

Department of "Normal Anatomy"	044-42/16
Department of "Pathological Anatomy and Histology"	044-63/15
Department of "Normal and Pathological Physiology"	044-53/11
Department of "Biology and Biochemistry"	044-46/11
Department of "Phthisiopulmonology and Radiology"	044-70/11
Department of "Introduction to the Clinic"	044-75/11
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Syllabus

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Educational program: 6B10115 «Medicine»

Working curriculum of the discipline: Normal digestive and endocrine systems

1.	General information about the discipline		
1.1	Discipline code: NDES 2208	1.6	Academic year: 2023-2024
1.2	The name of the discipline: "Normal digestive and endocrine systems".	1.7	Course: 2
1.3	Prerequisites: introduction to the profession, structural organization of human physiological processes	1.8	Semester: 3
1.4	Post-requirements: general pathology, digestive and endocrine systems in pathology	1.9	Number of credits (ECTS): 6/180
	Cycle: BD	1.10	Component: IC
2.	Description of the discipline		
	Formation of fundamental knowledge about morphofunctional and biochemical features of the digestive and endocrine systems. Anatomy of the digestive and endocrine systems. Visual research methods. Skills of pre-medical care and patient-centered care.		
3.	Summative assessment form		
3.1	<input checked="" type="checkbox"/> Testing	3.5	Coursework
3.2	Written	3.6	Essay
3.3	Verbal	3.7	Project
3.4	<input checked="" type="checkbox"/> OSP/OSC or the reception of practical skills	3.8	Other
4.	Objectives of the discipline		
	To form a complex of knowledge and understanding among students about the morphofunctional and biochemical features of the digestive and endocrine systems, the anatomy of the digestive organs and the endocrine system by studying visual research methods, as well as the formation of skills of pre-medical care for patients.		
5.	Final learning outcomes (LO disciplines)		
LO 1	Knows and understands morphofunctional and biochemical features of the digestive and endocrine systems, the anatomy of the digestive organs and the endocrine system by studying histological, biochemical and visual research methods		
LO 2	Indicates readiness to collect and analyze patient complaints, medical history data, examination results, laboratory, instrumental and other studies in order to recognize the condition or establish the presence or absence of the disease for monitoring and patient care.		
LO 3	Applies knowledge of the structure and topography of organs and systems to master the skills of physical examination and first aid.		
LO 4	Analyzes the information obtained during histological and biochemical observations, determines their significance for the characteristics of the state of the organism.		



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LO 5	Compares the results of observations with data obtained from modern sources of information, draws conclusions from the results and explains the algorithms of laboratory, instrumental and radiation research methods.					
5.1	LO of discipline	Learning outcomes LO, which are associated with the LO of the discipline				
	LO 1 LO 2 LO 3	LO 1 – Applies in practice fundamental knowledge in the field of biomedical, clinical, epidemiological and socio-behavioral sciences.				
	LO 4 LO 5	LO 2 – Provides patient-centered care in the field of biomedical, clinical, epidemiological sciences, aimed at the diagnosis, treatment and prevention of the most common diseases. LO 11 – Analyzes the effectiveness of diagnosis and treatment results, applying the principles of personalized medicine				
6.	Detailed information about the discipline					
6.1	<p>Location of the Department of "Normal Anatomy" – Al-Farabi Square 1, main academic building, ground floor; internal phone – 40-82-22, 40-82-26 (263), e-mail anatomia.2012@mail.ru . Email address: www.ukma.kz .</p> <p>Location of the Department of "Pathological Anatomy and Histology" Shymkent, Al-Farabi square 3, academic building No. 2, 4th floor; classrooms – No. 404 a,b; № 406; №408; №409, № 411a,b. e-mail address: Patan.gisto@mail.ru</p> <p>Location of the Department of "Normal and Pathological Physiology" Shymkent, Al-Farabi Square, academic building No. 2, 4-5 floor; tel.40-82-26 (422,423);</p> <p>Location of the Department of Biology and Biochemistry: 1 Al-Farabi Square, main academic building, 4th floor</p> <p>Location of the Department of "Phthisiopulmonology and Radiology": Clinic "Naz-Med", Ryskulova str.-33. email address – el_nur2@mail.ru</p> <p>Location of the department "Introduction to the clinic": Shymkent, Shymkent City Multidisciplinary Hospital, No. 2, Zhandosova str., 92/9 (modular) email address – klinika skma@mail.ru .</p>					
6.2	Number of hours	Lecture	Practical lesson	Lab. lesson	SIWT	SIW
		12	48	-	36	84
6.3	The plan of studying the discipline					
№	Discipline	Lecture	Practical	SIWT	SIW	
1 day	Anatomy	1	2	-		
	Physiology		-	2	5	
	Histology	-	1	-		
	Biochemistry	-	-	-		
	Basics of radiation diagnostics	-	-	-		
	Introduction to the clinic	-	-	-		
2 day	Anatomy	-	-	2	4	
	Physiology	1	2	-		
	Histology	-	-	-		
	Biochemistry	-	1	-		
	Basics of radiation diagnostics	-	-	-		
	Introduction to the clinic	-	-	-		
3 day	Anatomy	-	2	-		
	Physiology	-	-	-		
	Histology	1	1	2	4	
	Biochemistry	-	-	-		
	Basics of radiation diagnostics	-	-	-		
	Introduction to the clinic	-	-	-		
4 day	Anatomy	-	-	2	4	
	Physiology	-	2	-		
	Histology	-	-	-		
	Biochemistry	1	-	-		
	Basics of radiation diagnostics	-	1	-		
	Introduction to the clinic	-	-	-		



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5 day	Anatomy	-	2	-	
	Physiology	-	-	-	
	Histology	-	1	-	
	Biochemistry	-	-	1	2
	Basics of radiation diagnostics	1	-	1	2
	Introduction to the clinic	-	-	-	
6 day	Anatomy	-	-	-	
	Physiology	-	2	-	
	Histology	-	-	2	5
	Biochemistry	-	-	-	
	Basics of radiation diagnostics	-	-	-	
	Introduction to the clinic	1	1	-	
7 day	Anatomy	1	2	-	
	Physiology	-	-	2	5
	Histology	-	1	-	
	Biochemistry	-	-	-	
	Basics of radiation diagnostics	-	-	-	
	Introduction to the clinic	-	-	-	
8 day	Anatomy	-	-	2 рк -1	5
	Physiology	1	2	-	
	Histology	-	-	-	
	Biochemistry	-	1	-	
	Basics of radiation diagnostics	-	-	-	
	Introduction to the clinic	-	-	-	
9 day	Anatomy	-	2	-	
	Physiology	-	-	-	
	Histology	1	1	-	
	Biochemistry	-	-	1	3
	Basics of radiation diagnostics	-	-	-	
	Introduction to the clinic	-	-	1	2
10 day	Anatomy	1	-	2	5
	Physiology	-	2	-	
	Histology	-	-	-	
	Biochemistry	-	-	-	
	Basics of radiation diagnostics	-	1	-	
	Introduction to the clinic	-	-	-	
11 day	Anatomy	-	2	-	
	Physiology	1	-	-	
	Histology	-	1	2	5
	Biochemistry	-	-	-	
	Basics of radiation diagnostics	-	-	-	
	Introduction to the clinic	-	-	-	
12 day	Anatomy	1	-	2	5
	Physiology	-	2	-	
	Histology	-	-	-	
	Biochemistry	-	-	-	
	Basics of radiation diagnostics	-	-	-	
	Introduction to the clinic	-	1	-	
13 day	Anatomy	-	2	-	
	Physiology	-	-	2	5
	Histology	-	1	-	
	Biochemistry	-	-	-	
	Basics of radiation diagnostics	-	-	-	
	Introduction to the clinic	-	-	1	2
14 day	Anatomy	-	-	2	5
	Physiology	-	-	-	
	Histology	-	-	-	
	Biochemistry	-	1	-	
	Basics of radiation diagnostics	-	1	1	3
	Introduction to the clinic	-	1	-	



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15 day	Anatomy	-	2	-		
	Physiology	-	-	-		
	Histology	-	1	-		
	Biochemistry	-	-	1	2	
	Basics of radiation diagnostics	-	-	1	2	
	Introduction to the clinic	-	-	1	3	
16 day	Anatomy	-	-	-		
	Physiology	-	-	3 рк-2	6	
	Histology	-	-	-		
	Biochemistry	-	1	-		
	Basics of radiation diagnostics	-	1	-		
	Introduction to the clinic	-	1	-		
1	Anatomy	4	16	12	28	2,0cr
2	Physiology	3	12	9	21	1,5cr
3	Histology	2	8	6	14	1,0cr
4	Biochemistry	1	4	3	7	0,5cr
5	Basics of radiation diagnostics	1	4	3	7	0,5cr
6	Introduction to the clinic	1	4	3	7	0,5cr

7. Information about teachers

№	Name	Degrees and position	Email address	Scientific interests, etc.	Note
1.	Tanabaev Baymakhan Dilbarkhanovich	Lead of the department, PhD, Acting Professor	b.tanabayev@mail.ru	The direction of scientific research is "Macro-microhemocirculatory bed of the pelvic organs during ligation of the internal iliac arteries".	He gives lectures and conducts practical classes on anatomy in Kazakh and Russian languages.
2.	Murzanova Dinar Alpenovna	Candidate of Medical Sciences, Acting Professor	dina.murzanova@gmail.com	The direction of scientific research is "Adam anatomyasyndaǵy ishki aǵzaat aularynyń ulttyqsipaty."	He gives lectures and conducts practical classes on anatomy in Kazakh, Russian and English.
3.	Turekulova Akzharkyn Kenesovna	senior lecturer, Master's degree	jarkin-74@mail.ru	The direction of scientific research is "Ystyq klimat jaǵdaında qorǵasynnyń magistraldy arterialar qabyrǵasynnyń qurylymyna tigizetin áseri."	He gives lectures and conducts practical classes on anatomy in the Kazakh language.
4.	Ospanov Daken Tolenovich	senior lecturer	dakenospanov@list.ru		He gives lectures and conducts practical classes on anatomy in the Kazakh language.
5.	Dzhubanyshbaeva Gauhar Niyazkulovna	senior lecturer, Master's degree	gaukharai_kairat@mail.ru	Direction of scientific research – "MÁMS endirý barysyndaǵy prophylactalyq jumysynnyń máselelerin aıqyndau"	He gives lectures and conducts practical classes on anatomy in the Kazakh language.
6.	Sisabekov Kasymkhan Yermekbaevich	Professor, Associate Professor of Medical Sciences	sisabekov47@mail.ru	"Neuroimmunogenesis of the Same Mechanism of Morphology."	He gives lectures and conducts practical classes on histology in Kazakh and



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					Russian languages.
7.	Zhumashev Seydaly Nurakhovich	Acting Professor, Associate Professor of Medical Sciences	sult_med@mail.ru	Research interests: "Study of the morphological structure of hemo-immunopoiesis"	He gives lectures and conducts practical classes on histology in Kazakh and Russian languages.
8.	Toimbetova Karlygash Abibullaevna	senior lecturer	tojmbetova71@mail.ru	Scientific direction : "Neuromorphology"	He gives lectures and conducts practical classes on histology in Kazakh and Russian languages
9.	Zhazira Duisembieva Merekyzy	lecturer	zhazira-0508@mail.ru	He conducts research work on the topic "Ontüstik Qazaqstan aimaғындағы turғыndardyń salaýatty ómir saltyn qalyptastyrudyń gylım negizderi".	Conducts practical classes in histology in the Kazakh language.
10.	Zhakupbekova Galiya Saparovna	Head of the department, PhD, Acting Professor	<u>Galiya_074@mail.ru</u>	"Effect of biosweetilin on lipid peroxidation processes in hepatocyte and blood plasma under phosphorus intoxication" Ph.D., Ph.D. thesis.	She is the author of 35 scientific publications, prepared 1 pre-patent, 1 patent.
11.	Satybaldieva Nazgul Mutalkhanovna	senior lecturer, Master's degree	n_a_z_i_92@mail.ru	He conducts research work on the topic "Tynysjýyesiýrlyryndandart ynmúgedektiktińáleýmsettik-meditsinalyqmáseleri". Author of 11 scientific publications.	He gives lectures and conducts practical classes on physiology in Kazakh and Russian.
12.	Murina Natalia Mikhailovna	senior lecturer	namuri12@mail.ru	Author of 9 scientific publications.	He gives lectures and conducts practical classes on physiology in Kazakh and Russian.
13.	Azimbayeva Saule Nurkhanovna	senior lecturer, Master's degree	saule.a@mail.ru	Author of 7 scientific publications.	He gives lectures and conducts practical classes on physiology in Kazakh and Russian languages
14.	Kenzhebekov Pernebek Kenzhebekovich	Candidate of Chemical Sciences, Professor	kenzhebekov.p@gmail.com	"Investigation of the Chemical Composition of Volatile Aroma-Forming Compounds in Some Meat Products"	Author of 42 scientific publications, 1 textbook
15.	Ordabekova Asmira Baltabayevna	senior lecturer, Master's degree of biology	asmira75@mail.ru	"Microelementosis"	Author of 20 scientific publications, 1



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					textbook
16.	Asilbekova Gulshakhar Kenesbekovna	senior lecturer, Master's degree of biology	shahats@mail.ru	"Microelementosis"	Author of 10 scientific publications, 1 textbook
17.	Kanzhigitova Moldir Zharkynbekovna	senior lecturer, Master's degree of biology			
18.	Beisebayeva Lyazzat Mukhtarovna	senior lecturer	lyzzatb70@list.ru	"Organization of Clinical and Diagnostic Laboratory Service in Modern Conditions in the Republic of Kazakhstan"	Author of 4 scientific publications
19.	Zhienbayeva Aliya Altbayevna	lecturer			1 scientific publication
20.	Umurzakova Gaukhar Amangeldievna	assistant	visual_diagnostics@mail.ru	Radionuclide diagnostics of the urinary system	He gives lectures and conducts classes in Kazakh and Russian languages.
21.	Umiraliyev Aset Amiraliyevich	assistant	Aset.umiraliyev.72@mail.ru	Ultrasound of the abdomen	He gives lectures and conducts classes in Kazakh and Russian languages.
22.	Tulegenova Aigul Asanbaevna	assistant	taa8009@mail.ru	Ultrasound of organs in children	He gives lectures and conducts classes in Kazakh and Russian languages.
23.	Zhumadilova Akmaral Rakhmatullaevna	Head of the department, PhD, Acting Professor	akmaral-ar@mail.ru	Doc topic: features of the formation of the reproductive system of adolescent girls living in the zone of action of organochlorine pesticides. He is the author of more than 40 scientific and methodological publications, 6 textbooks.	He gives lectures and conducts classes in Kazakh and Russian languages.
24.	Ababakirova Dilsara Talibbaevna	assistant	dilsara_ababakirova@mail.ru	Innovative technology in the treatment of uterine fibroids	He gives lectures and conducts classes in Russian, Kazakh and English.
25.	Ermolaeva Olga Alexandrovna	assistant	Olga83_07@mail.ru	Author of more than 40 scientific publications, 1 textbook in Russian and English.	He gives lectures and conducts classes in Russian and Kazakh languages.



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8.Thematic plan

Days	Form of the lesson	Topic name	Summary	LO of discipline	Number of hours	Forms/methods/ learning technologies	Assessment forms/methods
1day	Anatomy. Lecture 1.	Morphofunctional characteristics of the organs of the oral cavity, pharynx	Oral cavity, lips, hard palate, soft palate, teeth, tongue. The glands of the oral cavity. Throat.	LO 1 LO 2	1	Introductory	Feedback (control questions)
	Anatomy. Practical lesson 1.	Oral cavity, tongue, palate, teeth, salivary glands: structure, topography, functions,	Oral cavity, lips, tongue, hard and soft palate, teeth, salivary glands: structure, topography, functions, blood supply, venous and lymphatic outflow, innervation.	LO 1 LO 2	2	Work in small groups with anatomical preparations, torso, dummies, tables, posters, on the interactive panel "Pirogov" And / or solving test tasks and situational tasks.	The checklist of the oral survey; Checklist for solving situational problems; Checklist for completing test tasks
	Physiology SIWT/SIW 1.	Food motivation. The physiological basis of hunger and satiety.	The concept of food motivation. Characteristics of the centers of hunger and satiety.	LO 1	2/5	Preparation and defense of the abstract and presentation	Review of the abstract presentation protection
	Histology Practical lesson 1	Central organs of the endocrine system.	Morphofunctional characteristics of the endocrine system. Classification, sources and course of development. Features of the hypothalamus	LO 1 LO 4	1	Work in small groups, a checklist of histopreparations, microphotographs, a	Work in small groups, a checklist of histopreparations,

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			structure. The structure of the pituitary gland. Epiphysis.			checklist for evaluating a practical lesson.	microphotographs, a checklist for evaluating a practical lesson.
2 day	Anatomy. SIWT/SIW 1.	Blood supply, venous and lymphatic outflow, innervation of the stomach, small and large intestines.	Stomach, small and large intestine: blood supply, venous and lymphatic outflow, innervation.	LO 1	2/4	Consultation on the most difficult issues of the curriculum when performing SIW, work with educational literature, delivery of SIW in the form of: -Description of the anatomical preparation on the anatomical table "Pirogov" -presentation	Evaluation sheets for certain forms of the completed task
	Physiology lesson 1	General characteristics of the digestive system.	Physiological features of the digestive system.	LO1	1	Introduction	-
	Physiology Practical lesson 1	Digestion in the mouth and stomach.	Functions of the gastrointestinal tract. The concept of digestion. Types of digestion. Physical and chemical processing of food in the mouth and stomach. The composition and functions of saliva. Enzymatic properties of	LO 1	2	Discussion of the main issues of the topic, practical work, test tasks, solving situational tasks	Oral interview, evaluation of practical work, evaluation of test tasks, evaluation of

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			gastric juice. Clinical and physiological research methods				situational problem solving
	Biochemistry Practical lesson 1	Biochemistry of digestion. Metabolism of substances. Bioenergetics.	Biochemistry of digestion. Stages of energy exchange in the body. Features of the metabolism of carbohydrates, lipids, proteins and amino acids are normal. Vitamins.	LO 1 LO 2	1	Seminar, situational tasks, testing	Checklist
3 day	Anatomy. Practical lesson 2.	Pharynx, esophagus: structure, topography, functions,.	Pharynx, esophagus: structure, topography, functions, blood supply, venous and lymphatic outflow, innervation.	LO 1	2	Work in small groups with anatomical preparations, torso, dummies, tables, tablets, posters, on the interactive panel "pirogov" And / or solving test tasks and situational tasks.	The checklist of the oral survey; Checklist for solving situational problems; Checklist for completing test tasks
	Histology Lecture 1	Histological structure of the endocrine system.	Morphofunctional characteristics of the endocrine system. Classification, sources and course of development. Features of the hypothalamus structure. The structure of the pituitary gland. Epiphysis. The structure of the thyroid gland. Parathyroid glands. Adrenal glands, cortical and medulla.	LO 1 LO 4	1	Overview lecture	Answers to control questions.



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	Histology Practical lesson 2	Peripheral organs of the endocrine system.	The structure of the thyroid gland. Parathyroid glands. Adrenal glands, cortical and medulla.	LO 1 LO 4	1	Work in small groups, checklist of histopreparat ions, microphotogr aphs	A checklist for evaluating a practical lesson.
	Histology SIWT/SIW1	APUD system .	Hormones and their significance in the body. The concept of target cells and hormone receptors. The structure and significance of the diffuse endocrine system.	LO 1 LO 2	2/4	Work in small groups, presentation protection, glossary compilation.	Checklist for SIW assessmen t
4 day	Anatomy. SIWT/SIW 2.	Liver, pancreas: blood supply, venous and lymphatic outflow, innervation.	Liver, pancreas: blood supply, venous and lymphatic outflow, innervation.	LO 1 LO 2	2/4	Consultation on the most difficult issues of the curriculum when performing SIW, work with educational literature, delivery of SIW in the form of: -Description of the anatomical preparation on the anatomical table "Pirogov" -presentation	Evaluation sheets for certain forms of the completed task
	Physiology Practical lesson 2	Functions of the small and large intestines.	The role of the small and large intestines in digestion.	LO 1	2	Discussion of the main issues of the topic, practical work, test tasks, solving situational tasks	Oral interview, evaluation of practical work, evaluation of test tasks,



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							evaluation of situational problem solving
	Biochemistry Lecture 1	Biochemistry of digestion. Biochemistry of hormones.	Biochemistry of digestion. Biochemistry of hormones.	LO 1 LO 2	1	Overview	Feedback questions
	Basics of radiation diagnostics Practical lesson 1	Radiation diagnostics of the esophagus. Radioscopy of the esophagus. Radiography of the esophagus. Computed tomography of the esophagus. Ultrasonic First scan. Radioisotope research. MRT	Radiation anatomy of the esophagus. Introduction of contrast agents. Features of anatomical and radiological constriction. Radioscopy of the esophagus. Radiography of the esophagus. Computed tomography of the esophagus. Ultrasound scanning. Radioisotope research. MRT	LO 2 LO 3 LO 5	1	Discussion, work with the provided radiological images	Oral interview, description of images, solving test tasks, solving crosswords, working with radiological images.
5 day	Anatomy. Practical lesson 3.	Stomach: structure, topography, functions.	Stomach: structure, topography, functions, blood supply, venous and lymphatic outflow, innervation.	LO 1 LO 3	2	Work in small groups with anatomical specimens, torsos, models, tables, tablets, posters, on an interactive panel of "pies" And/or solving test tasks and situational tasks.	Checklist of oral interview; Checklist for solving situational problems; Checklist for completing test tasks



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	Histology Practical lesson 3	Organs of the oral cavity1 .	Morphofunctional characteristics of the digestive system. Sources and course of embryonic development. Features of the structure of the oral mucosa. Structure of the tongue. Teeth.	LO 1 LO 4	1	Workin small groups, includinga list of histo-specimens, micrographs	Practical Lesson Evaluation Checklist.
	Biochemistry. SIWT/SIW 1.	The composition of human food. Structure and biological functions of coenzymes.	The composition of human food. Structure and biological functions of coenzymes.	LO 1 LO 2	1/2	Essay, presentation, glossary	Checklist for SIW assessment.
	Fundamentals of Radiation Diagnostics Lecture 1	The use of basic imaging methods in the diagnosis of the heart and large vessels.	Radiation methods of examination of the cardiovascular system. Basic X-ray methods of examination of the heart and large vessels. Basic principles of X-ray and ultrasound examination of the heart.	LO 2	1	Overview of illustrative	Feedback
	Fundamentals of Radiation Diagnostics SIWT/SIW 1	Radiological diagnostics of intestinal obstruction. Myelography and discography, research methods.	Radiological diagnostics of intestinal obstruction. Myelography and discography, research methods.	LO 2 LO 4 LO 5	1/2	Preparation of presentations , compilation of crosswords, test tasks, situational tasks, work with radiological images	Protection of presentati ons, solving crossword puzzles, test tasks, situational tasks, working with radiologic al images.
6 day	Physiology Practical lesson 3	The role of the liver and pancreas in the digestive process.	The composition and properties of bile, pancreatic, intestinal juices and their role in the hydrolysis and absorption of nutrients.	LO 1 LO 2	2	Discussion of the main issues of the topic, practical work, test	Oral interview, evaluation of practical work,



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						tasks, solving situational tasks	evaluation of test tasks, evaluation of situational problem solving
	Histology SIWT/SIW 2	Large salivary glands.	General plan of the structure of the large and small salivary glands.	LO 1 LO 4	2/5	Work in small groups, defend presentations, compile glossaries.	Checklist for SIW evaluation
	Introduction to the clinic. Lecture 1.	First aid for diseases of the digestive system and endocrine system.	Symptoms of impaired function of the digestive system. Principles of first aid for acute abdominal pain. First aid for abdominal pain and gastrointestinal bleeding	LO 1 LO 2 LO 4 LO 5	1	Overview lecture	Feedback
	Introduction to the clinic. Practical lesson 1.	Methods of questioning complaints, medical history and life of a patient with gastrointestinal tract diseases	Sequence and plan for filling out the patient's medical record. Title page. Passport details. Sequence and rules of patient description. The concept of active questioning of the patient. The sequence of the general examination of the patient: conditions, rules and techniques.	LO 1 LO 2 LO 5	1	Performing test tasks, solving clinical problems, performing practical work	Performing test tasks, solving clinical problems.
7 day	Anatomy. Lecture 2.	Anatomy of the esophagus, stomach, small	Esophagus, acornok, small intestine and toas.	LO 1	1	Overview	Feedback (Security Questions)



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		and large intestine					
Anatomy. Practical lesson 4.	Small and large intestine: structure, topography, functions.	Small and large intestine: structure, topography, functions, blood supply, venous and lymphatic outflow, innervation.	LO 1 LO 3	2	Work in small groups with anatomical specimens, torsos, models, tablets, posters, on the interactive panel "Pirogov" And/or solving test tasks and situational tasks.	Checklist of oral interview; Checklist for solving situational problems; Checklist for completing test tasks	
Physiology SIWT/SIW 2	Physiological norms of nutrition. Physiological foundations of rational nutrition. Metabolism and energy.	Physiological norms of nutrition in different age groups. Characteristics of rational nutrition. The importance of metabolism and energy. Methods for determining the energy consumption of the body (direct and indirect calorimetry).	LO 1	2/5	Preparation and defense of the abstract and presentation	Review of the abstract presentation on protection	
Histology Practical lesson 3	Organs of the oral cavity ²	Morphofunctional characteristics of the digestive system. Sources and course of embryonic development. Tonsils. Histophysiology of the esophagus.	LO 1 LO 4	1	Work in small groups, including a list of histospecimens, micrographs	Practical Lesson Evaluation Checklist.	



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8 day	Anatomy. SIWT/SIW 3	Midterm control 1.	Consolidation of the material covered on the topics of lectures, practical classes, SIWT and SIW	LO 1 LO 2 LO 3 LO 4 LO 5	2/5	Written-solution of integrated situational tasks	Checklist for the implementation of integrated situational tasks
	Physiology Lecture 2	Functions of the liver and pancreas during digestion.	The role of the liver and pancreas in digestion. The role of the microflora of the large intestine. Defecation.	LO 1	1	Introductory	-
	Physiology Practical lesson 4	Endocrine glands. General characteristics of the endocrine glands.	Endocrine glands (pituitary gland, thyroid gland, parathyroid glands, thymus gland) and their hormones.	LO 1	2	Discussion of the main issues of the topic, implementation of practical work, performance of test tasks, solution of situational problems	Oral questioning, assessment of the performance of practical work, assessment of the performance of test tasks, assessment of the solution of situational problems
	Biochemistry Practical lesson 2	Enzymology.	Enzymology. Enzymes involved in the metabolism of proteins, fats and carbohydrates. Mechanism of action of enzymes. Kinetics of enzymatic reactions.	LO 1 LO 2	1	Witheminar, situational tasks, testing	Checklist
9 day	Anatomy. Practical lesson 5.	Liver, pangastric gland: structure, topography, functions.	Structure of the liver, gallbladder. Ligaments of the liver. Segmental structure of the liver. Structure of the pancreas, blood supply,	LO 1	2	Work in small groups with anatomical specimens, torsos,	Checklist of oral interview; Checklist for solving



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			venous and lymphatic outflow, innervation.			models, tablets, posters, on the interactive panel "Pirogov" And/or solving test tasks and situational tasks.	situational problems; Checklist for completing test tasks
Histology Lecture 2	Histological structure of the digestive system.	Morphofunctional characteristics of the organs of the oral cavity, stomach and intestines. Features of the structure of the liver and pancreas.	LO 1 LO 4	1	Overview lecture.	Answers to security questions.	
Histology. Practical lesson 5	Stomach.	Structure of the stomach wall. Cardiac, pyloric and intrinsic glands of the stomach	LO 1 LO 4	1	Working in small groups, including a list of histospecimens, micrographs	Practical Lesson Evaluation Checklist.	
Biochemistry. SIWT/SIW 2.	Vitamins.	Vitamins, their classification, structure, food sources, biological functions of vitamins.	LO 1 LO 2	1/3	Presentation, Essay, Glossary	Part of the list for SIW assessment.	
Introduction to the clinic. SIWT/SIW 1.	Clinical manifestations of dyspeptic disorders.	Dyspeptic disorders: nausea, vomiting, belching, heartburn, bloating,. Details of symptoms, severity, relationship with food intake, quantity and quality.	LO 1 LO 2 LO 5	1/2	Work with electronic information resources. Preparation of a presentation, crossword, preparation of a mind map, compilation	Protection of presentations, crossword, mind map, test tasks	



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						of test tasks.	
10 day	Anatomy. Lecture 3.	Features of the structure of the pan-gastric glands. Peritoneum and its derivatives.	Structure of the liver, gallbladder. Topography of the liver. Ligaments of the liver. Segmental structure of the liver. Structure of the pancreas. Peritoneum and its derivatives. Floors of the peritoneal cavity.	LO 1	1	Overview	Feedback (Security Questions)
	Anatomy. SIWT/SIW 4	Features of the structure and function of the liver, gallbladder and pancreas in children	Anatomical and physiological features of the liver and pancreas in children. Development of the pancreas. Intrahepatic and extrahepatic bile ducts. Common bile duct, gallbladder.	LO 1 LO 2	2/5	Consultation on the most complex issues of the curriculum in the implementation of SIW, work with educational literature, passing SRO in the form of: - <i>Description of the anatomical specimen on the anatomical table "Pirogov"</i> - <i>Presentation</i>	Scorecards for certain forms of completed assignment



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	Physiology Practical lesson 5	Particular physiology of the endocrine glands.	Structural and functional characteristics of the hypothalamic-pituitary- adrenal system, epiphysis, thyroid, parathyroid, thymus. Research methods.	LO 3	2	Discussion of the main issues of the topic, implementati on of practical work, performance of test tasks, solution of situational problems	Oral questionin g, assessmen t of the performan ce of practical work, assessmen t of the performan ce of test tasks, assessmen t of the solution of situational problems
	Fundamentals of radiation diagnostics Practical lesson 2	Radiation diagnosis of the stomach. Overview radiography of the fia. Radiography with barium contrast. Double contrast in combination CT of the stomach Magnetic resonance imaging. Radionuclide diagnostics. Ultrasound examination. Preparation of patients for research.	Radiation anatomy of the stomach. Introduction of contrast agents. Anatomical and radiological features of the stomach. Overview radiography. Radiography with barium contrast. Double contrast. CT of the stomach. Magnetic resonance imaging. Radionuclide diagnostics. Ultrasound examination. Preparation of patients for research.	LO 2 LO 5	1	Discussion, work with the provided radiological images	Oral interview, descriptio n of images, solving test tasks, solving crossword s, working with radiologic al images.
11 day	Anatomy. Practical lesson 6.	Abdomen, pelvic cavity. Peritoneum, peritoneal passage. Floors	Abdomen, pelvic cavity. Peritoneum, peritoneal passage. Floors of peritoneum and its derivatives.	LO 1 LO 2	2	Work in small groups with anatomical specimens,	Checklist of oral interview; Checklist for



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		of peritoneum and its derivatives.				torsos, models, tablets, posters, on the interactive panel "Pirogov" And/or solving test tasks and situational tasks.	solving situational problems; Checklist for completing test tasks
	Physiology lecture 3	Hormonal regulation of physiological functions.	General properties of hormones, classification. Hypothalamic-pituitary-adrenal system. Endocrine glands	LO 1	1	Introductory	-
	Histology Practical lesson 6	Small intestine.	Structure of the wall of the small intestine. Crypt villi and their participation in digestion.	LO 1 LO 3 LO 4	1	Work in small groups, including a list of histospecimens, micrographs	Practical Lesson Evaluation Checklist.
	Histology SIWT/SIW 3	Age-related features of pancreatic histology.	Sources and course of development of the pancreas. Features of the structure of the pancreas depending on age and nutrition.	LO 1 LO 2	2/5	Work in small groups, defend presentations, compile glossaries.	Checklist for SIW evaluation
12 day	Anatomy. Lecture 4.	Morphofunctional characteristics of the organs of the endocrine apparatus, their role in the regulation of the activity of organs and systems of the body.	Branchiogenic group: thyroid. Parathyroid glands. Thymus gland. Neurogenic group: pituitary gland. Epiphysis. Adrenal system group. Mesodermal glands. Endodermal glands of the intestinal tube.	LO 1	1	Overview	Feedback (Security Questions)



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Anatomy. SIWT/SIW 5	Malformations of the digestive tract.	Malformations of the hard palate. Atresia of the esophagus, anus, and rectum.	LO 1 LO 2	2/5	Consultation on the most complex issues of the curriculum in the implementation of SIW, work with educational literature, passing SRO in the form of: - <i>Description of the anatomical specimen on the anatomical table "Pirogov"</i> - <i>Presentation</i>	Scorecards for certain forms of completed assignment
Physiology Practical lesson 6	Particular physiology of the endocrine glands.	Mechanism of action of hormones. Adrenal glands, pancreas and their hormones. Structural and functional characteristics of the pancreas and gonads	LO 1	2	Discussion of the main issues of the topic, implementation of practical work, performance of test tasks, solution of situational problems	Oral questioning, assessment of the performance of practical work, assessment of the performance of test tasks, assessment of the solution of situational problems
Introduction to the clinic.	First aid for gastric and	Causes of abdominal pain and gastrointestinal	LO 1 LO 3	1	Performing test tasks,	Performing test



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	Practical lesson 2.	intestinal dyspepsia.	bleeding. Clinical manifestations of abdominal pain and gastrointestinal bleeding. Algorithm for providing first aid for abdominal pain and gastrointestinal bleeding.	LO 4 LO 5		solving clinical problems, performing practical work	tasks, solving clinical problems. Gastric lavage method checklist.
13 day	Anatomy. Practical lesson 7.	Endocrine glands of branchiogenic and neurogenic groups: structure, functions.	General anatomical and physiological properties of endocrine glands. Branchiogenic group: thyroid, parathyroid, thymus. Neurogenic group: pituitary gland and epiphysis. Blood supply, venous and lymphatic outflow, innervation.	LO 1 LO 2	2	Work in small groups with anatomical specimens, torsos, models, tablets, posters, on the interactive panel "Pirogov" And/or solving test tasks and situational tasks.	Checklist of oral interview; Checklist for solving situational problems; Checklist for completing test tasks
	Physiology SIWT/SIW 3	Humoral regulation of functions. Age features.	The endocrine glands (pituitary gland, thyroid gland, parathyroid glands, thymus gland) and their hormones. The mechanism of action of hormones. Age features.	LO 1	2/5	Preparing and defending a presentation	Validate and protect your presentation.
	Histology Practical lesson 7	Large intestine.	Features of the structure of the wall of the large intestine. Endocrine cells of the gastrointestinal tract. Lymphatic follicles in the wall of the intestine, appendix.	LO 1 LO 2 LO 4	1	Work in small groups, including a list of histological specimens, micrographs	Practical Lesson Evaluation Checklist.
	Introduction to the clinic. SIWT/SIW 2.	Changes in appetite, taste perversion, bowel disorders (diarrhea,	Concept. Reasons. Symptoms. Details of symptoms, severity, relationship with food intake, quantity and	LO 1 LO 2 LO 4 LO 5	1/2	Work with electronic information resources. Preparation	Protection of presentations, crossword,



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		constipation, flatulence).	quality.			of a presentation, crossword, preparation of a mind map, compilation of test tasks.	mind map, test tasks
14 day	Anatomy. SIWT/SIW 6	Age-related features of the endocrine glands. Violation of the function of the endocrine glands.	Age-related features and dysfunction of individual endocrine glands.	LO 1 LO 2	2/5	Consultation on the most difficult issues of the curriculum when performing SRO, work with educational literature, delivery of SRO in the form of: -Description of the anatomical preparation on the anatomical panel "Pirogov" -presentation	Evaluation sheets for certain forms of the completed task
	Biochemistry Practical lesson 3	The role of the liver in metabolism.	The role of the liver in metabolism. Detoxifying function of the liver.	LO 1 LO 2	1	Witheminar, situational tasks, testing	Checklist
	Basics of Radiology Practical Lesson 3	Radiology of the duodenum Plain radiography of the duodenum Noah of the intestine. Radiographer A barium	Radial anatomy of the duodenum. Injection of contrast agents. Anatomical and radiological features of the duodenum. Plain radiography of the duodenum. Radiography with	LO 2 LO 5	1	Discussion, work with the provided radiological images	Interviewing, description of images, solving test tasks, solving crossword



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		<p>contrasting barium. Double contrastinanie. CT scan of the duodenum. Magnetic resonance imaging of the duodenum. Radionuclide diagnostics. Ultrasound. Preparation of patients for examinations.</p>	<p>barium contrast. Double contrast. CT scan of the duodenum. Magnetic resonance imaging of the duodenum. Radionuclide diagnostics. Ultrasound. Preparation of patients for examinations.</p>				<p>s, working with radiological images.</p>
	<p>Fundamentals of Radiation Diagnostics SIWT/SIW 2</p>	<p>Radiological diagnostics of Hirschsprung's disease. Irrigoscopy, research methodology.</p>	<p>Radiationdiagnosis of Hirschsprung's disease. Irrigoscopy, research methodology.</p>	<p>LO 2 LO 5</p>	<p>1/3</p>	<p>Preparation of presentations, compilation of crosswords, test tasks, situational tasks, work with radiological images</p>	<p>Protection of presentations, solving crossword puzzles, test tasks, situational tasks, working with radiological images.</p>
	<p>Introduction to the clinic. Practical lesson 3.</p>	<p>First aid in case of food poisoning. Preparing the patient for gastric surgeries.</p>	<p>Reasons. Symptoms. Complications. Gastric lavage technique. Preparing the patient for surgery. Enema.</p>	<p>LO 1 LO 4 LO 5</p>	<p>1</p>	<p>Performing test tasks, solving clinical problems, performing practical work</p>	<p>Performing test tasks, solving clinical problems. Gastric lavage method checklist.</p>
<p>15 day</p>	<p>Anatomy. Practical lesson 8.</p>	<p>Endocrine glands of adrenal, mesodermal x and etodermalx groups:</p>	<p>Glands of the drain group: adrenal glands, paraganglia. Mesodermal glands: testicle, ovaries. Endodermal glands of</p>	<p>LO 1 LO 2</p>	<p>2</p>	<p>Work in small groups with anatomical specimens, torsos,</p>	<p>Checklist of oral interview; Checklist for solving</p>



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	structure, functions.	the intestinal tube: pancreas. Blood supply, venous and lymphatic outflow, innervation.			models, tables, tablets, posters, on an interactive panel of "pies" And/or solving test tasks and situational tasks.	situational problems; Checklist for completing test tasks
Histology Practical lesson 8	Liver.	Structure of the "classical" and portal lobules of the liver. Peculiarities of blood supply. Gallbladder.	LO 1 LO 4	1	Work in small groups, including a list of histospecimens, micrographs	Practical Lesson Evaluation Checklist.
Biochemistry. SIWT/SIW 3.	Hormonal regulation of metabolism and functions.	Hormonal regulation of metabolism and functions. Cortisol and the regulation of gluconeogenesis. Insulin and glucagon	LO 1 LO 3	1/2	Presentation, analysis of scientific articles on the subject	Checklist for SIW evaluation, assessment of understanding, ability to analyze a scientific article and the formation of certain scientific concepts
Fundamentals of Radiation Diagnostics SIWT/SIW 3	Principles of radiation diagnostics of the digestive system.	Hormonal regulation of metabolism and functions. Cortisol and regulation of gluconeogenesis. Insulin and glucagon Radiation diagnostics in gastroenterology. The main methods of visual diagnostics of digestive organs. Introduction of	LO 1 LO 2 LO 3 LO 4 LO 5	1/2	Preparation of presentations, compilation of crosswords, test tasks, situational tasks, work with radiological	Protection of presentations, solving crossword puzzles, test tasks, situational tasks, working



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			radiopaque substances.			images	with radiologic al images.
	Introduction to the clinic. SIWT/SIW 3.	Clinical and laboratory characteristics of the main clinical syndromes of the endocrine system.	The algorithm of examination of the thyroid gland. Methods of examination of the thyroid gland. Inspection. Primary examination of the thyroid gland	LO 1 LO 2 LO 3 LO 4 LO 5	1/3	Work with electronic information resources. Preparation of a presentation, crossword, preparation of a mind map, compilation of test tasks.	Protection of presentations, crossword, mind map, test tasks
16 day	Physiology SIWT/SIW 4	Midterm control - II.	Consolidation of the material covered on the topics of lectures, practical classes, SIWT and SIW.	LO 1	3/6	Written-resolution of integrated situational tasks	Checklist for the implementation of integrated situational tasks
	Biochemistry 4 Practical lesson.	Biochemistry of hormones.	General Aspects of Endocrine Regulation. Classification of endocrine hormones.	LO 1 LO 2	1	Witheminar, situational tasks, testing.	Checklist
	Fundamentals of Radiation Diagnostics Practical Lesson 4	X-ray diagnostics of the large and small intestine. Plain X-ray of the large and small intestine. Radiography with barium contrast. Double contrasting. CT scan of the large and small intestine. Magnetic resonance imaging.	Radial anatomy of the large and small intestine. Injection of contrast agents. Anatomical and radiological features of the large and small intestine. Barium contrast radiography. Double contrast. CT scan of the large and small intestine. Magnetic resonance imaging. Radionuclide diagnostics. Ultrasound. Preparation of patients	LO 2 LO 5	1	Discussion, work with the provided radiological images	Interviewing, description of images, solving test tasks, solving crosswords, working with radiologic al images.



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		Radionuclide diagnostics. Ultrasound. Preparation of patients for examinations.	for examinations.				
	Introduction to the clinic. Practical lesson 4.	Main complaints in diseases of the endocrine system, their diagnostic significance. Medical history, hereditary predisposition.	Complaints of endocrine system diseases (increased mental excitability, sleep disorders, irritability, sweating, palpitations, frequent bowel movements, muscle weakness, drowsiness, lethargy, chilliness, itchy skin, thirst, increased appetite, weight loss). Anamnesis of the disease, identification of causes (mental traumas, fear, hormonal changes of the body during puberty, childbirth, menopause). Hereditary predisposition.	LO 1 LO 2 LO 5	1	Performing test tasks, solving clinical problems, performing practical work	Performing test tasks, solving clinical problems.

9. Teaching and Learning Methods		
9.1	Lecture	Introductory, overview (Answers to security questions) Overview and illustration Overview lecture. Feedback (questions)
9.2	Practical exercises	Work in small groups with anatomical specimens, torsos, models, tablets, posters, on the interactive panel "Pirogov", about discussing the main issues of the topic, performing practical work, with seminar, situational tasks, testing, work in small groups, a list of histopreparations, microphotographs, discussion, work with the provided radiological images, in the performance of test tasks, solving clinical problems, practical skills
9.3	SIWT/SIW	Consultation on the most complex issues of the curriculum in the implementation of SIW, work with educational literature, passing SIW in the form of: - <i>Description of the anatomical specimen on the anatomical table "Pirogov" - presentation</i> Preparation and defense of abstracts and presentations Work in small groups, compilation of glossaries, analysis of scientific articles on the topic, compilation of crosswords, test tasks, situational



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		tasks, work with radiological images, work with electronic information resources, preparation of an intellectual map.				
9.4	Boundary control	Testing at CTIC				
10.	10.1 Criteria for evaluating the results of the discipline					
10.1	№	Name of learning outcomes	Unsatisfactory - Unsatisfactory	Satisfying	Good	Very good
	LO 1	Discovers and understands the morphofunctional and biochemical features of the digestive and endocrine systems, the anatomy of the digestive organs and the endocrine system by studying visual research methods	1. Does not know and understand the morphofunctional and biochemical features of the digestive and endocrine systems, the anatomy of the digestive organs and the endocrine system	1. Makes gross mistakes in describing the morphofunctional and biochemical features of the digestive and endocrine systems, the anatomy of the digestive organs and the endocrine system	1. Explains the morphofunctional and biochemical features of the digestive and endocrine systems, the anatomy of the digestive organs and the endocrine system by studying visual research methods	1. Demonstrates knowledge of the morphofunctional and biochemical features of the digestive and endocrine systems, the anatomy of the digestive organs and the endocrine system by studying visual research methods
	LO 2	Shows readiness to collect and analyze the patient's complaints, medical history, examination results, laboratory, instrumental and other examinations in order to recognize the condition or establish the presence or absence of the disease for monitoring and care.	1. Does not know the methods of collecting and analyzing the patient's complaints, the results of examination, laboratory, instrumental and other examinations	1. Makes mistakes in the collection of the patient's anamnesis and complaints, the results of examination, laboratory, instrumental and other examinations in order to recognize the condition	1. Describes the collection and analysis of the patient's complaints, medical history, examination results, laboratory, instrumental and other examinations in order to recognize the condition or establish the presence or absence of the disease for the purpose of monitoring and	1. Demonstrates knowledge of collecting and analyzing the patient's complaints, medical history, examination results, laboratory, instrumental and other examinations in order to recognize the condition or establish the presence or absence of the disease for monitoring and



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					caring for patients.	caring for patients.
LO 3	Applies knowledge of the structure and topography of organs and systems to master the skills of physical examination and first aid.	1. Does not know the structure and topography of organs and systems to master the skills of physical examination	1. Does not fully describe the structure and topography of organs and systems for mastering the skills of physical examination	1. Explains the structure and topography of organs and systems for mastering the skills of physical examination and first aid.	1. Applies knowledge of the structure and topography of organs and systems to master the skills of physical examination and first aid.	
LO 4	Analyses the information obtained in the course of histological and biochemical observations, determines their significance for the characterization of the state of the body.	1. Does not know the methods of histological and biochemical observations to characterize the state of the organism.	1. Does not fully know the methods of histological and biochemical observations to characterize the state of the body.	1. Lists the information obtained in the course of histological and biochemical observations, determines its significance for the characterization of the state of the organism.	1. Freely demonstrates the information obtained in the course of histological and biochemical observations, determines its significance for the characterization of the state of the organism.	
LO 5	Compares the results of observations with the data obtained from modern sources of information and draws conclusions based on the results of laboratory tests;	1. Does not know the results of observations with data obtained from modern sources of information; 2. Does not draw conclusions based on the results of	1. Does not fully compare the results of observations with the data obtained from modern sources of information 2. Does not fully draw conclusions based on the results of laboratory tests;	1. Characterizes the results of observations with data obtained from modern sources of information; 2. Knows and draws conclusions based on the results of	1. Compares and analyzes the results of observations with the data obtained from modern sources of information; 2. Analyzes and demonstrates conclusions based on the	



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	laboratory tests;	laboratory tests;	results of laboratory tests;
10.2	Evaluation Criteria for Teaching Methods and Technologies		
	Checklist for a practical lesson		
Letter System Assessment	Digital Equivalent of Points	Percentage	Traditional Valuation
A	4,0	95-100	Very good
A -	3,67	90-94	
B +	3,33	85-89	Good
B	3,0	80-84	
B -	2,67	75-79	
C +	2,33	70-74	Satisfactorily
C	2,0	65-69	
C -	1,67	60-64	
D+	1,33	55-59	
D-	1,0	50-54	Not satisfactory
FX	0,5	25-49	
F	0	0-24	

Verbal Response

Form Control	Evaluation	Evaluation Criteria
Verbal Response	Very good Corresponds to the scores: 95-100 90-94	The student did not make any mistakes during the answer, was oriented in the theories, concepts and directions of the discipline being studied, gave them a critical assessment, and also used the scientific achievements of other disciplines.
	Good Corresponds to the scores: 85-89,80-84 75-79,70-74	The student did not make any gross mistakes during the answer, but made inaccuracies and non-fundamental mistakes, corrected by himself, and managed to systematize the program material with the help of the teacher.
	Satisfactorily Corresponds to the scores: 65-69,60-64 50-59	The student made fundamental mistakes during the answer, limited himself only to the educational literature indicated by the teacher, and experienced great difficulties in systematizing the material.
	Unsatisfactorily Corresponds to points 0-49	The student made gross mistakes during the answer, did not work through the main literature on the topic of the lesson, failed to use scientific terminology on histology and physiology.

Completing Test Tasks (Testing)



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Form Control	Evaluation	Evaluation Criteria
Completing Test Tasks (Testing)	Very good Matches points:95-100,90-94	The student completed 90-100% of the test tasks correctly.
	Good Corresponds to the scores: 85-89,80-84 75-79,70-74	The student completed 75-89% of the test tasks correctly.
	Satisfactorily Corresponds to the scores: 65-69,60-64,50-59	The student completed 50-74% of the test tasks correctly.
	Unsatisfactorily Corresponds to points 0-49	The student completed less than 50% of the test tasks correctly.

Solving situational (clinical) problems

Form Control	Evaluation	Evaluation Criteria
Solving situational problems	Very good Matches Points: 95-100 90-94	He took an active part in solvingsituational problems, showed original thinking, showed a deep knowledge of the material, and used the scientific achievements of other disciplines in the discussion.
	Good Corresponds to the scores: 85-89,80-84 75-79,70-74	He actively participated in the work, showed knowledge of the material, made non-fundamental inaccuracies or mistakes corrected by the student himself.
	Satisfactorily Corresponds to the scores: 65-69,60-64,50-59	When working in the group, he was passive, made inaccuracies and fundamental mistakes, experienced great difficulties in systematizing the material.
	Unsatisfactorily Corresponds to points 0-49	He did not take part in the work of the group, answering the teacher's questions, made fundamental mistakes and inaccuracies, did not use scientific terminology in his answers.

Scorecard

Practical Skills Assessment Criteria

Student's full name _____

№	Criteria for evaluating steps	Level			
		Very good	Good	Satisfied	Unsat isfied
		70-89	50-69		



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		90-100			0-49
1.	Correct location of the organ on the torso, skeleton and on a living person	18-20	14-17,8	10-13,8	0-9,8
2.	The student should give the full name of the organ and describe its general structure	18-20	14-17,8	10-13,8	0-9,8
3.	The student must name the structural elements of the organ.	18-20	14-17,8	10-13,8	0-9,8
4.	After listing the structural elements of the organ, the student should point to the poster, tablets and give a description of it.	18-20	14-17,8	10-13,8	0-9,8
5.	During the description of the organ and its structural elements, the student should talk about the age-related features of the organ	18-20	14-17,8	10-13,8	0-9,8

The maximum score is 100. Total Points _____ Teacher's Signature _____

Scorecard

Criteria for assessing the implementation of the scheme (arterial pathways)

Student's full name _____

№	Criteria for evaluating steps	Level			
		Very good 90-100	Good 70-89	Satisfied 50-69	Unsatisfied 0-49
1.	The student must correctly find and draw a diagram of the course of the arteries	18-20	14-17,8	10-13,8	0-9,8
2.	In Latin, the full name of the arteries should be given.	18-20	14-17,8	10-13,8	0-9,8
3.	The patient must correctly indicate the topography, the projection of the arteries	18-20	14-17,8	10-13,8	0-9,8
4.	Must enumerate all branches of the arteries	18-20	14-17,8	10-13,8	0-9,8
5.	The learner should indicate the areas of blood supply	18-20	14-17,8	10-13,8	0-9,8

The maximum score is 100. Total Points _____ Teacher's Signature _____

Scorecard

Criteria for Evaluating the Performance of the Circuit (Nerve Paths)

Student's full name _____

№	Criteria for evaluating steps	Level
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		Very good 90-100	Good 70-89	Satisfied 50-69	Unsatisfied 0-49
1.	The student must correctly draw a diagram of the course of the nerves	18-20	14-17,8	10-13,8	0-9,8
2.	The full name of the nerves should be given in Latin.	18-20	14-17,8	10-13,8	0-9,8
3.	The student must correctly indicate the topography, the projection of the nerves	18-20	14-17,8	10-13,8	0-9,8
4.	Must enumerate all the branches of the nerves	18-20	14-17,8	10-13,8	0-9,8
5.	The learner should indicate the areas of innervation	18-20	14-17,8	10-13,8	0-9,8

Maximum score – 100. Total points _____ Teacher's signature _____

Scorecard

Criteria for evaluating a presentation in multimedia format

Student's full name _____

№	Criterion	Level, score			
		Very good 90-100	Good 70-89	satisfied 50-69	Unsatisfied 0-49
1.	The presence of a title slide with a title, a presentation plan, a sufficient number of slides, a list of references and Internet sources.	9-10	7-8,9	5-6,9	0-4,9
2.	Relevance of the content of the presentation to the topic and tasks.	9-10	7-8,9	5-6,9	0-4,9
3.	Arrange the slides in a logical sequence.	9-10	7-8,9	5-6,9	0-4,9
4.	Style of presentation of the material (conciseness, clear wording, structure).	9-10	7-8,9	5-6,9	0-4,9
5.	Use of modern sources of information in sufficient quantities.	9-10	7-8,9	5-6,9	0-4,9
6.	Ability to summarize material, draw clear and concise conclusions.	9-10	7-8,9	5-6,9	0-4,9
7.	The level of orientation in the presentation material.	9-10	7-8,9	5-6,9	0-4,9
8.	Ability to report clearly, competently, consistently.	9-10	7-8,9	5-6,9	0-4,9
9.	Ability to defend one's position and ability to respond constructively to criticism.	9-10	7-8,9	5-6,9	0-4,9
10	Quality of slide design (colorfulness, clarity, etc.).	9-10	7-8,9	5-6,9	0-4,9

The maximum score is 100. Total Points _____ Teacher's Signature _____

Scorecard

X-ray Description Evaluation Criteria



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Student's full name _____

№	Criteria for evaluating steps	Level			
		Very good 90-100	Good 70-89	Satisfied 50-69	Unsatisfied 0-49
1.	The learner must correctly identify the field of study	22,5-25	17,5-22,25	12,5-17,25	0-12,25
2.	The student must correctly determine the projection of the image (front, side, back)	22,5-25	17,5-22,25	12,5-17,25	0-12,25
3	The patient must correctly indicate the anatomical structures of the bone or joints to be examined	22,5-25	17,5-22,25	12,5-17,25	0-12,25
4.	The student should be able to determine the age characteristics of the organ being examined.	22,5-25	17,5-22,25	12,5-17,25	0-12,25

The maximum score is 100. Total Points _____ Teacher's Signature _____

Checklist for the assessment of the practical lesson on the basics of histology

№	Evaluation Criteria	Level			
		Very good	Good	Satisfied	Unsatisfied
1	Answers the questions of the individual Quiz test	40	28	20	0
2	Responds to oral questioning (small groups)	20	14	10	0
3	Populates tables	20	14	10	0
4	Performs situational tasks and	20	14	10	0
	Total:	100	70	50	0

Scorecard

X-ray Description Evaluation Criteria

Student's full name _____

Item No.	Criteria for evaluating steps	Level			
		Very good 90-100	Good 70-89	Satisfied 50-69	Unsatisfied 0-49
1.	The learner must correctly identify the field of study	22,5-25	17,5-22,25	12,5-17,25	0-12,25
2.	The student must correctly determine the projection of the image (front, side, back)	22,5-25	17,5-22,25	12,5-17,25	0-12,25
3	The patient must correctly indicate the anatomical structures of the bone or joints to be examined	22,5-25	17,5-22,25	12,5-17,25	0-12,25
4.	The student should be able to determine the age characteristics of the organ being examined.	22,5-25	17,5-22,25	12,5-17,25	0-12,25

The maximum score is 100. Total Points _____ Teacher's Signature _____



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Written response to the questions in this activity

№	Evaluation Criteria	Points
1	The student showed original thinking, showed a deep knowledge of the material, and used scientific achievements of other disciplines when answering. Used scientific terminology.	27-30
2	The student showed knowledge of the material, made non-fundamental inaccuracies, corrected by the student himself. Used scientific terminology.	21-26
3	The student made inaccuracies and non-fundamental mistakes during the answer, used scientific terminology, experienced great difficulties in systematizing the material, and needed the help of a teacher.	15-20
4	The student did not answer the teacher's questions, made fundamental mistakes and inaccuracies, and did not use scientific terminology in his answers.	0-14

Performing Laboratory Work

№	Evaluation Criteria	Points
1	Completed practical and laboratory work in a timely manner and without any errors and submitted reports on them, took an active part in the discussion of the results of the work, made reasonable conclusions, and showed original thinking	27-30
2	He completed practical and laboratory work in a timely manner and submitted reports on them without fundamental remarks, took an active part in the discussion of the results of work	21-26
3	Completed practical and laboratory work in a timely manner and submitted reports on them. During the work, he was not active, he needed the help of a teacher	15-20
4	He did not submit reports on practical work in a timely manner, made fundamental mistakes in their implementation. Did not complete all the practical work provided for by the program. Did not take part in the discussion of the results of the work.	0-14

Practical skills

Form of control	Evaluation	Evaluation Criteria
Practical skills	Very good Meets points: A (4.0; 95-100%) A- (3.67; 90-94%)	The student has excellent practical skills : he knows the method of performing practical skills quite accurately, he has enough skills in patient care.
	Good Meets scores: B+ (3.33; 85-89%)	The student has good practical skills: he knows the method of performing practical skills inaccurately, he has enough skills in patient care.



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	B (3.0; 80-84%) B- (2.67; 75-79%) C+ (2.33; 70-74%)	
	Satisfactory Meets points: C (2.0; 65-69%) C- (1.67; 60-64%) D+ (1,0; 50-54%)	The student has satisfactory practical skills: he knows the basic provisions of the methodology for performing practical skills, but performs the skills of caring for a patient with gross errors.
	Unsatisfactory Meets FX scores (0.5; 25-49%) F (0; 0-24 %)	The student does not have a sufficient level of practical skills (does not know and does not know how to apply the skills of nursing).

Checklist for SIW evaluation

Scorecard

Criteria for evaluating a presentation in multimedia format

Student's full name _____

№	Criterion	Level, score			
		Very good 90-100	Good 70-89	satisfied 50-69	Unsatisfied 0-49
1.	The presence of a title slide with a title, a presentation plan, a sufficient number of slides, a list of references and Internet sources.	9-10	7-8,9	5-6,9	0-4,9
2.	Relevance of the content of the presentation to the topic and tasks.	9-10	7-8,9	5-6,9	0-4,9
3.	Arrange the slides in a logical sequence.	9-10	7-8,9	5-6,9	0-4,9
4.	Style of presentation of the material (conciseness, clear wording, structure).	9-10	7-8,9	5-6,9	0-4,9
5.	Use of modern sources of information in sufficient quantities.	9-10	7-8,9	5-6,9	0-4,9
6.	Ability to summarize material, draw clear and concise conclusions.	9-10	7-8,9	5-6,9	0-4,9
7.	The level of orientation in the presentation material.	9-10	7-8,9	5-6,9	0-4,9
8.	Ability to report clearly, competently, consistently.	9-10	7-8,9	5-6,9	0-4,9

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9.	Ability to defend one's position and ability to respond constructively to criticism.	9-10	7-8,9	5-6,9	0-4,9
10	Quality of slide design (colorfulness, clarity, etc.).	9-10	7-8,9	5-6,9	0-4,9

The maximum score is 100. Total Points _____ Teacher's Signature _____

Analysis of scientific articles:

№	Evaluation Criteria	Points
1	The work was done neatly and handed over, and on time, written independently on at least 3 pages of printed text. Thoughts on the problem are presented clearly and reasonably. In the text of the work, references to the authors are indicated everywhere. When defending a work, the text does not read, but tells. Confidently and accurately answers all questions asked. To work with the help of articles no more than 5 years old.	27-30
2	The work was done neatly and delivered, and on time, written independently on at least 3 pages of printed text. Thoughts on the problem are presented clearly, but without arguments. In the text of the work, references to the authors are indicated everywhere. When defending a work, the text does not read, but tells. When answering questions, he makes non-fundamental mistakes. To work with us, we use articles no more than 5 years old.	21-26
3	The work was done neatly and handed over on time, written independently on at least 2 pages of printed text. Thoughts on the problem are presented scattered, without arguments. In the text of the work, references to the authors are not indicated everywhere. When defending a work, the text reads. Answers questions hesitantly, makes fundamental mistakes. To work, use articles that are more than 5 years old.	15-20
4	The work is written on less than 2 printed texts. Thoughts are presented scattered, without arguments. There are no references to the authors in the text of the work. When defending a work, the text reads. When answering questions, he makes gross mistakes, does not navigate the material. Articles from more than 5 years ago were used for the work.	0-14

Preparation of a written creative work (essay)

№	Evaluation Criteria	Points
1	The content of the work is fully consistent with the topic; The topic is revealed in a deep and well-reasoned manner. With triple in composition, logical and consistent presentation of thoughts. The problem of the essay is clearly formulated. There are no factual errors. The conclusion contains conclusions that logically follow from the content of the main part.	27-30
2	The topic is covered quite fully and convincingly with minor deviations from it. A clearly formulated thesis that corresponds to the topic of the essay. In the main part, the thesis put forward is logical, connected, but not fully proved, there are isolated factual inaccuracies.	21-26



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3	A correct, but one-sided or incomplete answer to the topic is given. Deviations from it or individual errors in the presentation of factual material are omitted. The material is presented quite logically, but there are some violations of the sequence of expression of thoughts. The conclusions do not fully correspond to the content of the main part	15-20
4	The topic is not fully covered, which is indicative of superficial knowledge. It is characterized by the random arrangement of the material, the lack of connection between the parts. It is characterized by the presence of gross speech errors.	0-14

Form Control	Evaluation	Evaluation Criteria
Work with the provided images	Very good Corresponds to the estimates: A (4.0; 95-100%); A- (3.67; 90-94%)	The optimal method of X-ray examination is chosen. It defines a complete list of indications and contraindications for X-ray examination. It tells and shows the X-ray anatomy of the examined area, the projection of the image.
	Good Corresponds to the estimates: B+ (3.33; 85-89%); B (3.0; 80-84%); B- (2.67; 75-79%); C+ (2.33; 70-74%)	The optimal method of X-ray examination is chosen. In determining the indications and contraindications and for radiological examination, it makes minor errors. Determines the X-ray anatomy of the examined area, the projection of the image.
	Satisfactorily Corresponds to the estimates: C (2.0; 65-69%); C- (1.67; 60-64%); D+ (1.0; 50-54%)	The optimal method of X-ray examination is chosen. In determining the indications and contraindications and in the conduct of X-ray examination, he makes gross mistakes. Determines the X-ray anatomy of the examined area incompletely.
	Unsatisfactorily Corresponds to the assessment: FX (0.5; 25-49%); F (0; 0-24%)	Can't find the optimal method of X-ray examination. In determining the indications and contraindications, and in conducting a radiological examination, he makes gross mistakes. When determining the X-ray anatomy and projection of the image, he makes gross mistakes.

Form of control	Evaluation	Evaluation Criteria
Crossword	Very good Corresponds to the estimates: A (4.0; 95-100%); A- (3.67; 90-94%)	It is placed if the student has composed 7 or more words, the words are joined 4 or more times, there are no mistakes in the crossword questions, the questions are composed correctly, logically and predetermine the necessary answer, the design meets the requirements.
	Good Corresponds to the estimates: B+ (3.33; 85-89%); B (3.0; 80-84%); B- (2.67; 75-79%);	It is placed if the student has made a crossword of 7 words, the words are joined 3 times, there are no fundamental errors in the crossword questions, the questions are composed correctly, but there are small inaccuracies, the design meets the requirements.



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C+ (2.33; 70-74%);	
Satisfactorily Corresponds to the estimates: C (2.0; 65-69%); C- (1.67; 60-64%); D+ (1,0; 50-54%); D-(1,0; 50-54%)	It is placed if the student has made a crossword of 7 words, the words are joined 2 times, there are inaccuracies and mistakes in the crossword questions.
Unsatisfactorily Conforms to the assessment FX (0.5; 25-49%); F (0; 0-49%)	It is placed if the student has made a crossword puzzle of less than 7 words, the words are joined less than 2 times (or not joined); There are fundamental, gross mistakes in the crossword puzzle questions.

Checklist for SIW evaluation

№	Evaluation Criteria	Level			
		Very good	Good	Satisfied	Unsatisfie d
1	Assessment of histological microspecimen protection	40	28	20	0
2	Electron Micrograph Security Assessment	40	28	20	0
3	Evaluation of the glossary	20	14	10	0
	Total:	100	70	50	0

Preparation and protection of histological microspecimens and micrographs

Form Control	Evaluation	Evaluation Criteria
Preparation of presentation of histological microslides and microphotographs and its protection.	Very good Corresponds to the scores: 95-100 90-94	The student prepared a presentation of 3 microslides and 3 microphotographs on the topic at the appointed time, independently, accurately, with at least 6 content tables, using at least 5 literary sources and the presence of a detailed plan, provided schemes, tables and figures corresponding to the topic, demonstrated deep knowledge of the topic during the defense and accurately answered all the questions asked.
	Good Corresponds to the scores: 85-89 80-84 75-79 70-74	The student prepared a presentation of 3 microslides and 3 microphotographs on the topic at the appointed time, independently, accurately, with at least 6 informative tables, using at least 5 literary sources and the presence of a detailed plan, provided schemes, tables and figures corresponding to the topic, demonstrated good knowledge of the topic during the defense, made non-fundamental mistakes when answering questions.
	Satisfactorily Corresponds to the scores: 65-69 60-64 50-54	The student prepared a presentation of 3 microslides and 3 microphotographs on the topic at the appointed time, independently, but inaccurately, with a volume of at least 6 meaningful tables, using less than 5 literary sources and the presence of an undeveloped plan, provided an insufficient number of schemes, tables and figures corresponding to the topic, hesitantly answered questions during the defense, made fundamental mistakes.
	Unsatisfactorily	The student did not prepare a presentation of 3 microslides and 3



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Corresponds to points 0-49	microphotographs on the topic at the appointed time, or prepared it on time, but not independently, inaccurately, with less than 6 content tables, without indicating literary sources, in the absence of a plan, when answering the questions, made gross mistakes or could not answer the questions and did not defend the work.
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Securing Your Presentation

Form of control	Evaluation	Evaluation Criteria
Securing Your Presentation	Excellent Meets points: A (4.0; 95-100%) A- (3.67; 90-94%)	The student prepared a presentation on the topic on time, independently, accurately, with a volume of at least 20 concise and meaningful slides, using at least 5 literary sources and the presence of a detailed plan, provided diagrams, tables and figures corresponding to the topic, demonstrated deep knowledge of the topic during the defense and accurately answered all the questions asked.
	Good Meets scores: B+ (3.33; 85-89%) B (3.0; 80-84%) B- (2.67; 75-79%) C+ (2.33; 70-74%)	The student prepared a presentation on the topic on time, independently, accurately, with a volume of at least 20 concise and meaningful slides, using at least 5 literary sources and the presence of a detailed plan, provided schemes, tables and figures corresponding to the topic, demonstrated good knowledge of the topic during the defense, made non-fundamental mistakes when answering questions.
	Satisfactory Meets points: C (2.0; 65-69%) C- (1.67; 60-64%) D+ (1.0; 50-54%)	The student prepared a presentation on the topic on time, independently, but inaccurately, with a volume of at least 20 meaningless slides, using less than 5 literary sources and the presence of an undeveloped plan, provided an insufficient number of schemes, tables and figures corresponding to the topic, hesitantly answered questions during the defense, made fundamental mistakes
	Unsatisfactory Meets FX scores (0.5; 25-49%) F (0; 0-24 %)	The student did not prepare a presentation on the topic on time, or prepared it on time, but not independently, inaccurately, with less than 20 insubstantial slides, without indicating literary sources, in the absence of a plan, when answering questions, made gross mistakes or could not answer questions and did not defend a presentation on the topic.

Compilation of a glossary

Form Control	Evaluation	Evaluation Criteria
Compilation of a glossary	Very good Corresponds to the scores: 95-100; 90-94	The student compiled a glossary on the topic on time, independently, accurately, without errors, with a volume of at least 10 terms, correctly formulated the concepts, presented a translation into Kazakh and English.



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Good Corresponds to the scores: 85-89; 80-84; 75-79; 70-74;	The student compiled a glossary on the topic on time, independently, accurately, with a volume of at least 10 terms, correctly formulated the concepts, made non-fundamental mistakes when compiling the glossary, presented a translation into Kazakh and English.
Satisfactorily Corresponds to the scores: 65-69; 60-64; 50-54	The student compiled a glossary on the topic on time, independently, but inaccurately, with a volume of less than 10 terms, made fundamental mistakes when compiling the glossary, submitted a translation into Kazakh and English.
Unsatisfactorily Corresponds to the points 0-49	The student did not compile a glossary on the topic in the prescribed time, or compiled it on time, but not independently, inaccurately, with a volume of less than 10 terms, on the topic, when compiling the glossary, made gross mistakes, did not submit a translation into Kazakh and English.

Preparing a Mind Map

Form of control	Evaluation	Evaluation Criteria
Preparing a Mind Map	Excellent Meets points: A (4.0; 95-100%) A- (3.67; 90-94%)	The mind map is made accurately, carried out on time, made independently using at least 5 literary sources. Diagrams, tables and figures corresponding to the topic are provided. When defending, the material is not read, but told. Confidently and accurately answers all questions asked.
	Good Meets scores: B+ (3.33; 85-89%) B (3.0; 80-84%) B- (2.67; 75-79%) C+ (2.33; 70-74%)	The mind map was made accurately and carried out on time, made independently using at least 4 literary sources. Diagrams, tables and figures corresponding to the topic are provided. When defending, the material is not read, but told. When answering questions, he makes non-fundamental mistakes.
	Satisfactory Meets points: C (2.0; 65-69%) C- (1.67; 60-64%) D+ (1.0; 50-54%)	The mind map was made accurately and carried out on time, made independently using at least 3 literary sources. Diagrams, tables and figures corresponding to the topic are provided. When defending, the material is not read, but told. Confidently and accurately answers all questions asked. When defending, the text reads. Hesitantly answers questions, makes fundamental mistakes.
	Unsatisfactory Meets FX scores (0.5; 25-49%) F (0; 0-24 %)	The mind map is made inaccurately and not delivered on time, not written independently using less than 3 literary sources. When defending, the text reads. When answering questions, he makes gross mistakes, does not know the material.



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Preparation of test tasks

Form of control	Evaluation	Evaluation Criteria
Preparation of test tasks	Excellent Meets points: A (4.0; 95-100%) A- (3.67; 90-94%)	Test tasks contain at least 20 questions. Delivered on time. The basis of the test is meaningful. The test tasks are formulated clearly, correctly, and concretely. Uniform and adequate answer options. There is an algorithm for answers. Correct answers are marked.
	Good Meets scores: B+ (3.33; 85-89%) B (3.0; 80-84%) B- (2.67; 75-79%) C+ (2.33; 70-74%)	Test tasks contain at least 15 questions. Delivered on time. The basis of the test is meaningful. The test tasks are formulated clearly, correctly, and concretely. Different types of answers. There is an algorithm for answers. Correct answers are marked.
	Satisfactory Meets points: C (2.0; 65-69%) C- (1.67; 60-64%) D+ (1.0; 50-54%)	Test tasks contain 10 or fewer questions. Delivered on time. The basis of the test is meaningless. There are test tasks that are formulated unclearly, incorrectly, and not specifically. Different types of answers. There is an algorithm for answers. Not all correct answers are marked correctly.
	Unsatisfactory Meets FX scores (0.5; 25-49%) F (0; 0-24 %)	Test assignments were not submitted on time. The content of the test tasks does not correspond to the topic, the disclosure of the topic is weak, the quantitative requirements are not met.

Checklist for the assessment of boundary control

Evaluation Criteria for the Description of Histological Microspecimens

№	Evaluation Criteria	Level			
		Very good 90-100	Good 70-89	Satisfied 50-69	Unsatisfied 49 -0
1	Detects a microspecimen under a microscope	10,0	7,0	5,0	0
2	Records the staining of the microspecimen	10,0	7,0	5,0	0
3	Gives a complete description of the microspecimen	30,0	21,0	15,0	0
4	Records its function	10,0	7,0	5,0	0



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5	Sketches the microspecimen	40,0	28,0	20,0	0
	Total	100,0	70,0	50,0	0

Checklist for the assessment of boundary control

Evaluation Criteria for Description of Histological Micrographs

№	Evaluation Criteria	Level			
		Very good 90-100	Good 70-89	Satisfied 50-69	Unsatisfied 49 -0
1	Detects microphotography	10,0	7,0	5,0	0
2	Describes microphotography	40,0	28,0	20,0	0
3	Records its function	10,0	7,0	5,0	0
4	Sketches a micrograph	40,0	28,0	20,0	0
	Total	100	70	50	0

Checklist of border control

Form Control	Evaluation	Evaluation Criteria
Written Ticket Survey (Clinical Tasks) and Testing	Excellent Meets points: A (4.0; 95-100%) A- (3.67; 90-94%)	It is placed if the student did not make any mistakes or inaccuracies during the answer. Navigates the theories, concepts, and directions of the discipline being studied and critically evaluates them. 90-100% completion of test tasks.
	Good Meets scores: B+ (3.33; 85-89%) B (3.0; 80-84%) B- (2.67; 75-79%) C+ (2.33; 70-74%)	It is placed if the student did not make gross mistakes during the answer, made non-fundamental inaccuracies or fundamental mistakes corrected by the student himself, managed to systematize the program material with the help of the teacher. Completes test tasks by 70-89%.
	Satisfactory Meets points: C (2.0; 65-69%) C- (1.67; 60-64%) D+ (1,0; 50-54%)	It is placed in the event that the student made inaccuracies and unprincipled mistakes during the answer, limited himself only to the educational literature indicated by the teacher, experienced great difficulties in systematizing the material. Completes test tasks by 50-69%.
	Unsatisfactory Meets FX scores (0.5; 25-49%) F (0; 0-24 %)	It is given if the student made fundamental mistakes during the answer, did not work through the main literature on the topic of the lesson; does not know how to use the scientific terminology of the discipline, answers with gross stylistic and logical errors. Completes test tasks by 0-49%.



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11. Learning Resources

Electronic Resources

1. SKMA Repository <http://lib.ukma.kz/repository/>
2. Republican Interuniversity Electronic Library <http://rmebrk.kz/>
3. Student Advisor <http://www.studmedlib.ru/>
4. Ashyk kitapkhana [https:// kitap.kz/](https://kitap.kz/)
5. <http://t.me/AkzharkynGaukhar>
6. SmartMedic YouTube <https://goo.gl/zSzoZD>
1. https://meduniver.com/Medical/Video/predmet_metodi_istoria_gistologii.html
2. <https://meduniver.com/Medical/Video/citologia.html>
3. https://meduniver.com/Medical/Video/lekcia_po_citologii.html
4. https://meduniver.com/Medical/Video/lekcia_po_embriologii.html
5. https://meduniver.com/Medical/Video/razvitie_ploda_i_stroenie_placenta.html
6. https://meduniver.com/Medical/Video/gistologia_epitelialnix_tkanei.html
7. https://meduniver.com/Medical/Video/gistologia_rixloi_voloknistoi_tkani.html
8. https://meduniver.com/Medical/Video/gistologia_sobstvenno_soeditelnix_tkanei.html
9. https://meduniver.com/Medical/Video/osteogenez_i_xondrogenez.html
10. https://meduniver.com/Medical/Video/gistologia_epitelialnix_i_gelezistix_tkanei.html
11. SCMA website:
12. <https://ukma.kz>
13. Electronic Resources
14. Normal Physiology [Elektronnyi resurs]: uchebnik / pod red. B. I. Tkachenko. - 3rd ed., ispr. i dop. - Electron.textual data. (53.1 Mb). - Moscow: GEOTAR - Media, 2017. -el. Wholesale Disc
15. Adam physiology. Dinamikalyq syzbalar atlası [Elektronnyi resurs] : oqulyk / K. V. Sudakov [zh.b.] ; Qazaq til. Oud. M. K. Kankozha. - Electrotexual data (105Mb). - Moscow: GEOTAR - Media, 2017. - 464b. p.
16. Qalypty fiziologiya [Elektronnyi resurs] : oqylyq / qaz.til. Oud. F. A. Mindubaeva; Ed. by K. V. Sudakov. - Electrotexual data (1.42Mb). - Moscow: GEOTAR - Media, 2015. - 864 bet.e. wholesale. disk



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17. Kamkin, A. G. Atlas po fiziologii [Atlas of physiology]. In 2 vols. T. 1 [Elektronnyi resurs]: ucheb.posobie / A. G. Kamkin, I. S. Kiseleva. - Electrotexual data (58.4 Mb). - Moscow: GEOTAR - Media, 2010. - 408 p. (in Russian). Wholesale Disc

18. Kamkin, A. G. Atlas po fiziologii [Atlas of physiology]. In 2 vols. T. 2 [Elektronnyi resurs]: ucheb.posobie / A. G. Kamkin, I. S. Kiseleva. - Electrotexual data (58.7 Mb). - Moscow: GEOTAR - Media, 2012. - 448 p. (in Russian).

19. Physiology páninen elektronny oqú qúraly [Elektronnyi resurs] : meditsinalyq kollegderge arnalǵan oqú quraly / QR densaýlyq saqtaý mınıstrligi; Technical and technical equipment; Medicinalyq mamandyqtarǵa arnalǵan. -Electron. Textual Dan. (22.3 Mb). - Túrkiстан : OQO, 2012. -el. wholesale. Disk

1. Radiation diagnostics of respiratory and mediastinal diseases [Elektronnyi resurs]: uchebnoe posobie / E. B. Bekmuratov [i dr.] ; Ministry of Health and Social Development of the Republic of Kazakhstan. SKFA. - Electron. Textual Dan. - Shymkent: [b. i.], 2016. - e-mail wholesale CD-ROM(8.91Mb)

2. Sáuleli diagnostika [Elektronnyi resurs] :oqúlyq / qazaqtil. Oud. A. B. Akhmetbaeva; Ed. Basq. G. E. Trufanov. -Electron. Textual Dan. (421Mb). - Moscow: GEOTAR - Media, 2014. - 576b. p.

3. Pathomorphology and radiodiagnostics of some non-inflammatory lung diseases in premature newborns
Serikbay M.K. , 2020/<https://aknurpress.kz/login>

4. Differential diagnosis and treatment of tuberculosis in adults and children.Bekembayeva G.S., Zhandarkulov A.A., 2018/<https://aknurpress.kz/login>

5. Diagnostics and treatment of respiratory diseases.
Imangazinova S.S., 2016/<https://aknurpress.kz/login>

6. Radiation Therapy: Textbook. Ed. by G.E. Trufanov. - 3rd ed., revised and supplemented, Moscow: GEOTAR-Media, 2018. - 484 p. <http://rmebrk.kz>

- lib.ukma.kz
- www.aknurpress.kz.
- <https://www.youtube.com/channel/UC2KQ2vGectAWstvVXKUL2Og>

1. Datkhaev, U. M. Kommunikativnye skilly [Elektronnyi resurs]: uchebnik / U. M. Datkhaev, M. A. Asimov, G. Zh. Umurzakhova. - Electron. Textual data. (5.21 MB). - Almaty: Evero, 2016. - 256 p. (in Russian). wholesale. Disc (CD-ROM)

2. Asimov, A. A. Kommunikativtik daǵdylyar [Elektronnyi resurs] : oqúlyk / M. A. Asimov, A. A. Sultanbekov. - Electron. Textual data. (7.30MB). - Almaty: Evero, 2016. - 260 bets. el. wholesale. Disc (CD-ROM).

3. Adilova, L. M. Meyirgerdiń manipulalyq áreketiniń algoritmderi [Elektronnyi resurs] : oqú quraly = Algoritm sestrinskikh manipulatsii : ucheb. posobie - M. : "Litterra", 2016. - 248p.

4. Communicative language. Communication skills. Communication skills. Almaty, Evero LLP, 118 https://www.elib.kz/ru/search/read_book/601/

5. Dáriger mamandyǵyna kirispe. Clinic, Ethics and Communication. Asimov M.A., Orazbakova G.O., Madalieva S.Kh., Bagiyarova F.A., 2017/ [https:// aknurpress.kz/login](https://aknurpress.kz/login)

6. Jedel meditsinalyq járdem Kanybekov A., 2017 /<https://aknurpress.kz/login>

7. Algorithm of diagnosis and emergency care Alpysova A.R., 2015/<https://aknurpress.kz/login>



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E-Textbooks	<ol style="list-style-type: none"> 1. Bilić, G . L. A human anatomist. Atlas. In 3 vols. T.1. Musculoskeletal system. Osteology. Syndesmology. Myology [Elektronnyi resurs] : uchebnik - M. : GEOTAR - Media, 2013. 2. Bilić, G . L. Human Anatomy. Atlas. In 3 vols. Vol. 2 [Elektronnyi resurs] : M. : GEOTAR - Media, 2013. 3. Bilić, G . L. Human Anatomy. Atlas. V. 3 t. T. 3 [Elektronnyi resurs] : uchebnik M. : GEOTAR - Media, 2013. 4. HumanAnatomy. In 2 vols. Vol. 1 [Elektronnyi resurs] : uchebnik M. : GEOTAR - Media, 2013. 5. HumanAnatomy. In 2 vols. Vol. 2 [Elektronnyi resurs] : uchebnik - M. : GEOTAR - Media, 2013. <ol style="list-style-type: none"> 1. Histology, Embryology, Cytology [Elektronnyi resurs]: uchebnik [Electronic resource]: textbook / ed. by Yu. - Electron. Textual data. (41.1Mb). - Moscow: GEOTAR - Media, 2016. - 800 p. (in Russian). 2. Histology. Complex Tests: Answers and Explanations [Elektronnyi resurs]: uchebnoe posobie / pod red. S. L. Kuznetsova. - Electron. Textual Dan. (41.1Mb). - Moscow: GEOTAR - Media, 2014. - 288 p. (in Russian). 3. Histology [Elektronnyi resurs]: uchebnoe posobie [Histologiya] [Elektronnyi resurs]: uchebnoe posobie [Histologiya] [Elektronnyi resurs]: uchebnoe posobie [Histologiya] [Elektronnyi resurs]: uchebnoe posobie [Electronic resource]: textbook / S. (39.6Mb). - Moscow: GEOTAR - Media, 2014. - 184 p. 4. Histology. 1 – bólim [Elektronnyi resurs] :oqýlyq. - Electron. Textual data. (13.1 MB). - [B. m. : b. i.]. -el. wholesale. Disc (CD-ROM). 5. Histology. Atlas for Practical Classes [Elektronnyi resurs]: uchebnoe posobie / N. V. Boychuk [i dr.]. - Electron. Textual Dan. (131 MB). - Moscow: Publishing Group "GEOTAR-Media", 2010. - 160 p. (in Russian). wholesale. CD-ROM. <ol style="list-style-type: none"> 1. SKMA Repository http://lib.ukma.kz/repository/ 2. Republican Interuniversity Electronic Library http://rmebrk.kz/ 3. Student Advisor http://www.studmedlib.ru/ 4. Open University of Kazakhstanhttps://openu.kz/kz 5. Law (access in the reference and information sector) https://zan.kz/ru 6. Paragraph https://online.zakon.kz/Medicine/ 7. Scientific Electronic Library https://elibrary.ru/ 8. Ashyk kitapkhana https://kitap.kz/ 9. Thomson Reuters «Web of Science» www.webofknowledge.com 10. Scopus https://www.scopus.com/ 11. Sciencedirect http://www.sciencedirect.com/ 12. Biochemistry [Elektronnyi resurs]: uchebnik dlya vuzov [Biochemistry]: textbook for
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	<p>higher education institutions / ed. by E. S. Severin. - 5th ed. , ispr. and additional - Electron. Textual Dan. (66.3 Mb). - Moscow: GEOTAR - Media, 2013. - 768 p. (in Russian). wholesale. Disc (CD-ROM).</p> <p>13. Biochemistry [Elektronnyi resurs]: uchebnik [Electronic resource]: textbook / edited by E. S. Severin. - 5th ed. -Electron. Textual Dan. (66.4 MB). - Moscow: Publishing Group "GEOTAR-Media", 2011. - 768 p. (in Russian). wholesale. Disc (CD-ROM)</p> <p>14. Tapbergenov S.O. Medical and Clinical Biochemistry /Tapbergenov S.O., 2020.-512 p. https://www.elib.kz/ru/search/read_book/429/1. Radiation diagnostics of respiratory and mediastinal diseases [Elektronnyi resurs]: uchebnoe posobie / E. B. Bekmuratov [i dr.] ; Ministry of Health and Social Development of the Republic of Kazakhstan. SKFA. - Electron. Textual Dan. - Shymkent: [b. i.], 2016. - e-mail wholesale CD-ROM(8.91Mb)</p> <p>2. Sәuleli diagnostika [Elektronnyi resurs] :oqýlyq / qazaqtıl. Oud. A. B. Akhmetbaeva; Ed. Basq. G. E. Trufanov. -Electron. Textual Dan. (421Mb). - Moscow: GEOTAR - Media, 2014. - 576b. p.</p> <p>3. Pathomorphology and radiodiagnostics of some non-inflammatory lung diseases in premature newborns Serikbay M.K. , 2020/https://aknurpress.kz/login</p> <p>5. Differential diagnosis and treatment of tuberculosis in adults and children.Bekembayeva G.S., Zhandarkulov A.A., 2018/https://aknurpress.kz/login</p> <p>5. Diagnostics and treatment of respiratory diseases. Imangazinova S.S., 2016/https://aknurpress.kz/login</p> <p>6. Radiation Therapy: Textbook. Ed. by G.E. Trufanov. - 3rd ed., revised and supplemented - Moscow: GEOTAR-Media, 2018. - 484 p. http://rmebrk.kz</p> <p>1. Aryngazin, K.Sh., Mazhimova, M.B. First pre-medical aid in accidents: Educational and methodological manual. / Sost. K. Sh. Aryngazin. - Pavlodar: Kereku, 2013. - 73 p. http://rmebrk.kz/</p> <p>2. S. Kabiyeva Introduction in clinic: Textbook, volume I. – Almaty: 2020 – 263 p. https://elib.kz/ru/search/read_book/324/</p> <p>3. Kabiyeva S.M. Introduction to the Clinic: Textbook. Volume I./S.M. Kabiyeva.- Almaty: Evero, 2020. -304 p https://www.elib.kz/ru/search/read_book/316/</p>
Laboratory Physical Resources	<p>Skeleton, set of bones, models, torso, electronic tablets, interactive anatomical table "Pirogov", anatomical panel "Pirogov"</p> <p>Microscopes, a set of microslides, an atlas of microphotographs.</p> <p>Dummies, Sivtsev's table, Forster's perimeter, electrocardiograph, tonometer, phonendoscope, Sali hemometer.</p> <p>Biochemical analyzer, spectrophotometers, reagent kit, test tubes</p> <p>Simulators of the Center for Practical Skills</p>
Literature	<p><i>Main:</i></p> <ol style="list-style-type: none"> Gaivoronskii, I. V. Anatomy cheloveka [Human anatomy]. In 2 vols. Vol. 1. A system of support and movement organs. Splanchnology: textbook - Moscow: GEOTAR - Media, 2014 Borzyak, E. I.Human anatomy. Photographic atlas. In 3 volumes. Volume 1. Musculoskeletal system textbook - Moscow: GEOTAR - Media, 2014. - 480 p. (in Russian). Sinelnikov, R. D. Atlas of Human Anatomy. In 4 vols. Vol. 1. Doctrine of bones, connection of bones and muscles. allowance . - 7th ed., revised . - Moscow: New Wave: Izdatel Umerenkov, 2012. <p><i>Additional:</i></p> <ol style="list-style-type: none"> Anatomy according to Pirogov. Atlas of Human Anatomy. In 3 vols. Vol. 2. Head. Neck: Moscow: GEOTAR - Media, 2013 Boyanovich Y. V. Human Anatomy: Atlas. - Rostov-on-Don: Phoenix, 2011



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3. Sapin, M. R. Normal Human Anatomy: In 2 books. Book 1: textbook / M. R. Sapin, G. L. Bilich; Moscow, MIA Publ., 2010.
4. Sapin, M. R. Normal Human Anatomy: In 2 books. Kn. 2: textbook / M. R. Sapin, G. L. Bilich. - ; Moscow, MIA Publ., 2010.
5. Prives M.G. Human Anatomy: Textbook. -12th ed., rev. I dop. – St. Petersburg: Izd. House. SPbMAPE, 2009

About the main one:

1. Afanasyev Y.I. and Yurina N.A. Histology, Cytology and Embryology – 6th ed. Moscow, Meditsina Publ., 2016. 800 p. (In Russian).
2. Yushkantseva S.I., Bykov V.L. Histology, Cytology and Embryology: Atlas.- Moscow: GEOTAR-Media, 2017. 296 p. (In Russian).

Additional:

- 1.Krstic R.V. Illustrated Encyclopedia of Human Histology: 1576 Illustrations. Lane. Moscow: OOO "Izdatelstvo Onyx": "Izdatelstvo "Mir i Obrazovanie", 2010. 608 p. (In Russian).
2. Selezneva, T. D. Histology]: ucheb. Textbook / T.D. Selezneva, A.S. Mishin, V.Y. Barsukov. Moscow, Eksmo Publ., 2010. - 350 p. (in Russian).
3. Junqueira L.K., Carneiro J.. Histology: Textbook. Lane. Ed. by V.L. Bykov. Moscow, GEOTAR-Media Publ., 2009. 576 p. (In Russian).
- Kuznetsov S.L., Mushkambarov N.N. Histology, Cytology and Embryology. Textbook. Publisher: MIA, 2017. 600 p. (In Russian).

About the main one:

1. Normal physiology [Text]: textbook / Ed. by L. Z. Tel, N. A. Agadzhanian; M-vo obraz. and Science of the Russian Federation. Rivers. I.M. Sechenov First Moscow State Medical University. - Moscow: "Litterra", 2015. - 768 p. : ill
2. Human Physiology [Text]: textbook / ed. by E.B.Babsky. - Almaty: Evero, 2014. - 743 p. (in Russian)
3. Human Physiology: Textbook / L. Z. Tel [i dr.]. - Almaty: Evero, 2012
4. Kositskiy G.I. Physiology 1-2-3 tom.- Evero, 2014.
5. Nurmukhambetuly, A. Oryssha - qazaqsha meditsinalyq (physiologiyalyq) sózdik = Russian-Kazakh medical - Almaty: Evero, 2014.
6. Human Physiology: Textbook / L. Z. Tel [i dr.]. -Rivers. Rep. Center for Innovative Technologies of Medical Education and Science of the Ministry of Health of the Republic of Kazakhstan. - Almaty: Evero, 2012. - 600 p. (in Russian).

Additional:

1. Mindubaeva, F. A. Rukovodstvo k prakticheskikh zayacheniyam po fiziologii [Guidance to practical classes in physiology]. - Almaty: Evero, 2016. - 208 p. (in Russian)
2. Situational Tasks on the Course of Normal Physiology: Educational and Methodological Manual / V. K. Kasymbekov [i dr.]. - Almaty: Evero, 2016. - 144 p
3. Nurmukhambetuly, A. Oryssh-qazaqsha meditsinalyq (physiologiyalyq) sózdik = Russian-Kazakh medical - Almaty: Evero, 2014. - 903 p. (in Russian)
4. Mindubaeva, F. A. Rukovodstvo k prakticheskikh zayacheniyam po fiziologii [Guidance to practical classes in physiology: educational and methodological manual]. - Almaty: Evero, 2012. - 194 p.
5. Human Physiology: Textbook / Ed. by V. M. Pokrovsky, G. F. Korotko. - 2nd ed., revised and supplemented; Rivers. Department of Educational Medicine. and personnel policy of the Ministry of Health of the Russian Federation. Moscow, Meditsina Publ., 2007. - 656 p. (in Russian).
6. Mindubayeva F. A., Evnevich A. M., Krekesheva T. I. Rukovodstvo k prakticheskikh zayacheniyam po fiziologii: ucheb.-metodicheskoe posobie [Guide to practical classes in physiology: educational and methodological manual]. - Almaty: Evero, 2012. - 194 p.
11. Biochemistry [Elektronnyi resurs]: uchebnik dlya vuzov [Biochemistry]: textbook for higher education institutions / ed. by E. S. Severin. - 5th ed. , ispr. and add. - Electron. Textual data (66.3 Mb). - Moscow: GEOTAR - Media, 2013. - 768 p. (in Russian). wholesale. Disc (CD-ROM).
12. Biochemistry [Elektronnyi resurs]: uchebnik [Electronic resource]: textbook / edited by E. S.



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Severin. - 5th ed. - Electron. Textual data. (66.4 MB). - Moscow: Publishing Group "GEOTAR-Media", 2011. - 768 p. (in Russian). wholesale. Disc (CD-ROM)

Main:

1. Radiation diagnostics: textbook / Ministry of Education and Science of the Russian Federation; ed. by G. E. Trufanov. - ; Rivers. I.M. Sechenov First Moscow State Medical University. - Moscow: GEOTAR - Media, 2015. - 496 p. (in Russian).
2. Sáýreli diagnostika: oqýlyq / RF bilim jáne gyl. Ministerligi ; G. E. Trufanovtyń redaksiyamen; Qazaq tiline aud. A. B. Akhmetbaeva; Ed. by A. K. Akhmetbaev. - ; I. M. Sechenov atyndaǵy GOU HPE "Birinshi Moskva meml. honey. un-ti" úsynǵan. - Moscow: GEOTAR - Media, 2014. - 576 bet. with.
3. Radiation diagnostics: textbook / Ministry of Education and Science of the Russian Federation; ed. by Trufanov G. E. - ; Rivers. I. S. Sechenov First Moscow State Medical University, Moscow: GEOTAR – Media, 2013. 496 p. (in Russian)
4. Radiation Therapy: Textbook / Ministry of Education and Science of the Russian Federation; ed. by G. E. Trufanov. -Rivers. State Educational Institution of Higher Professional Education "First Moscow. State Med. I.M. Sechenov University". - Moscow: GEOTAR - Media, 2013. - 208 p. (in Russian).
5. Ilyasova, E. B. Radiological diagnostics [Text] : ucheb. Textbook / E. B. Ilyasova, M. L. Chekhonatskaya, V. N. Priezzheva. - Moscow: GEOTAR - Media, 2013. - 280 p. : ill
6. Radiation diagnostics of respiratory and mediastinal diseases [Text]: textbook / E. B. Bekmuratov [i dr.] ; Ministry of Health and Social Development of the Republic of Kazakhstan. SKFA. - Shymkent: [b. i.], 2016. - 104 p

Additional:


1. X-ray diagnostics of the thoracic organs: national hand. /Hl. Ed. by S. K. Ternova, Ch. Ed. by V. N. Troyan, A. I. Shekhter. - Moscow: GEOTAR - Media, 2014. - 584 p. (in Russian).
Burgener, Francis A. Radiation diagnostics of bone and joint diseases. More than 1000 radiographs: manual: atlas: transl. from English / Francis A. Burgener, M. Cormano, T. Pudas ; eds., S. K. Ternovoy, A. I. Shikhter. - Moscow: GEOTAR - Media, 2014. - 552 p. (in Russian).

Main:

1. Clinic. Volume 1 [Mátin] :oqýlyq / S. M. Kabieva [zh.b.] ; QR densaýlyqsaqtaý jáne áleýmettik damý ministrliǵi. KMMU. - Almaty: Evero, 2016. - 287 bp
2. Karkabaeva, A. D. Clinicaǵa kirispe-2. 1 -bólim [Mátin] :oqúqúraly / A. D. Karkabaeva, N. N. Telyaeva. - Astana: [b. i.], 2017. - 152 bet. p.
3. Karkabaeva, A. D. Clinic's Guide-2. II-bólim [Mátin] :oqúqúraly / A. D. Karkabaeva, N. N. Telyaeva. - [B. m.] : Astana, 2017. - 208 bet. With
4. Telyaeva, N. N. Introduction to the Clinic -2. Ch. 1 [Text] : ucheb. Textbook / N. N. Telyaeva, A. D. Karkabaeva. - Astana: [b. i.], 2017. - 214 p. (in Russian).
5. Telyaeva, N. N. Introduction to the Clinic -2. Part II [Text] : ucheb. Textbook / N. N. Telyaeva, A. D. Karkabaeva. - Astana: [b. i.], 2017. - 210 p. (in Russian).


Additional:

1. Tolekova, S. Z. Klinikaǵa kirispe [Mátin] :oky qypaly / S. Z. Tolekova. - Karaganda: RC "Aknur", 2013. - 244 bet. S
2. Alpysova A. R., Molodovskaya N. V . Aýruhanaǵa deingi kezeńde jedel kómek kórsetý algorithmderi = Algorithms for providing emergency care at the pre-hospital stage: oqý quraly / A. R. Alpysova, N. V. Molodovskaya; QR Densaýlyq saqtaý jáne áleýmettik damý ministrliǵi. - Karaganda: AKNUR, 2019. - 120 bps
3. Kanybekov A. Zhedel meditsinalyq járdem : oqý quraly / A. Kanybekov. - 2nd bass. - Karaganda: AKNUR, 2017. - 266 bets. s.
4. Kabieva, S. M. Introduction to the Clinic. T. 1. [Text] : textbook / S. M. Kabieva. - Almaty: Evero, 2016. - 304 p. (in Russian)
5. Ayapov, K. Modernizatsiya sestrinskogo obrazovaniya Kazakhstana [Modernization of nursing

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Department of "Normal Anatomy" Department of "Pathological Anatomy and Histology" Department of "Normal and Pathological Physiology" Department of "Biology and Biochemistry" Department of "Phthisiopulmonology and Radiology" Department of "Introduction to the Clinic"	044-42/16 044-63/15 044-53/11 044-46/11 044-70/11 044-75/11	
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	education in Kazakhstan]. - 2nd ed., rev. - [b. m.] : New book, 2022. - 220 p. (in Russian). 6. Kabiyeva, S. Introduction in clinic. Volume 1 [Text] : textbook / S. Kabiyeva. - Almaty : "Evero" , 2016. - 263 p. 7. Hammer , Gary D. Pathophysiology of Disease: An Introduction to Clinical Medicine / Gary D. Hammer . - 7nd ed. - New York : Mg Graw Hill. Education, 2014. - 762 p.
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12.	Module Policy
<p>Requirements for students:</p> <ol style="list-style-type: none"> 1. not to be late for classes; 2. do not miss classes without a valid reason; 3. have anatomical gloves, tweezers and a scalpel; 4. be active during practical exercises; 5. be able to work in a team; 6. to execute and submit the CPC in a timely manner, according to the schedule; 7. not to engage in extraneous activities during classes; 8. be tolerant, open, and friendly to fellow students and teachers; 9. observe ethical standards of behavior when working with anatomical specimens and organs of the human body; 10. takes care of the property of the department; 11. make up for missed classes in a timely manner for valid reasons; 12. observe safety precautions in the classroom. 13. During lectures/practical classes/PSA, students are forbidden to: 14. use mobile devices/gadgets; 15. Leave the training room/classroom (leave the workplace at the clinical/industrial base) without the permission of the teacher. <p>Dress Code Requirements The student is obliged to:</p> <ol style="list-style-type: none"> 1. Have a clean, ironed medical gown, cap/cap; 2. Have a neat hairstyle, short-cut nails; (for girls: bright makeup and bright nail polish are not allowed) . <p>Penalties:</p> <ol style="list-style-type: none"> 1. In case of a single violation of the module policy, the student receives a verbal warning from the teacher. 2. In case of repeated violations of the module policy, the student provides an explanatory note addressed to the head of the department. 3. In case of systematic violation of the discipline policy, the head of the department submits a corresponding report to the dean's office. <ul style="list-style-type: none"> • A student who did not appear at the border control without a valid reason and received an unsatisfactory grade for one of the types of control (RC1, RC2, TCsr) is not allowed to take the exam in the discipline; A student who did not appear at the AC for a valid reason, immediately after starting classes, with the permission of the dean's office, receives a work sheet. • For 1 absence of lectures, for an unreasonable reason, the staff score is 1.0 points and is subtracted from the grades of the boundary control. • For 1 miss of the PSA, for no good reason, the penalty point is 2.0 points and is subtracted from the SRO's grades • Incentive points are taken into account according to the policy of the department. Incentive points are added to the milestone control score. For active participation in the work of the Council of People's Commissars and seminars in each discipline, the student is awarded an incentive point from 5 to 10. <p>If students do not score 50% of the current rating (i.e. 30 points), then they are not allowed to take the final control (exam). Student requirements, attendance, behavior, grading policies, penalties, incentives, etc.</p> <p>The student must:</p> <ul style="list-style-type: none"> • comply with medical ethics and deontology; 	

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Department of "Normal Anatomy" Department of "Pathological Anatomy and Histology" Department of "Normal and Pathological Physiology" Department of "Biology and Biochemistry" Department of "Phthisiopulmonology and Radiology" Department of "Introduction to the Clinic"	044-42/16 044-63/15 044-53/11 044-46/11 044-70/11 044-75/11	
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- no smoking in the Academy;
- keep the department clean;
- do not damage the furniture in the classrooms;
- take care of textbooks;
- observe the appearance of a medical student;
- comply with safety regulations;
- wear masks during the flu epidemic;
- do not miss classes without a good reason;
- **classes** missed for a good reason should be completed in a timely manner, but only if there is a permit from the dean's office and at the time determined by the teacher;
- not to be late for classes;
- have the necessary documentation in the classroom: a syllabus, methodological recommendations for classes, lectures, a notebook and a textbook;
- conscientiously prepare for classes;
- be active during classes;
- Do not engage in extraneous 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 discipline;
- keep silence and order during breaks;
- Complete and submit SROs in a timely manner and on schedule (in electronic form); with checking written works for plagiarism.

Penalties for non-fulfillment of work sections:

- In case of missing lectures without a valid reason, the grade of boundary control is reduced – 1 point for each missed lecture;
- if you miss a PSA without a valid reason, the SRO grade is reduced by 2 points for each missed lesson;
- in case of late submission of the SRO without a valid reason (later than the specified week), the SRO is not accepted;
- In case of a single violation of the discipline policy, a warning is given to the student;
- in case of systematic violation of the discipline policy, information about the student's behavior is transferred to the dean's office of the faculty;

Criteria for non-admission to the final control

- A student who has received an unsatisfactory grade for one of the types of control (frontier control 1, frontier control 2, average grade of current control) is not allowed to take the final control in the discipline.

13.	Academic policy based on the moral and ethical values of the academy
	www.ukma.kz Regulations and Rules of the SCMA. Academic Policy.
	P.4 Student's Honor Code
	P.10. Organization of the educational process
	P.12. Grading Policy
	Final control – students who have fully mastered the program of the discipline and scored an admission rating are allowed to take the exam.
	The final score is calculated automatically based on the average score of the current control, the average score of the boundary controls, and the assessment of the final control:
	Clearance Rating (60%) = Average Boundary Inspection Score (20%) + Average Current Inspection Score (40%)
	Average assessment of boundary controls = $DR1 + DR2 / 2$
	The average score of the current control is the arithmetic mean of the current scores, taking into account the average score for the SRO and penalty points.
	Final score (100%) = $RCsr \times 0.2 + TCsr \times 0.4 + IC \times 0.4$



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Final Grade (100%)= Tolerance Rating (60%) + Final Control (40%)

An example of calculating a student's final grade:

Penalty points:

For example, a student missed 2 lectures and = $1.0 \times 2 = 2.0$ points

For skipping 1 SIWT = 2.0 points

RC 1 – 80 points

RC 2 – 90 points

RCsr = $\frac{(80-2)+90}{2} = 84$ points

Arithmetic mean of the current control (practice and laboratory classes) – 80 points

SIW 1 – 75 points

SIW 2 – 85 points

SIW N... – Number of SIW

Average score for SRO = $\frac{75 + 85 + N...}{2 + N...} = 80$ points

Average current assessment taking into account SIW and penalty points:

$TCSr^* = \frac{TCsr + SROsr}{2} - KSRO = \frac{80 + (80 - 2.0)}{2} = \frac{158}{2} = 79.0$

Admission Rating (60%)=RCsr x 0.2 + TCsr x 0.4 = $84 \times 0.2 + 79.0 \times 0.4 = 16.8 + 31.6 = 48.4$ points

Final control (40%), for example, the student answered 45 questions correctly out of 50 (90%),

$90 \times 0.4 = 36$ points

Final grade (100%) =

1) RD (60%) + IR (40%) = $48.4 + 36 = 84.4$ points

2) RCsr x 0.2 + TCsr x 0.4 + IR x 0.4 = $84.0 \times 0.2 + 79.0 \times 0.4 + 90 \times 0.4 = 16.8 + 31.6 + 36 = 84.4$ points

RKsr – Average Assessment of Boundary Controls

TKsr is the average assessment of the current control

IC – Final Control Assessment

RC 1 - Border Control 1

RC 2 – Border Control 2

RD – Admission Rating

TKSr* is the average current score taking into account SRO and barf scores

Klek – 1st Lecture Skip Rate

KSIW – Pass Factor of the 1st SIWT



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14. Approval and revision			
Date of approval at the departments	Protocol No <u>10</u> <u>25.05.2023</u>	Head of department "Normal Anatomy", PhD, Acting Prof. Tanabayev B.D.	
	Protocol No <u>11</u> <u>26.05.2023</u>	Head of department "Pathological Anatomy and Histology", Doctor of Medical Sciences, Acting Prof. Sadykova A.Sh.	
	Protocol No <u>10</u> <u>29.05.2023</u>	Head of department "Normal and Pathological Physiology", Ph.D, Acting Prof. Zhakipbekova G.S.	
	Protocol No <u>14</u> <u>26.05.2023</u>	Head of department "Biology and Biochemistry", Professor Esirkepov M.M.	
	Protocol No <u>21</u> <u>26.05.2023</u>	Head of department "Phthisiopulmonology and Radiology", candidate of medical sciences Kasaeva L.T.	
	Protocol No <u>11</u> <u>26.05.2023</u>	Head of department "Introduction to the clinic", PhD, Acting Associate Professor Zhumadilova A.R.	
Date of approval for CEP	Protocol No <u>11</u> <u>05.06.2023</u>	Chair of the CEP Doctor of Medical Sciences, Acting Prof. Sadykova A.Sh.	