; 85-89%) B (3,0; 80-84%) B- (2,67; 75-79%) C+ (2,33; 70-74%)	Evaluation Parameters (each parameter is assessed according to the following criteria (assessment levels: lower - 3,5; upper - 4,45): complete completion of the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions): **Outpatient appointment:** - effectively using communication skills to identify the patient's primary concerns - effectively using communication skills to evaluate the patient's medical history - evaluated the physical examination data - made a preliminary diagnosis - developed a laboratory test plan in accordance with the Clinical and Practical Guidelines - developed a laboratory test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - correctly interpreted laboratory test results - correctly interpreted instrumental test results - made a final diagnosis - developed a treatment plan in accordance with the Clinical and Practical Guidelines - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - work in a day hospital or home hospital - work in a screening room - work with the KMIS - medical documentation **Work on the site**: - assets - patronage
Good corresponds to the assesment: C (2,0; 65-69%); C- (1,67; 60-64%); D+ (1,33; 55-59%) D (1,0; 50-54%)	Evaluation Parameters (each parameter is assessed according to the following criteria (assessment levels: lower - 2,5; upper - 3,45): complete completion of the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions): **Outpatient appointment:** - effectively using communication skills to identify the patient's primary concerns - effectively using communication skills to evaluate the patient's medical history - evaluated the physical examination data - made a preliminary diagnosis

			- developed a laboratory test plan in accordance with the Clinical and Practical Guidelines - developed a laboratory test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - correctly interpreted laboratory test results - correctly interpreted instrumental test results - made a final diagnosis - developed a treatment plan in accordance with the Clinical and Practical Guidelines - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - work in a day hospital or home hospital - work in a screening room - work with the KMIS - medical documentation **Work on the site:** - assets - patronage
		Does not meet the assessments satisfactorily: FX (0,5; 25-49%) F (0; 0-24%)	Assessment parameters (each parameter is assessed according to the following criteria (assessment levels: 2.45 and below): fully completed the task, accuracy, consistency, ability to correctly evaluate and draw logical conclusions): **Outpatient appointment:** - effectively using communication skills to identify the patient's primary concerns - effectively using communication skills to evaluate the patient's medical history - evaluated the physical examination data - made a preliminary diagnosis - developed a laboratory test plan in accordance with the Clinical and Practical Guidelines - developed a laboratory test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines - developed an instrumental test plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - correctly interpreted laboratory test results - correctly interpreted instrumental test results

			- made a final diagnosis - developed a treatment plan in accordance with the Clinical and Practical Guidelines - developed a treatment plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - developed a preventive measures plan in accordance with the Clinical and Practical Guidelines and relevant scientific advances - work in a day hospital or home hospital - work in a screening room - work with the KMIS - medical documentation **Work on the site:** - assets - patronage
IWI			
Analysis of scientific articles by topic (data search from scientific databases as a collective activity)			
		Excellent corresponds to the assesment: A (4,0; 95 - 100%) A- (3,67; 90 - 94%)	Selecting the right article, its scientific or clinical value, mastery of the material, and providing a precise, clear, and concise explanation. Ability to explain research results. Analyzes research results (e.g., article review is in-depth and adequate), and the accuracy and structure of the review (provides clear information for each idea). Speech (e.g., full volume, speed, intonation, effective use of pauses) and delivery style (effective but not excessive gestures, making eye contact, proper posture in front of the audience, use of the podium). Ability to achieve results (e.g., precision, sense of expertise).
		Very good corresponds to the assesment: B+ (3,33; 85 - 89%) B (3,0; 80 - 84%) B- (2,67; 75 - 79%) C+ (2,33; 70 - 74%)	Selecting the correct article, its scientific or clinical value, mastery of the material, and providing a precise, clear, and concise explanation. Ability to explain research results. When analyzing research results (e.g., the article review is thorough and adequate), allows for inaccuracies and inconsistencies in the review. Speech (e.g., full volume, speed, intonation, effective use of pauses) and presentation style (effective but not excessive gestures, making eye contact, proper posture in front of the audience, use of the podium). Ability to achieve results (e.g., precision, a sense of expertise).
		Good corresponds to the assesment: C (2,0; 65 - 69%) C- (1,67; 60 - 64%) D+ (1,33; 55-59%) D- (1,0; 50-54%)	The article's selection, scientific or clinical value, is inadequate. The author lacks a thorough understanding of the material and failed to provide a precise, clear, and concise explanation. Inaccuracies are present when explaining research results. Difficulty analyzing research results. Speech (Example: full volume, speed, intonation, effective use of pauses) and presentation style (gestures are effective but excessive, eye contact, posture in front of the audience, use of the podium). Results not fully achieved (Example: accuracy, sense of expertise).
		Does not meet the assessments satisfactorily: FX (0; 0 - 49%), F (0; 0 - 24%)	Inappropriate selection of the article based on scientific or clinical value; lack of familiarity with the material; failure to provide a precise, clear, and concise explanation; inability to explain research results. Speech (Example: full volume, speed, intonation, does not use effective pauses) and presentation style (gestures are effective but excessive, does not establish eye contact). Results were not achieved.

		Midterm Control – Testing	
		Excellent corresponds to the assesment: A (4,0; 95-100%) A- (3,67; 90-94%)	90-100% correct answers.
		Very good corresponds to the assesment: B+ (3,33; 85-89%) B (3,0; 80-84%) B- (2,67; 75-79%) C+ (2,33; 70-74%)	70-89% correct answers.
		Good corresponds to the assesment: C (2,0; 65-69%); C- (1,67; 60-64%); D+ (1,33; 55-59%) D (1,0; 50-54%)	50-69% correct answers.
		Does not meet the assessments satisfactorily: FX (0,5; 25-49%) F (0; 0-24%)	Less than 50% correct answers.
		Checklist for midterm assessment (100% of the total) – written exam	
1	**Theoretical question:**	Excellent corresponds to the assesment: A (4,0; 95-100%) A- (3,67; 90-94%)	Awarded if the intern made no errors or inaccuracies during their answer. They are familiar with the theories, concepts, and approaches in the discipline being studied and provide a critical evaluation of them, utilizing the scientific advances of other disciplines.
		Very good corresponds to the assesment: B+ (3,33; 85-89%) B (3,0; 80-84%) B- (2,67; 75-79%) C+ (2,33; 70-74%)	Awarded if the intern made no significant errors in their answer, but only minor inaccuracies. They are not fully familiar with the theories, concepts, and approaches in the discipline being studied, made errors in their critical evaluation, and do not fully utilize the scientific advances of other disciplines.
		Good corresponds to the assesment:	This is given if the intern made inaccuracies in their answer. They are not fully familiar with the theories, concepts, and approaches in the discipline being studied, do not have a critical understanding of them, and do

		C (2,0; 65-69%); C- (1,67; 60-64%); D+ (1,33; 55-59%) D (1,0; 50-54%)	not fully utilize the scientific advances of other disciplines.
		Does not meet the assessments satisfactorily: FX (0,5; 25-49%) F (0; 0-24%)	This is given if the intern made numerous errors during their answer, is unversed in the theories, concepts, and approaches of the discipline being studied, and is unable to utilize the scientific advances of other disciplines.
2	**Solution of a situational problem:**	Excellent corresponds to the assesment: A (4,0; 95-100%) A- (3,67; 90-94%)	The intern did not make any errors or inaccuracies while solving the case study. They understand the patient's problems, critically assess them, correctly formulate a diagnostic, treatment, and preventive plan, correctly determine the patient's follow-up strategy, possess excellent communication skills, and utilize relevant scientific advances and the Clinical Protocol.
		Very good corresponds to the assesment: B+ (3,33; 85-89%) B (3,0; 80-84%) B- (2,67; 75-79%) C+ (2,33; 70-74%)	The intern made no major errors while solving the case study, and only minor inaccuracies. They are familiar with the patient's problems, have some difficulty critically assessing them, and make some mistakes when developing a diagnostic and treatment plan. They possess communication skills and do not utilize scientific advances in this area, but are familiar with the materials in the Clinical Protocol..
		Good corresponds to the assesment: C (2,0; 65-69%); C- (1,67; 60-64%); D+ (1,33; 55-59%) D (1,0; 50-54%)	The intern made inaccuracies and minor errors while solving the case study, has some difficulty analyzing and critically assessing patient problems, makes errors when developing a diagnostic, treatment, and preventive plan, and lacks communication skills. He/she has not fully completed the Clinical Protocol.
		Does not meet the assessments satisfactorily: FX (0,5; 25-49%) F (0; 0-24%)	The intern is unclear about the patient's needs and has poor communication skills. He hasn't reviewed the Clinical Protocol materials.
3	**Interpretation of laboratory and instrumental research results:**	Excellent corresponds to the assesment: A (4,0; 95-100%) A- (3,67; 90-94%)	The intern clearly and consistently describes each indicator, correctly analyzes changes in the ECG and laboratory test results, determines their clinical significance and provides a correct, complete justification for his conclusion.
		Very good corresponds to the assesment: B+ (3,33; 85-89%) B (3,0; 80-84%) B- (2,67; 75-79%)	The intern clearly and consistently describes each indicator, changes in the ECG and laboratory test results, but allows for minor inaccuracies in the analysis of the identified changes, determining their clinical significance and justifying their conclusion.

		C+ (2,33; 70-74%)	
		Good corresponds to the assesment: C (2,0; 65-69%); C- (1,67; 60-64%); D+ (1,33; 55-59%) D (1,0; 50-54%)	The intern describes changes in the ECG and laboratory test results unclearly and inconsistently, makes mistakes in their analysis, and experiences great difficulty in determining their clinical significance and substantiating his conclusion.
		Does not meet the assessments satisfactorily: FX (0,5; 25-49%) F (0; 0-24%)	The intern does not know how to describe changes in the ECG and laboratory test results.

Multi-point knowledge assessment system:

Letter grading system	Digital equivalent of points	Percentage content	Assessment according to the traditional system
A	4,0	95-100	Excellent
A -	3,67	90-94	
B +	3,33	85-89	Very good
B	3,0	80-84	
B -	2,67	75-79	
C +	2,33	70-74	
C	2,0	65-69	Good
C -	1,67	60-64	
D+	1,33	55-59	
D-	1,0	50-54	
FX	0,5	25-49	Unsatisfactory
F	0	0-24	

11.	**Educational resources:**
Electronic resources, including but not limited to: databases, animations, simulators, professional blogs, websites, other electronic reference materials (e.g., video, audio, digests)	**Electronic resources of the LIC** • SKMA Electronic Library - https://e-lib.skma.edu.kz/genres • Republican Interuniversity Electronic Library (RIEL) - http://rmebrk.kz/ • Aknurpress Digital Library - https://www.aknurpress.kz/ • Epigraph Electronic Library - http://www.elib.kz/ • Epigraph - a portal of multimedia textbooks https://mbook.kz/ru/index/

	• IPR SMART Electronic Library System https://www.iprbookshop.ru/auth • Zan Legal Information System - https://zan.kz/ru • Medline Ultimate EBSCO - https://research.ebsco.com/ • EBSCO Medical Collection eBook - https://research.ebsco.com/ • Scopus - https://www.scopus.com/
Electronic textbooks	1. Bayés de Luna, A. *ECG in ST-Elevation Myocardial Infarction* / A. Bayés de Luna, M. Fiol-Sala, E. M. Antman; translated by F. I. Pleshkov. — Moscow: Medical Literature, 2026. — 106 p. — ISBN 978-5-89677-254-5. https://www.iprbookshop.ru/156882.html 2. Kupriyanova, A. V. *Fundamentals of 24-Hour ECG Monitoring Analysis: A Study Guide* / A. V. Kupriyanova. — Moscow: IPR Media, 2024. — 103 p. — ISBN 978-5-4497-3967-4 https://www.iprbookshop.ru/146015.html DOI: https://doi.org/10.23682/146015 3. *Clinical ECG: A Study Guide* / A. F. Safarova, S. V. Avdoshina, A. V. Bogomaz [et al.]; edited by Zh. D. Kobalava. — Moscow: Peoples' Friendship University of Russia (RUDN University), 2017. — 160 p. — ISBN 978-5-209-08270-5. https://www.iprbookshop.ru/91008.html 4. Beisenbekova, Zh. A. *Differential Diagnosis of Syndromes in Cardiology: Educational and Methodological Guide*. — Almaty: Evero, 2020. — 136 p. https://www.elib.kz/ru/search/read_book/4216/ 5. Dyussupova, A. A., Espenbetova, M. Zh., Zhumanbayeva, Zh. M. *Key Issues in Cardiology: Methodological Guide*. — Almaty: Evero Publishing, 2020. — 322 p. https://www.elib.kz/ru/search/read_book/246/ 6. *Cardiopulmonary Resuscitation: Methodological Recommendations* / Israilova V. K., Aitkozhin G. K., Shmygaleva A. A., Abdymoldaeva Zh. A., Kamalova G. T. — Almaty: Medet Group LLP, 2018. — 46 p. https://www.aknurpress.kz/reader/web/1849 7. Nukutova, B. T. *Cardiac Rhythm and Conduction Disorders: Etiology, Electrophysiological Mechanisms, Classification, ECG Diagnostics, Treatment: A Textbook* (2nd ed.). — Karaganda: Aknur Publishing, 2018. — 150 p. https://www.aknurpress.kz/reader/web/1442 8. *Cardiovascular System Module* [Electronic Resource]: Textbook / [S. K. Zhaugasheva et al.]; executive editors: S. B. Zhautykova, S. B. Nursultanova; series editor R. S. Dosmagambetova. — Moscow: Litterra, 2014. — 340 p. http://rmebrk.kz/ 9. Kerimkulova A. S., Espenbetova M. Zh. *Management of Cardiology Patients in Outpatient Settings: Study Guide*. — Almaty: Evero, 2020. — 245 p.https://elib.kz/ru/search/read_book/857/ 10. "Electrocardiogram." *MedlinePlus*, U.S. National Library of Medicine, 28 February 2023. Accessed 21 November 2024. https://medlineplus.gov/lab-tests/electrocardiogram/ 11. "Heart Tests." *National Heart, Lung, and Blood Institute (NHLBI)*, NIH, 24 March 2022. Accessed 21 November 2024. https://www.nhlbi.nih.gov/health/heart-tests 12. Electrocardiography (ECG) Jean-Jacques Goy/ Sharjah : Bentham Science Publishers. 2013

	https://research.ebsco.com/plink/3df77fba-e627-3a6a-8b6c-0706547af308 13. Marriott's Practical Electrocardiography Авторы David G Strauss,Douglas SchockenEd.: Thirteenth edition. Philadelphia : Wolters Kluwer Health. 2020 https://research.ebsco.com/plink/2950b338-5df6-3dff-8099-86f45aa7113b 14. ECG Workout : Exercises in Arrhythmia Interpretation. Авторы Jane Huff, Ed.: Eighth edition. Philadelphia, PA : Wolters Kluwer Health. 2023 https://research.ebsco.com/linkprocessor/plink?id=9360d3af-6f3b-3c93-8e3d-e2f41457cf0f 15. The Only EKG Book You'll Ever Need, Авторы Malcolm S. Thaler, Philadelphia : Wolters Kluwer Health. 2023 https://research.ebsco.com/linkprocessor/plink?id=e889c927-a439-3231-9089-8d6f97de9c79 16. The ECG Workbook, Авторы Rowlands, Angela, Sargent, Dr Andrew,. Ed.: 4th edition. Keswick : M&K Publishing. 2019 https://research.ebsco.com/linkprocessor/plink?id=2624beee-f830-3fc6-8515-f863fac54f34 17. Rowlands, Angela Sargent, Andrew: The ECG Workbook. Keswick : M&K Update Ltd. 2011 https://research.ebsco.com/c/tpjtkn/ebook-viewer/pdf/je77o7qz3f?location=https%25253A%25252F%25252Fresearch.ebsco.com%25252Fc%25252Ftpjtkn%25252Fsearch%25252Fdetails%25252Fje77o7qz3f%25253Fdb%25253Dnlebk%252526limiters%25253DNone%252526q%25253DElectrocardiography%252526searchMode%25253Dboolean 18. Crawford, Jacqui Doherty, Linda: Practical Aspects of ECG Recording. Keswick : M&K Update Ltd. 2011 https://research.ebsco.com/c/tpjtkn/ebook-viewer/pdf/kiyz3agqqr?location=https%25253A%25252F%25252Fresearch.ebsco.com%25252Fc%25252Ftpjtkn%25252Fsearch%25252Fdetails%25252Fkiyz3agqqr%25253Fdb%25253Dnlebk%252526limiters%25253DNone%252526q%25253DElectrocardiography%252526searchMode%25253Dboolean 19. Sandra Goldsworthy Leslie Graham: Compact Clinical Guide to Arrhythmia and 12-Lead EKG Interpretation : Foundations of Practice for Critical Care Nurses. New York, NY : Springer Publishing Company. 2016 https://research.ebsco.com/c/tpjtkn/ebook-viewer/epub/neqjnmqg2z/section/top?location=https%25253A%25252F%25252Fresearch.ebsco.com%25252Fc%25252Ftpjtkn%25252Fsearch%25252Fdetails%25252Fneqjnmqg2z%25253Fdb%25253Dnlebk%252526limiters%25253DNone%252526q%25253DElectrocardiography%252526searchMode%25253Dboolean 20. Maureen A. Knechtel: EKGs for the Nurse Practitioner and Physician Assistant. New York : Springer Publishing Company. 2013 https://research.ebsco.com/c/tpjtkn/ebook-viewer/pdf/isi3jsnwsv?location=https%25253A%25252F%25252Fresearch.ebsco.com%25252Fc%25252Ftpjtkn%25252Fsearch%25252Fdetails%25252Fisi3jsnwsv%25253Fdb%25253Dnlebk%252526limiters%25253DNone%252526q%25253DElectrocardiography%252526searchMode%25253Dboolean
Laboratory Physics Resources	-

Special Programs	-
Journals (Electronic Journals)	
Literature	**Main:** 1. Sedov V.P. Clinical echocardiography: a practical guide / V.P. Sedov. - M.: GEOTAR Medicine, 2021. - 144 p. Copies: total: 2 2. Malyuchenko, N. G. Fundamentals of clinical electrocardiography: a teaching aid / N. G. Malyuchenko. - ; Approved and rec. for publication by the Academic Council of KSMU. - Almaty: Evero, 2014. - 144 p. 3. Kiyakbaev, G.K. Cardiac arrhythmias. Fundamentals of electrophysiology, diagnostics, treatment and modern recommendations: monograph / edited by V.S. Moiseev. - M.: GEOTAR-Media, 2014. - 240 p. **Additional:** 1. Diagnosis of Cardiovascular Diseases. Formulation, Classification: A Guide for Physicians. 6th Edition, Revised and Supplemented/S.G. Gorokhova/GEOTAR-Media.-2024.-408 2. Laboratory and Instrumental Diagnostics of Cardiovascular Pathology (Cardiology Series - for the Practicing Physician)/A.G. Obrezan, E.K. Serezhina. A Guide.-GEOTAR-Media.-2024 3. Cardiomyopathies and myocarditis. - 2nd edition, revised and enlarged under the editorship of G.K. Kiyakbaev, S.V. Moiseev, D.A. Andreev / Manual. - GEOTAR-Media. - 2024. - 528 4. ECG Interpretation in Clinical Practice / S. Okutuchu, A. Oto; translated from English under the editorship of D.V. Drozdov / Manual. - GEOTAR-Media. - 2024. - 128 5. Clinical Electrocardiography according to Goldberger. - 3rd edition / Textbook / A.L. Goldberger, Z.D. Goldberger, A. Shvilkin, translated from English under the editorship of A.B. Khadzegova GEOTAR-Media. - 2024. - 456. 6. Antiarrhythmic drugs/Scientific and practical publication/Edited by A. Martinez-Rubio, J. Tamargo, G. A. Dana; translation from English edited by S. V. Popov/GEOTAR-Media.-2023.-352 7. Pivina L. M. Algorithms for providing medical care in emergency conditions: textbook.- Almaty: TechSmith, 2023 8. Cardiac arrhythmias: a guide for doctors.-9th ed., revised. and enlarged. F. I. Belyalov/GEOTAR-Media.-2023.-512 9. Heart rhythm and conduction disorders (Series "Cardiology" - for a practicing physician)/ A. G. Obrezan, E. K. Serezhin/ Manual. - GEOTAR-Media. - 2023. - 216 10. Pivina L.M. Syndromic approach to the diagnosis and treatment of emergency conditions: textbook. - Almaty: TechSmith, 2023Clinical protocols approved by the Expert 11. Antiarrhythmic drugs/Scientific and practical publication/Edited by A. Martinez-Rubio, J. Tamargo, G. A. Dana; translation from English edited by S. V. Popov/GEOTAR-Media.-2023.-352 12. Pivina L. M. Algorithms for providing medical care in emergency conditions: textbook.- Almaty: TechSmith, 2023 13. Cardiac arrhythmias: a guide for doctors.-9th ed., revised. and enlarged. F. I. Belyalov/GEOTAR-Media.-2023.-512 14. Heart rhythm and conduction disorders (Series "Cardiology" - for a practicing physician)/ A. G. Obrezan, E. K. Serezhin/ Manual. - GEOTAR-Media. - 2023. - 216 15. Pivina L.M. Syndromic approach to the diagnosis and treatment of emergency conditions: textbook. - Almaty: TechSmith, 2023

16. Diseases of the myocardium and pericardium: from syndromes to diagnosis and treatment / Scientific and practical publication by O.V. Blagova et al. /GEOTAR-Media.-2019.-884
17. Commission on Healthcare Development of the Ministry of Health of the Republic of Kazakhstan (2013-2022)
18.

12. Discipline policy:

Requirements for interns, attendance, behavior, grading policy, penalties, incentives, etc.
1. Come to class in uniform (gown, cap) and with a stethoscope and tonometer;
2. Be punctual and responsible;
3. Attendance at practical classes and the standardized work schedule is mandatory. Actively participate in the educational process;
4. A student who misses a class (unless excused by the dean) will be given an "n" grade. Unexcused absences will not be made up. A "0" grade will be entered in the electronic journal in the box next to the "n" mark two days before the exam.
Missed classes with a valid reason are made up upon presentation of a supporting document. Students are required to submit a certificate to the Dean's Office no later than 5 business days from the date of receipt and submit an application to the Dean for a work slip with a deadline, which is valid for 30 days from the date of receipt by the Dean's Office. Grades received for working a class are entered into the electronic journal in the box next to the "n" mark. If supporting documents are missing or submitted to the Dean's Office later than 5 business days after returning to class, the reason is considered unexcused.
Students who miss classes due to a dean's order for release are not given an "n" mark; they are assigned an average grade, and midterm assessments are completed.
Each intern must complete all SRO assignments, including individual and group activities, and submit them according to the schedule.
All types of written work by students are checked for plagiarism.5. Be responsible for the sanitary condition of your work area and personal hygiene.
Eating in classrooms is strictly prohibited.
Observe safety regulations in classrooms.
Observe the internal regulations of the Academy and the clinical sites where classes are held.
Be tolerant, open, and friendly toward fellow students and faculty.
Treat department property with care.
Turn off cell phones during class time.
Mandatory duty shifts at the department's clinical sites (one shift per week).

13 Academic policy based on the moral and ethical values of the academy

EARNING OUTCOME ASSESSMENT POLICY::
The following types of assessment are used within the assessment system:
Current assessment (CA) of student progress is conducted by the instructor during both in-class and out-of-class activities;
Midterm assessment (MA) is conducted at least twice for each academic discipline; MA is part of the CA;
Final assessment (FA) is an exam administered upon completion of the course. The final assessment (FA) score for the course must be at least 50 points (60%), calculated automatically based on the average score of the current assessment (40%) + the average score of the midterm assessments (20%).
Midterm assessment – conducted in two stages: practical skills assessment using the OSCE (objective structured clinical examination) and testing.
Under the DOT, midterm assessments of students are conducted online: practical skills assessments are conducted online on the Zoom and Webex platforms; online proctoring technology is used for testing—a system for identity verification and confirmation of online exam results.

14. Approval and revision

Date of agreement with the Library and Information Center	Protocol № 7	Full name of the head of the LIC	
	25.06.25	R.I. Darbicheva	
Date of approval at the department	Protocol № 1	Full name of the head	
	27.08.2025	Candidate of Medical Sciences, Associate Professor Zh.Ә.Kauyzbay	
Date of approval AC EP "Medicine"	Protocol № 1	Full name of the Chairman of the AC EP "Medicine"	
	28.08.2025	D. Auezkhankyzy	