

ONTUSTIK QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ		 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»
Department of Pathology and Forensic Medicine		63-11-2025
Working programme of the discipline "General pathology"		Page 1 of 22

Syllabus

Working programme of the discipline " General pathology" Educational program 6B 10115 "Medicine"

1.	General information about the discipline		
1.1	Course code: GP 2223	1.6	Academic year: 2025-2026
1.2	Name of the discipline: General Pathology	1.7	Course: 3
1.3	Prerequisites: Locomotor apparatus and skin at norm, the nervous system and sensory organs of vision at norm, the cardiorespiratory system at norm, the digestive and endocrine systems at norm, the genitourinary system at norm, the blood or lymph at norm.	1.8	Semester : 5
1.4	Postrequisites: Musculoskeletal system and skin in pathology, nervous system and sensory organs of vision in pathology, cardiorespiratory system in pathology, digestive and endocrine systems in pathology, genitourinary system in pathology, blood or lymph in pathology	1.9	Number of credits (ECTS): 4 (120)
1.5	Cycle: BD	1.10	Component : IC
2.	Description of the discipline		
The formation of fundamental knowledge about the patterns of development of general pathological processes and the development of skills in pathophysiological analysis of clinical and laboratory data, description of macro- and micropreparations, the study of the concepts of etiopathogenesis, morphogenesis, morphology and disease outcomes allows to integrate this knowledge into practical activities, ensuring high-quality care and analysis of treatment effectiveness.			
3.	Summative Assessment Form		
3.1	☒ MCQ testing	3.5	Coursework
3.2	Writing	3.6	Essay
3.3	Oral	3.7	Project
3.4	☒ OSPE/OSCE or practical skills assessment	3.8	Other (specify)
4.	Objectives of the discipline		
Formation of a holistic understanding of the mechanisms of development of general pathological processes based on the study of issues of general nosology, the concept of pre-disease, disease, their stages, general etiology, pathogenesis and morphogenesis of pathological processes. Formation of clinical thinking skills based on the application of knowledge of pathophysiological mechanisms of the course, pathoanatomical changes, complications and outcomes of general pathological processes developing in various diseases.			
5.	Final learning outcomes (LO of the discipline)		
LO 1	Demonstrates knowledge of general pathology, understanding of the patterns of development of changes in cells and tissues in various pathological conditions.		
LO 2	Explains the etiology, pathogenesis, and morphogenesis of general pathological processes.		
LO3	Determines pathological changes and functional disorders at the organ, tissue and cellular levels, describes macro- and micropreparations and analyzes the results of clinical laboratory and experimental studies.		
LO4	Makes conclusions on macro- and micropreparations, as well as on the results of clinical laboratory and experimental studies, and predicts the outcomes of pathological changes in organs and tissues during general pathological processes when solving cases.		
5.1	LO of the discipline	Learning outcomes of the GP, which are associated with the discipline LO	
	LO 1	LO 1. Applies in practice fundamental knowledge in the field of biomedical, clinical, epidemiological and social-behavioral sciences .	
	LO 2	LO 2. Provides patient-centered care in the biomedical, clinical, epidemiological and social-behavioral sciences aimed at the diagnosis, treatment and prevention of the most common	
	LO 3		

	LO 4	diseases .											
		LO11. Analyzes the results of the conducted research and his/her professional activities based on scientific data.											
6.	Detailed information about the discipline												
6.1	Venue : SKMA, Department of Pathology and Forensic Medicine : Shymkent, Al-Farabi sq. , 3, Academic Building No. 2, 4th floor; audiences – No. 404 a, b; No. 406; No. 408; No. 409, No. 411a, b. e-mail: Patan.gisto@mail.ru												
6.2	Number of hours	Lectures	Practical classes				Lab.	SIWT		SIW			
		8	32					12		68			
6.3	Study plan for the discipline												
	Days	1	2	3	4	5	6	7	8	9	10	Time	
	Form of the lesson												
General pathological physiology (2 cr.)	Lec	1			1		1	1				4	
	Practical	3		2	1	2	1	3	2	2		16	
	SIWT	1		1	1	1		1	1			6	
	SIW	5		6	6	1		5	5			28+6(PA)=34	
General pathological anatomy (2 cr.)	Lec		1	1		1			1			4	
	Practical		3	1	2	1	2		1	2	4	16	
	SIWT		1			1	1			1	2 RK No. 2	6	
	SIW		6			5	6			6	5	28+6(PA)=34	
7.	Information about teachers												
No.	Full name			Degrees and Position					Email address				
1	Sadykova Aliya Shamilevna			Doctor of Medical Sciences, Acting Professor					aliya.sadykova.66@mail.ru				
2	Bisimbaeva Saule Babatovna			PhD, Acting Docent					Bisimbaeva@inbox.ru				
3	Dosybaev Bakhytzhan Krykbaevich			PhD, Acting Docent					Krik85@mail.ru				
4	Khodzhaev Nurlan Kenzhetureevich			PhD, Acting Docent					nkkhoja@mail.ru				
5	Kulbalieva Zhannat Zhakslikovna			PhD, Acting Docent					zhann_7@mail.ru				
6	Sedykh Egor Pavlovich			PhD, Acting Docent					egorsedykh1986@mail.ru				
7	Kerimov Rassim Azatovich			Master, Senior teacher					Kir-2004@list.ru				
8	Abildina Kalamkas Berzhanovna			Master, Assistant					Mskas1972@mail.ru				
9	Ignatieva Anastasia Sergeevna			Senior teacher					Zhelonkina_88@mail.ru				
10	Berdalieva Gulmira Bakhytzyzy			Senior teacher					Mira-3505@mail.ru				
11	Kurymbaeva Ainur Rashidkyzy			Assistant					Smp_zoj@mail.ru				
12	Seidakbar Aisana Usenovna			Teacher					aseydakbar@mail.ru				
13	Duysembieva Zhazira Mereykyzy			Teacher					zhazira0508@mail.ru				
8.	Thematic plan												
Day	Form of the lesson	Topic Title	Summary				LO Of the modul	Number of hours	Forms/ methods/ learning technologies		Forms/ evaluation methods		
1	Pathological physiology. Lecture 1	Subject, tasks and methods of pathological physiology. General nosology. General etiology and pathogenesis	Subject, tasks and methods of pathological physiology. General nosology. Disease, concept, stages. Pre- disease , concept. General etiology and pathogenesis. Etiological factors, types. Main link in pathogenesis. Clinical significance				LO1	1	Overview		Quick poll Feedback		
	Pathological physiology.	Subject, tasks and methods of	Subject, tasks and methods of pathological physiology.				LO2 LO3	3	Work in small groups,		Checklist for working in		

	Practical lesson 1	pathological physiology. General nosology. General etiology and pathogenesis	General nosology. Disease, concept, stages. Pre-disease, concept. General etiology and pathogenesis. Etiological factors, types. Main link of pathogenesis. Clinical significance	LO4		discussion of the topic, case - study	small groups, topic discussion checklist, case solution checklist
	Pathological physiology. SIWT/SIW 1	The role of reactivity and heredity in pathology	Reactivity and resistance, concept, types, forms. Factors determining reactivity. Mutations. Classification of hereditary pathology. Etiology and pathogenesis of gene and chromosomal diseases. Clinical significance	LO2 LO3 LO4	1/5	Case - study	Case Solution Checklist
2	Pathological anatomy. Lecture 1	Introduction to general pathology	Subject, goals, objectives, objects, methods and levels of pathological anatomy research. Autopsy. Biopsy. Experiment. Alteration. Dystrophies. Classification. Parenchymatous protein, fat, carbohydrate dystrophies. Clinical significance	LO1	1	Overview	Quick poll Feedback
	Pathological anatomy. Practical lesson 1	Pathology cells. Disruption of protein metabolism	Dystrophies. Classification. Parenchymatous protein, fat, carbohydrate dystrophies. Etiology, pathogenesis, morphogenesis, pathological anatomy. Outcome. Clinical significance	LO2 LO3 LO4	3	Discussion of the topic, description of macro- and micropreparations with a conclusion, case study	Checklist descriptions of macro- and micropreparations, case solution checklist
	Pathological anatomy. SIWT/SIW 1	Cell pathology	Cell pathology. Pathology of the nucleus, cytoplasm, cell membranes. Types of pathologically altered cells. Examples. Participation in conducting autopsies at a clinical site	LO2 LO3 LO4	1/6	Case - study	Case Solution Checklist
3	Pathological physiology. Practical lesson 2	Cell pathology	Cell damage, concept, types, causes, mechanisms. Free radical lipid peroxidation. Mechanisms of cell protection and adaptation during damage. Antioxidant systems. Clinical significance	LO2 LO3 LO4	2	Work in small groups, discussion of the topic, case - study	Checklist for working in small groups, topic discussion checklist, case solution checklist
	Pathological physiology. SIWT/SIW 2	General reactions of the body to injury	Stress, concept, stages. "Selye's triad". Shock, concept, stages, types. Coma, concept, types, leading links of pathogenesis. Clinical significance	LO2 LO3 LO4	1/6	Case - study	Case Solution Checklist
	Pathological anatomy.	Metabolic disorders	Protein, fat, carbohydrate stromal-vascular dystrophies.	LO1	1	Overview	Quick poll Feedback

	Lecture 2		Mixed, mineral dystrophies. Etiology, pathogenesis, morphogenesis, pathological anatomy. Outcome. Clinical significance				
	Pathological anatomy. Practical lesson 2	Metabolic disorders	Mixed dystrophies. Mineral dystrophies. Etiology, pathogenesis, morphogenesis, pathological anatomy. Outcome. Clinical significance	LO2 LO3 LO4	1	Discussion of the topic, description of macro- and micropreparations with a conclusion, case study	Checklist descriptions of macro- and micropreparations, case solution checklist
4	Pathological physiology. Lecture 2	Disorders of water and electrolyte balance	Water balance, types. Dehydration, concept, types, causes, development mechanisms. Hyperhydration, concept, types, causes, development mechanisms. Edema and dropsy, concept, types, pathogenetic factors. Clinical significance	LO1	1	Overview	Quick poll Feedback
	Pathological physiology. Practical lesson 3	Disorders of water and electrolyte balance	Water balance, types. Dehydration, concept, types, causes, development mechanisms. Hyperhydration, concept, types, causes, development mechanisms. Edema and dropsy, concept, types, pathogenetic factors. Clinical significance	LO2 LO3 LO4	1	Work in small groups, discussion of the topic, case - study	Checklist for working in small groups, topic discussion checklist, case solution checklist
	Pathological physiology. SIWT/SIW 3	Acid-base imbalances	Classification of acid-base balance disorders. Acidosis and alkalosis, types, causes, clinical and laboratory manifestations, compensation mechanisms. Clinical significance	LO2 LO3 LO4	1/6	Case - study	Case Solution Checklist
	Pathological anatomy. Practical lesson 3	Necrosis	Necrosis. Mechanism of development, classification of necrosis. Microscopic signs of necrosis. Outcome. Clinical significance	LO2 LO3 LO4	2	Discussion of the topic, description of macro- and micropreparations with a conclusion, case study	Checklist descriptions of macro- and micropreparations, case solution checklist
5	Pathological anatomy. Lecture 3	Circulatory disorders	Plethora. Arterial plethora. Venous plethora. Clinical significance	LO1	1	Overview	Quick poll Feedback

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	Pathological anatomy . Practical lesson 4	Circulatory disorders	Bleeding. Plasmorrhage. Stasis. Thrombosis. Morphogenesis of thrombosis. Morphology of thrombus. Embolism. Types. Venous congestion. Anemia. Types. Etiology. Pathogenesis. Morphogenesis. Pathological anatomy. Outcome. Clinical significance	LO2 LO3 LO4	1	Discussion of the topic, description of macro- and micropreparations with a conclusion , case study	Checklist descriptions of macro- and micropreparations , case solution checklist
	Pathological anatomy . SIWT / SIW 2	Circulatory disorders	DIC syndrome. Shock. Pathological anatomy. Outcome. Clinical significance	LO2 LO3 LO4	1/5	Case - study	Case Solution Checklist
	Pathological physiology. Practical lesson 4	Typical metabolic disorders	Disorders of carbohydrate , lipid, protein, mineral and vitamin metabolism . Hypo- and hyperglycemia, types, causes. Hyperlipemia. Obesity, causes, types . Hypo- and hyperproteinemia, causes of development . Disorders of macro- metabolism . and microelements. Hypo- and hypervitaminosis. Clinical significance	LO2 LO3 LO4	2	Work in small groups, discussion of the topic, case - study	Checklist for working in small groups, topic discussion checklist, case solution checklist
	Pathological physiology. SIWT / SIW 4	Midterm Examination 1	Topics of lectures, practical classes, independent work, covered during 1-5 days of training	LO1 LO2 LO3 LO4	1/1	Integrated control of educational achievements using control educational cases, testing	Checklist case solutions , testing checklist
6	Pathological physiology. Lecture 3	Hypoxia. Peripheral circulatory disorders	Hypoxia, concept, types , etiology, pathogenesis , compensatory reactions. Shift of the oxyhemoglobin dissociation curve. Forms of peripheral circulation disorders . Arterial hyperemia, venous hyperemia, ischemia, stasis, thrombosis and embolism, concept, causes, mechanisms of development, symptoms, consequences . Clinical significance	LO1	1	Overview	Quick poll Feedback

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	Pathological physiology. Practical lesson 5	Hypoxia. Peripheral circulatory disorders	Hypoxia, concept, types , etiology, pathogenesis , compensatory reactions. Shift of the oxyhemoglobin dissociation curve. Forms of peripheral circulation disorders . Arterial hyperemia, venous hyperemia, ischemia, stasis, thrombosis and embolism, concept, causes, development mechanisms, symptoms, consequences . Clinical significance	LO2 LO3 LO4	1	Work in small groups, discussion of the topic, case - study	Checklist for working in small groups, topic discussion checklist, case solution checklist
	Pathological anatomy . Practical lesson 5	Inflammation	Inflammation. Exudative inflammation. Proliferative inflammation. Immune inflammation. Pathological anatomy. Outcome. Pathological anatomy of sepsis. Clinical significance	LO2 LO3 LO4	2	Discussion of the topic, description of macro- and micropreparati ons with a conclusion , case study	Checklist descriptions of macro- and micropreparati ons , case solution checklist
	Pathological anatomy . SIWT / SIW 3	Compensatory adaptive processes. Regeneration	Regeneration. Processes of adaptation and compensation. Sclerosis. Clinical significance	LO2 LO3 LO4	1/6	C ase - study	Case Solution Checklist
7	Pathological physiology. Lecture 4	Inflammation	Inflammation, concept, etiology, pathogenesis , types, course , outcomes , manifestations . Alteration, inflammation mediators. Microcirculation disorders in the inflammation focus. Exudation and emigration of leukocytes, mechanisms . Proliferation . Clinical significance	LO1	1	Overview	Quick poll Feedback
	Pathological physiology. Practical lesson 6	Inflammation	Inflammation, concept, etiology, pathogenesis , types, course , outcomes , manifestations . Alteration, inflammation mediators. Microcirculation disorders in the inflammation focus. Exudation and emigration of leukocytes, mechanisms . Proliferation . Clinical significance	LO2 LO3 LO4	3	Work in small groups, discussion of the topic, case - study	Checklist for working in small groups, topic discussion checklist, case solution checklist
	Pathological physiology. SIWT / SIW 5	Pathophysiology of the infectious process. Fever	Infectious process, concept, causes, development mechanisms. Sepsis, concept, types. Fever, concept, etiology, pathogenesis, stages, types, meaning. Metabolism and	LO2 LO3 LO4	1/5	C ase - study	Case Solution Checklist

			organ function during fever. Distinction between fever and hyperthermia . Clinical significance				
8	Pathological physiology. Practical lesson 7	Allergy	Allergy, concept, etiology. Types of allergens. Sensitization. Classification and general pathogenesis of allergic reactions. Pathogenesis of allergic reactions of types I, II, III, IV. Clinical significance	LO2 LO3 LO4	2	Work in small groups, discussion of the topic, case - study	Checklist for working in small groups, topic discussion checklist, case solution checklist
	Pathological physiology. SIWT / SIW 6	Immunodeficiency states	Immunodeficiency states, concept, types, mechanisms of formation, manifestations. AIDS, etiopathogenesis, stages, manifestations. Autoimmune process, concept, stages of development . Pathogenetic classes of autoimmune diseases . Clinical significance	LO2 LO3 LO4	1/5	Case - study	Case Solution Checklist
	Pathological anatomy . Lecture 4	Immunopathological processes	Morphology of immunogenesis disorders. Pathology of the thymus, peripheral lymphoid tissue in immunogenesis disorders. Hypersensitivity reactions. Clinical significance	LO1	1	Overview	Quick poll Feedback
	Pathological anatomy . Practical lesson 6	Immunopathological processes	Morphology of immunogenesis disorders. Pathology of the thymus, peripheral lymphoid tissue in immunogenesis disorders. Hypersensitivity reactions. Autoimmunization and autoimmune diseases. Immunodeficiency syndromes. Primary and secondary immunodeficiency syndromes. Clinical significance	LO2 LO3 LO4	1	Discussion of the topic, description of macro- and micropreparations with a conclusion , case study	Checklist descriptions of macro- and micropreparations , case solution checklist
9	Pathological physiology. Practical lesson 8	Tumors	Tumors, concept, types , etiology. Pathogenesis of tumor growth . Paraneoplastic syndromes, concept, manifestations. Cancer cachexia, concept, pathogenesis. Mechanisms of antitumor resistance of the body. Clinical significance	LO2 LO3 LO4	2	Work in small groups, discussion of the topic, case - study	Checklist for working in small groups, topic discussion checklist, case solution checklist
	Pathological anatomy . Practical lesson 7	Tumors	Tumors of the epithelial coverings and endocrine glands. The concept of precancer.	LO2 LO3 LO4	2	Discussion of the topic, description of macro- and	Checklist descriptions of macro- and micropreparati

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			Benign and malignant tumors. Cancer. Sarcoma. Metastasis. Pathological anatomy. Complications, causes of death. Clinical significance			micropreparati ons with a conclusion , case study	ons , case solution checklist	
	Pathological anatomy . SIWT / SIW 4	Tumors	Mesenchymal tumors. Sarcoma. Metastasis. Pathological anatomy. Complications, causes of death. Clinical significance	LO2 LO3 LO4	1/6	C ase - study	Case Solution Checklist	
10	Pathological anatomy . Practical lesson 8	Tumors	Tumors of melanin-producing tissue and nervous system. Benign and malignant tumors. Metastasis. Clinical significance	LO2 LO3 LO4	4	Discussion of the topic, description of macro- and micropreparati ons with a conclusion , case study	Checklist descriptions of macro- and micropreparati ons , case solution checklist	
	Pathological anatomy . SIWT / SIW 5	Border control No. 2	Topics of lectures, practical classes, independent work, covered during 6-10 days of training	LO1 LO2 LO3 LO4	2/5	Integrated control of educational achievements using control educational cases, testing	Checklist case solutions , testing checklist	
8.1	Preparation and implementation of interim assessment							12 hours
9.	Teaching methods							
9.1	Lectures	Overview lectures						
9.2	Practical classes	Work in small groups , discussion of the topic, case study , description of macro- and micropreparations with a conclusion						
9.3	SIWT / SIW	Case - study , autopsy						
9.4	Midterm Examination	Integrated monitoring of educational achievements using control educational cases , testing						
10.	Evaluation criteria							
10.1	Criteria for assessing the results of the discipline							
No. LO	Name of learning outcomes	Unsatisfactory	Satisfactorily	Good	Excellent			
LO1	Demonstrates knowledge of general pathology, understanding of the patterns of development of changes in cells and tissues in various pathological conditions.	Does not explain the patterns of development of changes in cells and tissues in various pathological conditions	Has difficulty explaining the patterns of development of changes in cells and tissues in various pathological conditions	Explains the patterns of development of changes in cells and tissues in various pathological conditions	Freely explains the patterns and development of changes in cells and tissues in various pathological conditions			
LO 2	Explains the etiology, pathogenesis, and morphogenesis of general pathological processes.	Does not demonstrate knowledge of the etiology, pathogenesis, morphogenesis of general pathological processes	Demonstrates knowledge of the etiology, pathogenesis, morphogenesis of general pathological processes, but makes gross errors	Demonstrates knowledge of the etiology, pathogenesis, and morphogenesis of general pathological processes , but allows for minor inaccuracies	Demonstrates knowledge of the etiology , pathogenesis , morphogenesis of general pathological processes			

LO 3	Determines pathological changes and functional disorders at the organ, tissue and cellular levels , describes macro- and micropreparations and analyzes the results of clinical laboratory and experimental studies.	1. Does not determine pathological changes and functional disorders at the organ, tissue and cellular levels . 2. Does not describe macro- and micro - preparations and does not analyze the results of clinical, laboratory and experimental studies	1. Determines pathological changes and functional disorders at the organ, tissue and cellular levels . 2. Describes macro- and micro - preparations and analyzes the results of clinical, laboratory and experimental studies , but makes gross errors	1. Identifies pathological changes and functional disorders at the organ, tissue and cellular levels . 2. Describes macro- and micro - preparations and analyzes the results of clinical , laboratory and experimental studies, but allows for minor inaccuracies	1. Independently identifies pathological changes and functional disorders at the organ, tissue and cellular levels . 2. Independently describes macro- and micro - preparations and analyzes the results of clinical , laboratory and experimental studies
LO 4	Makes conclusions on macro- and micropreparations, as well as on the results of clinical laboratory and experimental studies, and predicts the outcomes of pathological changes in organs and tissues during general pathological processes when solving cases.	1. Does not draw conclusions based on macro- and micro - preparations , as well as on the results of clinical, laboratory and experimental studies in general pathological processes . 2. Does not predict the outcomes of pathological changes in organs and tissues in general pathological processes when solving cases	1. Makes conclusions on macro- and micro - preparations , as well as on the results of clinical, laboratory and experimental studies in general pathological processes , but makes gross errors. 2. Predicts the outcomes of pathological changes in organs and tissues during general pathological processes , but makes gross errors when solving cases	1. Makes conclusions on macro- and micro - preparations , as well as on the results of clinical, laboratory and experimental studies in general pathological logical processes , but allows for minor inaccuracies. 2. Predicts the outcomes of pathological changes in organs and tissues during general pathological processes , but allows for minor inaccuracies when solving cases	1. Independently makes conclusions on macro- and micro - preparations , as well as on the results of clinical, laboratory and experimental studies in general pathological processes . 2. Independently predicts the outcomes of pathological changes in organs and tissues during general pathological processes when solving cases

10.2 Criteria for assessing teaching methods and technologies

Multi-point knowledge assessment system

Letter Grading	Digital equivalent of points	Percentage content	Traditional system assessment
A	4.0	95-100	Great
A -	3.67	90-94	
B +	3.33	85-89	
B	3.0	80-84	Fine
B -	2.67	75-79	
C +	2.33	70-74	
C	2.0	65-69	Satisfactorily
C -	1.67	60-64	
D+	1.33	55-59	
D-	1.0	50-54	Unsatisfactory
FX	0, 5	25-49	

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F	0	0-24	
Checklist for the lesson			
Form of control	Grade	Evaluation criteria	
Work in small groups (implementation of practical work)	Exellent corresponds to points 95-100 90-94	- completed the practical work on time and without any errors and submitted a report on it; - took an active part in the discussion of the research results; - made a well-reasoned conclusion, while demonstrating original thinking	
	Good corresponds to points 85-89 80-84 75-79 70-74	- completed practical work on time and submitted a report on it, making unfundamental mistakes; - took an active part in the discussion of the research results	
	Satisfactorily corresponds to points 65-69 60-64 50-54	- completed practical work on time and submitted a report on it, making fundamental mistakes; - was not active during the discussion, needed the teacher's help	
	Unsatisfactory corresponds to points 25-49	- failed to submit the practical work report on time, made gross errors, and did not complete all the practical work required by the program;	
	Unsatisfactory corresponds to points 0-24	- did not take part in the discussion of the results of the work	
Case - study	Exellent corresponds to points 95-100 90-94	- solved cases within a certain time; - gave full answers to all questions	
	Good corresponds to points 85-89 80-84 75-79 70-74	- solved cases within a certain time; - gave complete answers to all questions; - made minor mistakes when solving cases	
	Satisfactorily corresponds to points 65-69 60-64 50-54	- solved cases within a certain time; - gave incomplete answers to questions; - made fundamental mistakes when solving cases	
	Unsatisfactory corresponds to points 25-49	- solved the cases incorrectly or did not solve them at all ; - made gross mistakes when solving cases	
	Unsatisfactory corresponds to points 0-24		
Work in small groups (and interpretation of clinical laboratory test results)	Exellent corresponds to points 95-100 90-94	- correctly, without any errors, interpreted the results of clinical laboratory tests; - made a reasoned conclusion	
	Good corresponds to points 85-89 80-84	- correctly interpreted the results of clinical laboratory tests, making minor errors; - made a reasoned conclusion	

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	75-79 70-74	
	Satisfactorily corresponds to points 65-69 60-64 50-54	- correctly interpreted the results of clinical laboratory studies, having made fundamental mistakes; - made an unfounded conclusion
	Unsatisfactory corresponds to points 25-49	- incorrectly interpreted the results of clinical laboratory tests, making gross errors; - did not draw a conclusion
	Unsatisfactory corresponds to points 0-24	
Discussion of the topic	Excellent corresponds to points 95-100 90-94	- did not make any mistakes during the discussion; - was oriented in the theories, concepts and directions of general pathology and gave them a critical assessment; - used scientific achievements of other disciplines
	Good corresponds to points 85-89 80-84 75-79 70-74	- during the discussion he did not make any gross mistakes, but he did make inaccuracies and minor errors, which he corrected himself; - managed to systematize the program material with the help of the teacher
	Satisfactorily corresponds to points 65-69 60-64 50-54	- made fundamental mistakes during the discussion; - limited himself to only the educational literature specified by the teacher; - experienced great difficulty in systematizing the material
	Unsatisfactory corresponds to points 25-49	- made gross mistakes during the discussion; - did not study the basic literature on the topic of the lesson; - failed to use scientific terminology of general pathology
	Unsatisfactory corresponds to points 0-24	

Checklist for midterm assessment

Testing - testing is assessed using a multi-point knowledge assessment system.

Checklist for the subject pathological anatomy

Checklist for practical lesson

Form of control	Grade	Evaluation criteria
Case study	Excellent corresponds to points 95-100 90-94	- solved cases within a certain time; - gave full answers to all questions Demonstrates original thinking when analyzing a situational task. Fully utilizes the theoretical knowledge necessary to solve a given task. Demonstrates the ability to draw logical conclusions on a situational task, while demonstrating a deep understanding of the necessary educational material.
	Good corresponds to points 85-89 80-84 75-79 70-74	- solved cases within a certain time; - gave complete answers to all questions; - made minor mistakes when solving cases Possesses the necessary knowledge to solve this situational task. Allows for minor inaccuracies when discussing this case. Is able to draw correct conclusions on the proposed situational task.

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	Satisfactorily corresponds to points 65-69 60-64 50-54	- solved cases within a certain time; - gave incomplete answers to questions; - made fundamental mistakes when solving cases Allows minor inaccuracies when discussing a given task, has difficulty interpreting analyses proposed in a situational task. Draws conclusions with difficulty
	Unsatisfactory corresponds to points 25-49	- solved cases incorrectly or did not solve them at all; - made gross mistakes when solving cases
	Unsatisfactory corresponds to points 0-24	Allows fundamental errors in discussing a situational task. Passive, unable to draw appropriate conclusions.
Description of the macropreparation	"Excellent" corresponds to points 95-100 90-94	- correctly named the organ, indicated the dimensions, - described the surface: the condition of the capsule or serous membrane, dullness, shine, overlap; - gave a description of the pathological focus: indicated the location, size, shape (if it is an ulcer - the condition of the bottom), color, consistency; - made the correct pathological conclusion/diagnosis
	Good corresponds to points 85-89 80-84 75-79 70-74	- correctly named the organ, indicated the dimensions, described the surface: condition of the capsule or serous membrane, dullness, shine, overlap; - gave a description of the pathological focus: indicated the location, size, shape (if it is an ulcer - the condition of the bottom), color, consistency; - made the correct pathological conclusion/diagnosis, but during the answer made minor mistakes and inaccuracies
	"Satisfactorily" corresponds to points 65-69 60-64 50-54	- correctly named the organ, did not indicate the dimensions, did not fully describe the surface: did not describe the condition of the capsule or serous membrane, dullness, shine, overlap; - gave an incomplete description of the pathological focus: did not indicate indicated location, size, shape (if it is an ulcer - the condition of the bottom), color, consistency; - made the correct pathological conclusion/diagnosis, but during the answer made fundamental mistakes and inaccuracies
	"Unsatisfactory" corresponds to points 25-49	- correctly named the organ, did not indicate the size, did not describe the surface: did not describe the condition of the capsule or serous membrane, dullness, shine, overlap; - gave an incorrect description of the pathological focus: did not indicate indicated location, size, shape (if it is an ulcer - the condition of the bottom), color, consistency; - made the correct pathological conclusion/diagnosis, but during the answer made fundamental mistakes and inaccuracies

ONTÜSTİK QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ	 SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия»	
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	"Unsatisfactory" corresponds to points 0-24	- incorrectly named the organ, did not indicate the size, did not describe the surface: did not describe the condition of the capsule or serous membrane, dullness, shine, overlap; - gave an incorrect description of the pathological focus: - did not indicate indicated location, size, shape (if it is an ulcer - the condition of the bottom), color, consistency; - made an incorrect pathological conclusion/diagnosis, made gross errors during the answer, left some questions unanswered
Description of the microslide	"Excellent" corresponds to points 95-100 90-94	-correctly named the organ or tissue, correctly characterized pathological changes: localization, made a description, named the color; -made the correct pathological conclusion/diagnosis
	"Good" corresponds to points 85-89 80-84 75-79 70-74	-correctly named the organ or tissue, correctly characterized pathological changes: localization, made a description, named the color; - made the correct pathological conclusion/diagnosis, but during the answer made minor mistakes and inaccuracies
	"Satisfactorily" corresponds to points 65-69 60-64 50-54	- correctly named an organ or tissue, incorrectly characterized pathological changes: localization, made a description, incorrectly named the color; - made the correct pathological conclusion/diagnosis, but during the answer made fundamental mistakes and inaccuracies
	"Unsatisfactory" corresponds to points 25-49	- correctly named an organ or tissue, incorrectly characterized pathological changes: localization, made a description, incorrectly named the color; -made the correct pathological conclusion/diagnosis, made gross errors during the answer
	"Unsatisfactory" corresponds to points 0-24	- incorrectly named an organ or tissue, incorrectly characterized pathological changes: localization, made a description, incorrectly named the color; - made an incorrect pathological conclusion/diagnosis, made gross mistakes during the answer, left some questions unanswered
Discussion of the topic	Excellent corresponds to points 95-100 90-94	- did not make any mistakes during the discussion; - was oriented in the theories, concepts and directions of the discipline and gave them a critical assessment; - used scientific achievements of other disciplines
	Good corresponds to points 85-89 80-84 75-79 70-74	- during the discussion he did not make any gross mistakes, but he did make inaccuracies and minor errors, which he corrected himself; - managed to systematize the program material with the help of the teacher

	Satisfactorily corresponds to points 65-69 60-64 50-54	- made fundamental mistakes during the discussion; - limited himself to only the educational literature specified by the teacher; - experienced great difficulty in systematizing the material
	Unsatisfactory corresponds to points 25-49	- made gross mistakes during the discussion; - did not study the basic literature on the topic of the lesson; - failed to use the scientific terminology of the discipline
	Unsatisfactory corresponds to points 0-24	- found it difficult to answer; - did not study the basic literature on the topic of the lesson; - failed to use the scientific terminology of the discipline

Checklist of SIWT and SIW

Checklist for assessing responses to the description of a macroscopic preparation in a case

No.	Evaluation Criteria/Evaluation	Excellent	Good	Satisfactorily	Unsatisfactory
1	Name of the organ	5.0-4.0	3.9-3.0	2.9-2.0	1.9-0
2	Organ size	5.0-4.0	3.9-3.0	2.9-2.0	1.9-0
3	Surface: condition of the capsule or serous membrane, dullness, shine, superposition	10.0-9.0	8.9-7.0	6.9-5.0	4.9-0
4	Characteristics of the pathological focus: Localization, size, shape (if an ulcer – condition of the bottom), color, consistency	20.0-19.0	18.9-15.0	14.9-11.0	10.9-0
5	Pathological diagnosis/conclusion	10.0-9.0	8.9-7.0	6.9-5.0	4.9-0
6	Total	50.0-45.0	44.5-35.0	34.5-25.0	24.5-0

Checklist for assessing responses to the description of a microscopic specimen in a case study

N o.	Evaluation Criteria/Evaluation	Excellent	Good	Satisfactorily	Unsatisfactory
1	Name of an organ or tissue	10.0-9.0	8.9-7.0	6.9-5.0	4.9-0
2	Characteristics of pathological changes: localization, description	25.0-23.0	22.9-20.0	19.9-15.0	14.9-0
3	Coloring	5.0-4.0	3.9-3.0	2.9-2.0	1.9-0
4	Pathological diagnosis/conclusion	10.0-9.0	8.8-5.0	4.8-3.0	2.8-0
5	Total	50.0-45.0	44.5-35.0	34.5-25	24.5-0

11. Educational resources

Electronic resources

1. Electronic library of YUKMA - <https://e-lib.skma.edu.kz/genres>
2. Republican Interuniversity Electronic Library (RIEL) – <http://rmebrk.kz/>
3. Digital library "Aknurpress" - <https://www.aknurpress.kz/>

	4. Electronic library "Epigraph" - http://www.elib.kz/ 5. Epigraph - portal of multimedia textbooks https://mbook.kz/ru/index/ 6. EBS IPR SMART https://www.iprbookshop.ru/auth 7. information and legal system "Zan" - https://zan.kz/ru 8. Medline Ultimate EVSCO 9. eBook Medical Collection EBSCO 10. Scopus - https://www.scopus.com/
Electronic textbooks	Pathological Physiology: 1. Патологиялық физиология. Тәжірибелік сабақтарға нұсқау [Электронный ресурс] : оқу құралы = Патофизиология. Руководство к практическим занятиям : учебное пособие / қаз. тіліне ауд. С. Б. Жәуітқова ; ред. В. В. Новицкий. - Электрон. текстовые дан. (63,4Мб). - М. : ГЭОТАР - Медиа, 2014. - 768 бет. эл. опт. диск (CD-ROM) 2. Патологиялық физиология. Досжанова М.П. , – Алматы: Эверо, 2015 ЦБ Aknurpress / https://www.aknurpress.kz/reader/web/2476 3. Кравцов В.И и др. Тестовые задания по патологической физиологии с элементами профилизации / Под ред. профессора В.И. Кравцов. - Алматы: Эверо, 2020. - 116 с. https://www.elib.kz/ru/search/read_book/472/ 4. Кравцов В.И и др. Тестовые задания по патологической физиологии с элементами профилизации / Под ред. профессора В.И. Кравцов. - Алматы: Эверо, 2020. - 128 с. https://www.elib.kz/ru/search/read_book/471/ 5. Кравцов В.И и др. Тестовые задания по патологической физиологии с элементами профилизации / Под ред. профессора В.И. Кравцов. - Алматы: Эверо, 2020. - 104 с. https://www.elib.kz/ru/search/read_book/473/ 6. Патологиялық физиология: 2 том. Оқулық/қазақ тіліне аударған, жауапты редактор Ж.Б. Ахметов. , – Алматы: Эверо, 2020 - 200 https://www.elib.kz/ru/search/read_book/91/ 7. Патологиялық физиология: 1 том. Оқулық/қазақ тіліне аударған, жауапты редактор Ж.Б. Ахметов. , – Алматы: Эверо, 2020 - 240 с https://www.elib.kz/ru/search/read_book/88/ 8. Патологическая физиология: Учебник для медицинских вузов. 2 том. Алматы: Эверо, 2020 – 216 https://www.elib.kz/ru/search/read_book/98/ 9. Адо А.Д, Адо М.Л, Пыцкого В.И., Порядина Г. В., Владимирова Ю.Л. Патологическая физиология: учебник для медицинских вузов. 1 том. Алматы: Эверо, 2020 - 248 с. https://www.elib.kz/ru/search/read_book/96/ 10. Адо А.Д, Адо М.Л, Пыцкого В.И., Порядина Г. В., Владимирова Ю.Л. Патологическая физиология: Учебник для медицинских вузов. 3 том. Алматы: Эверо, 2020 https://www.elib.kz/ru/search/read_book/100/ 11. Уразалин. Тест тапсырмалары, Профилизация элементтерімен бірге патологиялық физиология, бойынша мамандықтар: 051301-жалпы медицина, 051302-стоматология. III-бөлім. Гемостаз қан жүйесінің, канайналым және тынысалу жүйелерінің патофизиологиясы. Алматы, «Эверо» баспасы, 2020 ж., 142 б. https://www.elib.kz/ru/search/read_book/896/ 12. Уразалин. Тест тапсырмалары, Профилизация элементтерімен бірге патологиялық физиология, Бойынша мамандықтар: 051301-жалпы медицина, 051302-стоматология. II-бөлім. Типтік патологиялық процестер, Біртектес дерттік үрдістер. Алматы, «Эверо» баспасы, 2020 ж., 184 б. https://www.elib.kz/ru/search/read_book/895/ 13. Уразалин. Тест тапсырмалары, Профилизация элементтерімен бірге патологиялық физиология, Бойынша мамандықтар: 051301-жалпы медицина, 051302-стоматология. IV-бөлім. Асқорыту, бауыр, бүйрек, эндокриндік және жүйке жүйелерінің патофизиологиясы. Алматы, «Эверо» баспасы, 2020 ж., 204 б. https://www.elib.kz/ru/search/read_book/897/ 14. Адо А.Д, Адо М.Л, Пыцкого В.И. , Порядина Г.В. , Владимирова Ю.Л. Патологиялық физиология: 3 том. Оқулық/қазақ тіліне аударған, жауапты редактор Ж.Б. Ахметов. – Алматы: Эверо, 2020 – 344 https://www.elib.kz/ru/search/read_book/94/ 15. Анатомия, физиология, патология органов слуха, речи, зрения. Ахметова Н.Ш. , – Алматы: Эверо, 2019 ЦБ Aknurpress / https://www.aknurpress.kz/reader/web/1016 16. Мамандандырылған патологиялық физиология курсы. Жәуітқова С.Б., Өмірбаева Е.Қ. , – Алматы: Эверо, 2019 ЦБ Aknurpress / https://www.aknurpress.kz/reader/web/1449 17. Коган, Б. М. Анатомия, физиология и патология сенсорных систем : учебное пособие / Б. М. Коган, К.В. Машилов. — Москва : Аспект Пресс, 2011. — 384 с. https://www.iprbookshop.ru/8873.html 18. Герасимова, О. В. Патология основных систем жизнеобеспечения. Том 1 : учебное пособие / О. В. Герасимова. — Самара : РЕАВИЗ, 2009. — 143 с. — https://www.iprbookshop.ru/10144.html 19. Патологическая физиология: теоретический курс = Pathological physiology: theoretical course : учебное пособие / Е. В. Куликов, Ю. А. Ватников, В. И. Паршина, В. М. Бяхова. — Москва : Российский университет дружбы народов, 2018. — 92 с. https://www.iprbookshop.ru/91045.html 20. Examination Tests From Pathological Physiology Učební Texty Univerzity Karlovy V Praze, 2015 eBook Collection (EBSCOhost) First edition. Prague : Charles University in Prague, Karolinum Press. 2015// eBook

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12. Discipline Policy

Requirements for students (attendance, behavior, grading policy, penalties, incentives, etc.)

- observe medical ethics and deontology;
- no smoking in the academy;
- maintain cleanliness in the department;
- do not damage furniture in classrooms;
- treat textbooks with care;
- maintain the appearance of a medical university student;
- observe safety regulations;
- during quarantine, wear medical masks and comply with sanitary and epidemiological regulations;
- do not miss classes without a good reason;
- classes missed for a valid reason must be made up in a timely manner, but only with permission from the dean's office and at a time determined by the teacher;
- don't be late for classes;
- have the necessary documentation in class: syllabus, methodological instructions for classes, lectures, notebook and textbook;
- prepare for classes conscientiously;
- be active during classes;
- do not engage in other activities during classes: do not talk, do not smoke, do not chew gum, do not eat food, do not use the phone, do not listen to music, do not read newspapers and magazines, do not prepare for classes in another

subject;

- maintain silence and order during breaks;
- implement SIW in a timely manner.

Penalties for failure to complete sections of the work:

- If you miss lectures without a valid reason, your midterm assessment grade will be reduced by 1 point for each missed lecture;
- If you miss a SIW without a valid reason, your midterm assessment score will be reduced by 2 points for each missed lesson;
- In case of a single violation of the discipline policy, the student is given a warning;
- In case of systematic violation of the discipline policy, information about the student's behavior is transferred to the faculty dean's office.

Criteria for non-admission to final control:

A student who has received an unsatisfactory grade for one of the types of tests (RC 1, RC 2, average grade of the current test) is not admitted to the final test for the discipline.

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

Regulations and Rules of SKMA. Academic policy.

P.4. Code of honor of the student

P.10. Organization of the educational process

The final grade is calculated automatically based on the average grade of the current control, the average grade of the midterm control and the grade of the final control.

$$\text{Final score (100\%)} = \text{RA(60\%)} + \text{FC(40\%)}$$

$$\text{RA(60\%)} = \text{MEavg (20\%)} + \text{CCavg (40\%)}$$

$$\text{RK av} = (\text{RK 1} + \text{RK 2}) : 2$$

$$\text{Final score (100\%)} = \text{MEavg} \times 0.2 + \text{CCavg} \times 0.4 + \text{FC} \times 0.4$$

RA – rating of admission

FC – assessment of final control

MEavg – average score of midterm control, taking into account penalty points

CC av – average assessment of current control taking into account SIW

ME1 – midterm examination 1

ME 2 – midterm examination 2

14. Approval and revision			
Date of agreement with the Library and Information Center	Protocol No.	Full name of the head of the BIC	Signature
25.06.25	7	Darbicheva R. I.	[Signature]
Date of approval for AC EP	Protocol No.	Full name of the Chairman of the AC EP	Signature
27.06.25	6	Aygenkhanov D.	[Signature]
Date of approval at the department	Protocol No.	Full name of the head of the department	Signature
26.06.25	13	Sadykova A. Sk	[Signature]
Date of revision at the department	Protocol No.	Full name of the head of the department	Signature
Date of revision on AC EP	Protocol No.	Full name of the Chairman of the AC EP	Signature