Стом-21ИН

Федеральное государственное бюджетное образовательное учреждение высшего образования
«СЕВЕРО-ОСЕТИНСКАЯ ГОСУДАРСТВЕННАЯ МЕДИЦИНСКАЯ АКАДЕМИЯ»
Министерства здравоохранения Российской Федерации

ДОКУМЕНТ ПОДПИСАН
ЭЛЕКТРОННОЙ ПОДПИСЬЮ

Сертификат: 2D4EFF8215A48D63793F851FADB089F4
Владелец: Ремизов Олег Валерьевич
Действителен: с 23.05.2023 до 15.08.2024

УТВЕРЖДАЮ
Ректор ФГБОУ ВО СОГМА
Минздрава России
О.В. Ремизов
«24» мая 2023 г.

РАБОЧАЯ ПРОГРАММА ДИСЦИПЛИНЫ

**«ПАТОЛОГИЧЕСКАЯ АНАТОМИЯ-
ПАТОЛОГИЧЕСКАЯ АНАТОМИЯ ГОЛОВЫ И ШЕИ»**

основной профессиональной образовательной программы высшего образования – программы специалитета по специальности 31.05.03 Стоматология,
(образовательная программа, частично реализуемая на английском языке)
утвержденной 24.05.2023 г.

Форма обучения очная

Срок освоения ОПОП ВО 5 лет

Кафедра патологической анатомии с судебной медициной

Владикавказ 2023

Стом-21ИН

Federal State Budget Educational Institution of Higher Education
NORTH OSSETIAN STATE MEDICAL ACADEMY
health Ministry of Russian Federation

APPROVED
Rector of FSBEI HE NOSMA
O.V. Remizov.
24.05.2023

EDUCATIONAL PROGRAM OF THE DISCIPLINE

«PATHOLOGICAL ANATOMY - PATHOLOGICAL ANATOMY OF THE HEAD AND NECK»
the main professional educational program of higher education is the specialty program in the specialty 31.05.03 Dentistry, approved on 24.05.2023

Form of training full-time

The period of development 5 years

Department of pathological anatomy with forensic medicine

Vladikavkaz, 2023

The work programme of the discipline is based on the following:

1. FSES HE in the specialty 31.05.03 Dentistry, approved by the Ministry of Education and Science of the Russian Federation "12" August 2020 № 984

2. Curriculum of academic program of the main professional educational program of higher education for the specialty 31.05.03 Dentistry
Stom-21-01-21ИН
Stom-21-02-22ИН
Stom-21-03-23ИН, approved by the Academic Council of ФГБОУ СОГМА of the Ministry of Health of Russia "25" May 2023, Minutes № 8

The working programme of the discipline was approved at the meeting of the department of pathological anatomy with forensic medicine from "22" May 2023, Minutes № 10

The work programme of the discipline was approved at the meeting of the Central Coordination Methodological and Educational Council of "24" May 2023, Minutes № 5.

The working programme of the discipline was approved by the Scientific Council FSBEI of HE NOSMA of the Ministry of Health of Russia from "24" May 2023, Minutes № 8

Developers:

Head of the Department of Pathological Anatomy with Forensic Medicine FSBEI of HE NOSMA of the Ministry of Health of Russia, Candidate of Medical Sciences, Associate Professor A.A. Yepkhiev.

Associate Professor of the Department of Pathological Anatomy with Forensic Medicine FSBEI of HE NOSMA of the Ministry of Health of Russia, Candidate of Medical Sciences Gabueva A.A.

The content of the work program

1. name of the discipline;
2. the list of planned learning outcomes in the discipline, correlated with the planned results of the development of the educational program;
3. indication of the place of discipline in the structure of the educational program;
4. the amount of discipline in credit units indicating the number of academic or astronomical hours allocated for contact work of students with the teacher (by type of training sessions) and for independent work of students;
5. the content of the discipline, structured by topics (sections) with an indication of the number of academic or astronomical hours allocated to them and types of training sessions;
6. list of educational and methodological support for independent work of students in the discipline;
7. evaluation materialsfor the interim certification of students in the discipline;
8. the list of basic and additional educational literature necessary for the development of the discipline;
9. list of resources of the information and telecommunication network "Internet" (hereinafter - the network
"Internet"), necessary for the development of the discipline;
10. methodological guidelines for students on the development of the discipline;
11. list of information technologies used in the implementation of the educational process in the discipline, including a list of software and information reference systems (if necessary);
12. description of the material and technical base necessary for the implementation of the educational process in the discipline.
13. conducting educational activities using e-learning and distance learning technologies

2. The list of planned results of training in the discipline and the results of the development of the educational program

№№	Competence number/index	The content of the competence (or part of it)	The content of the discipline (or its sections)	Indicators of competence achievement	Development results		
					know	be able	to own
1	2	2	3	4	5	6	7
1.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Metabolic disorders in cells and tissues.	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Definition of dystrophies. Classification of dystrophies. The main morphogenetic mechanisms of dystrophy.	Interpret morphological changes in cells and determine the main morphological characteristics of protein, fat and carbohydrate, predict the outcome of these processes and assess their significance based on the nature, degree, prevalence and localization of dystrophies	Skills of morphological diagnosis of dystrophies
2.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Damage and death of cells and tissues	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Causes and mechanisms of development of various types of necrosis, their functional significance Morphological differences of necrosis from other pathological	Distinguish between the macroscopic and microscopic picture of the clinical and morphological forms of necrosis	Skills of morphological diagnosis of necrosis, apoptosis

					processes Definition of apoptosis The difference between apoptosis and necrosis		
3.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Disorders of blood and lymph circulation	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Determination of arterial and venous fullness Types and mechanisms of development of arterial and venous fullness Definition of stasis, its causes Definition of bleeding and its types Definition of anemia and its types Disorders of lymph circulation Violations of the content of tissue fluid Definition of DIC syndrome, causes and mechanisms of its development Definition of thrombosis, to name its causes, conditions	Explain the causes of bleeding, the mechanisms of their development, the consequences for the body Give definitions of hemorrhage, name its types, values for the body To give a morphological characteristic of thrombosis, to distinguish it from thromboembolism and postmortem blood coagulation To assess the importance of embolism for the body, the mechanisms of death in pulmonary embolism Diagnose different types of infarction by macro- and microscopic picture	Skills of morphological diagnosis of circulatory disorders

4.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Inflammation	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	The essence, causes and mechanism of inflammation Phases of inflammation, their morphological characteristics Classification of inflammation Morphological characteristics of inflammation Clinical significance and outcomes of types of exudative inflammation Types of productive inflammation, causes, mechanisms of development The difference of types of productive inflammation by macro- and microscopic picture Differences between specific inflammation and banal	Define inflammation, explain its etiology, mechanism of development To give macro- and microscopic characteristics of various types of inflammation To evaluate the functional significance and outcomes of various types of exudative inflammation in various organs To diagnose granulomatous inflammation by microscopic picture Diagnose productive inflammation with a microscopic picture Diagnose tuberculous granuloma by microscopic picture Diagnose specific mesaortitis by microscopic picture	Skills of morphological diagnosis of various types of inflammation
5.	ОПК-9	Able to assess morphofunctional, physiological conditions and	Pathology of the immune system	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological	Types of immunopathological processes The main types of hypersensitivity	To give a macro- and microscopic characterization of morphological changes in hypersensitivity	Skills of morphological diagnostics of hypersensitivity reactions

		pathological processes in the human body to solve professional problems		states and pathological processes of the human body.	reactions Definition, classification of autoimmune diseases Primary and secondary immunodeficiency	reactions	
6.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Regeneration and adaptation processes	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Determination of adaptation and compensation The essence of compensatory and adaptive processes Types of compensatory-adaptive reactions Types of hypertrophy, mechanisms of their development Types of regeneration, their mechanisms The concept of metaplasia	Diagnose myocardial hypertrophy by macro- and microscopic picture Diagnose granulation tissue by microscopic picture Diagnose atrophy by macroscopic picture	Skills of morphological diagnostics of compensatory and adaptive processes
7.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve	Tumor growth. The main properties of tumors. Tumors of epithelial tissue	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Definition of a tumor Theories of tumor development Three principles of tumor classification Types of tumor atypism The main theories of the origin of tumors	Distinguish the types of epithelial tumors based on their morphological characteristics Diagnose a benign tumor from the glandular epithelium Diagnose a benign tumor "kidney	Skills of morphological diagnosis of epithelial tumors

		professional problems			Classification of epithelial tumors Characteristics of papillomas Types of adenomas Types of cancer	adenoma" Diagnose "squamous cell carcinoma"	
8.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Tumors of nervous, mesenchymal, melanin-forming tissues	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Features of growth of mesenchymal tumors, tumors of nervous and melanin-forming tissue Characteristics of the main tumors from mesenchymal, nervous and melanin-forming tissues	Diagnose a benign connective tissue tumor - "Fibroma" Diagnose a malignant connective tissue tumor - "Fibrosarcoma" Diagnose a brain tumor from a microscopic picture Diagnose skin melanoma	Skills of morphological diagnosis of mesenchymal tumors
9.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Diseases of the organs of hematopoiesis and lymphoid tissue	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Classification of diseases of hematopoietic and lymphoid tissues Principles of classification of leukemias Morphological changes in organs in acute and chronic leukemia Characteristics of Hodgkin's and non-Hodgkin's lymphomas Classification of	Be able to give morphological characteristics of acute and chronic leukemia and anemia Be able to give a morphological characterization of Hodgkin's lymphoma	Skills of morphological diagnosis of leukemia and anemia

					anemia The main types of anemia. Brief description of changes in internal organs		
10.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Diseases of the heart, blood vessels and connective tissue	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Definition, etiopathogenetic factors of its development Stages of morphogenesis of atherosclerosis Clinical and morphological forms of atherosclerosis Complications of atherosclerosis Risk factors and theories of hypertension development Clinical and morphological forms and stages of hypertension Etiology, classification and pathogenesis of coronary heart disease Pathological anatomy of coronary heart disease	Diagnose the stages of atherosclerosis by microscopic picture Diagnose atherosclerotic nephrosclerosis by macroscopic picture Diagnose myocardial hypertrophy by macroscopic picture Diagnose myocardial hypertrophy by microscopic picture Diagnose hemorrhage in the brain using a macroscopic picture Explain the causes and mechanism of development of coronary heart disease and cerebrovascular diseases, assess the likely outcome of coronary heart disease and cerebrovascular diseases and determine	Skills of morphological diagnosis of atherosclerosis and hypertension stages Skills of morphological diagnosis of myocardial infarction, ischemic and hemorrhagic strokes Skills of morphological diagnosis of rheumatic diseases

					Classification, pathogenesis and pathological anatomy of cerebrovascular diseases Definition, etiopathogenesis of rheumatism Clinical and morphological forms of rheumatism Etiology, pathogenesis, pathomorphology of systemic lupus erythematosus Etiology, pathogenesis, pathomorphology of rheumatoid arthritis, systemic scleroderma and nodose (nodular) polyarteritis	the significance of complications for the body Diagnose acute warty endocarditis with rheumatism by microscopic picture Diagnose rheumatic granuloma at different stages of its maturation by electron microscopic picture	
11.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional	Lung diseases	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Classification of acute pneumonia Etiology, pathogenesis and pathanatomy of croup pneumonia Etiology, pathogenesis and pathanatomy of focal pneumonia Classification, etiology and pathogenesis of	Diagnose croup pneumonia and its stage according to the macroscopic picture. Diagnose lung carnification by macro- and microscopic picture Diagnose	Skills of morphological diagnosis of pneumonia, bronchiectatic disease, emphysema, pneumosclerosis, lung cancer

		problems			HCL Etiology, pathogenesis and pathanatomy of bronchial asthma Etiology, pathogenesis and pathanatomy of bronchiectasis Etiology, pathogenesis and pathanatomy of emphysema of the lungs Etiology, pathogenesis, classification and pathanatomy of lung cancer	bronchopneumonia by macro- and microscopic picture Diagnose bronchiectasis and pneumosclerosis by macroscopic picture Diagnose chronic obstructive pulmonary emphysema on the basis of a microscopic picture Diagnose the pulmonary heart using a macroscopic picture	
12.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Diseases of the gastrointestinal tract	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Etiology, pathogenesis, morphological characteristics of acute and chronic gastritis Etiology, pathogenesis, morphological characteristics of peptic ulcer disease Complications of peptic ulcer disease Etiology, pathogenesis, morphological characteristics of	Diagnose chronic gastritis by macroscopic picture Diagnose chronic gastric ulcer by macroscopic picture Diagnose a chronic stomach ulcer from a microscopic picture Diagnose phlegmonous appendicitis by macroscopic picture	Skills of morphological diagnosis of gastritis, gastric ulcer, appendicitis, Crohn's disease

					appendicitis, its complications, outcomes		
13.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	Liver diseases	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the human body.	Definition, classification, etiology, pathogenesis, morphological characteristics, complications, outcomes of hepatitis. Definition, classification, etiology, pathogenesis, morphological characteristics, complications, outcomes of liver cirrhosis Definition, classification, etiology, pathogenesis, morphological characteristics, complications, outcomes of hepatosis	Diagnose toxic liver dystrophy by microscopic picture Diagnose fatty liver dystrophy (fatty hepatosis) according to the macroscopic picture Diagnose acute viral hepatitis by microscopic picture Diagnose active chronic hepatitis by microscopic picture	Skills of morphological diagnosis of hepatitis, hepatosis, cirrhosis, liver cancer
14.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the	Kidney diseases	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological	Classification of glomerulopathies Definition, classification, etiology, pathogenesis, morphological characteristics,	Diagnose subacute glomerulonephritis "big mottled kidney" by macroscopic picture Diagnose extracapillary productive glomerulonephritis by	Skills of morphological diagnosis of acute, subacute and chronic glomerulonephritis, pyelonephritis,

		human body to solve professional problems		processes of the human body.	Complications, outcomes of glomerulonephritis Complications, outcomes of glomerulonephritis Classification of tubulopathies Etiology, pathogenesis, classification and pathological anatomy of pyelonephritis Etiology, pathogenesis, classification and pathological anatomy of acute renal failure Etiology, pathogenesis, classification and pathological anatomy of kidney stone disease	microscopic picture Diagnose kidney amyloidosis by microscopic picture Diagnose purulent pyelonephritis by microscopic picture Diagnose kidney wrinkling by microscopic picture Diagnose necrotic nephrosis by microscopic picture	kidney stones
15.	ОПК-9	Able to assess morphofunctional, physiological conditions and pathological processes in the human body to	Morphology of the infectious process Bacterial airborne infections Viral infections. Tuberculosis	ИД-1 ОПК-9 Be able to determine morphofunctional, physiological states and pathological processes of the	Distinguishing features of viral infections and rickettsioses from bacterial infections Clinical and morphological forms of influenza	Diagnose influenza bronchopneumonia by microscopic picture To diagnose spinal cord changes in the paralytic stage of polio by microscopic picture To give a microscopic	Skills of morphological diagnostics of various infectious diseases

		solve professional problems	Syphilis Sepsis	human body.	Local and general changes in measles Etiology, pathogenesis, morphological characteristics of polio, complications, outcomes. Etiology, pathogenesis and pathological anatomy of diphtheria Etiology, pathogenesis and pathological anatomy of scarlet fever Etiology, pathogenesis and pathological anatomy of HIV infection Etiology, pathogenesis, pathological anatomy of typhoid fever Etiology, pathogenesis and classification of tuberculosis Pathological anatomy of various forms of primary and secondary tuberculosis Etiology,	characterization of diphtheria angina in diphtheria To give a microscopic characterization of myocarditis in diphtheria Diagnose tuberculosis of the lymph node by microscopic picture Diagnose miliary pulmonary tuberculosis by macroscopic picture Diagnose syphilitic mesaortitis by microscopic picture Diagnose septic endometritis by microscopic picture	

					pathogenesis, classification and pathological anatomy of syphilis Etiology, pathogenesis, classification and pathological anatomy of sepsis		
16.	ПК-1	Conducting a patient examination in order to establish a diagnosis	General characteristics and classification of diseases of the dental system. Pathology of the oral mucosa. Diseases of the hard tissues of the tooth. Diseases of the pulp and periapical tissues of the tooth.	ИД-14 ПК-1 Be able to diagnose caries, pulp and periodontal diseases, periodontal diseases, oral mucosa ИД-20 ПК-1 Be able to diagnose dental deformities and anomalies of teeth and jaws; identify risk factors for oncopathology (including various background processes, precancerous conditions)	Etiology, pathogenesis, pathological anatomy of caries Etiology, pathogenesis, pathological anatomy of non-carious lesions Etiology, pathogenesis, pathological anatomy of pulpitis Etiology, pathogenesis, pathological anatomy of periodontitis Etiology, pathogenesis, pathological anatomy of stomatitis	Diagnose various stages of caries by microscopic picture Diagnose fluorosis by microscopic picture Diagnose periodontitis by microscopic picture Diagnose different types of pulpitis by microscopic picture Diagnose stomatitis by microscopic picture	Skills of morphological diagnostics of caries, fluorosis, pulpitis, periodontitis
17.	ПК-1	Conducting a patient	Gum and periodontal	ИД-14 ПК-1 Be able to	Etiology, pathogenesis,	Diagnose gingivitis, periodontitis and	Skills of morphological

		examination in order to establish a diagnosis	diseases. Diseases of the salivary glands. Diseases of the jaws	diagnose caries, pulp and periodontal diseases, periodontal diseases, oral mucosa ИД-16 ПК-1 Be able to diagnose defects of dentition, periodontal pathology, complete absence of teeth ИД-20 ПК-1 Be able to diagnose dental deformities and anomalies of teeth and jaws; identify risk factors for oncopathology (including various background processes, precancerous conditions)	pathological anatomy of gingivitis Etiology, pathogenesis, pathological anatomy of periodontitis, periodontal disease Classification , pathological anatomy of the hand of the jaw bones of odontogenic and non - odontogenic tumors of the jaw bones Etiology, pathogenesis, pathological anatomy of cheilitis (cheilita Manganotti) Etiology, pathogenesis, pathological anatomy of glossitis	periodontal disease by microscopic picture Diagnose cheilitis, glossitis by microscopic picture Diagnose odontogenic and non-odontogenic cysts by microscopic picture Diagnose ameloblastoma, myxoma, odontogenic fibroma by microscopic picture Diagnose non-ontogenic tumors of the jaw bones by microscopic picture	diagnosis of sialoadenitis, sialolithiasis, jaw bone cysts
18.	ПК-1	Conducting a patient examination in order to establish a	Inflammatory lesions of the soft tissues of the head and neck. Tumor diseases	ИД-16 ПК-1 Be able to diagnose defects of dentition, periodontal	Etiology, pathogenesis, pathological anatomy of furuncle, carbuncle, pyogenic granuloma,	Diagnose furuncle, carbuncle, pyogenic granuloma by microscopic picture Diagnose	Skills of morphological diagnostics of benign and malignant tumor

		diagnosis	of the orofacial region. Pathology of the lymph nodes of the neck. Malformations of the orofacial region	pathology, complete absence of teeth ИД-20 ПК-1 Be able to diagnose dental deformities and anomalies of teeth and jaws; identify risk factors for oncopathology (including various background processes, precancerous conditions)	streptococcal congestion Etiology, pathogenesis, pathological anatomy of acute and chronic lymphadenitis Etiology, pathogenesis, pathological anatomy of the norm Etiology, pathogenesis, pathological anatomy of epulis, fibroids	malformations of the orofacial region in a microscopic picture Diagnose acute and chronic lymphadenitis by microscopic picture Diagnose major epithelial tumors, fibroma, epulis by microscope picture	processes, lymphadenitis, malformations of the orofacial region

3. The place of discipline in the structure of the educational program
The discipline "Pathological anatomy - pathological anatomy of the head and neck" is a discipline of the mandatory part of FSES of HE Block 1 in the specialty 31.05.03 Dentistry.

•4.The scope of the discipline

№ №	Type of work		Total credits	Total hours	Semesters	
					№ 3	№ 4
					hours	hours
1	2		3	4	5	6
1	**Contact work of students with the teacher (total), including:**		-	96	48	48
2	Lectures (L)		-	28	14	14
3	Clinical Practical training (PT)		-	68	34	34
4	Seminars (S)					
5	Laboratory work (LW)					
6	Independent work of a student (IWS)		**-**	**48**	**24**	**24**
7	**Type of intermediate certification**	credit (C)				
		exam (E)	**-**	**36**		**36**
8	**TOTAL:** Total labor intensity	hours		**180**	**72**	**108**
		Units	**5**		**2**	**3**

5. Content of the discipline

No.	Semester No.	Name of the section of the academic discipline	Types of educational activities, including independent work of students (in hours)				?
1	3	Metabolic disorders in cells and tissues. Damage and death of cells and tissues	2	4	4	10	testing solving situational problems oral interview
2	3	Disorders of blood and lymph circulation	2	4	4	10	testing solving situational problems oral interview
3	3	Inflammation. Pathology of the immune system	2	4	4	10	testing solving situational problems oral interview
4	3	Regeneration and adaptation processes	2	4	4	10	testing solving situational problems

							oral interview
5.	3	Tumor growth. Tumors of epithelial tissue.	2	4	2	8	testing solving situational problems oral interview
6.	3	Tumors of nervous, mesenchymal, melanin-forming tissues	2	4	2	8	testing solving situational problems oral interview
7.	3	Diseases of the organs of hematopoiesis and lymphoid tissue.	2	4	4	10	testing solving situational problems oral interview
1.	3	Modular classes	-	6	-	6	solving situational problems oral interview
2.	4	Lung diseases	-	4	4	8	testing solving situational problems oral interview
3.	4	Diseases of the heart, blood vessels and connective tissue	2	4	4	10	testing solving situational problems oral interview
4.	4	Diseases of the digestive system Liver diseases Kidney diseases	2	4	4	10	testing solving situational problems oral interview
5.	4	Morphology of the infectious process Bacterial airborne infections Viral infections, Tuberculosis. Syphilis. Sepsis	4	4	4	12	testing solving situational problems oral interview
6.	4	General characteristics and classification of diseases of the dental system. Pathology of the oral mucosa. Diseases of the hard tissues of the tooth. Diseases of the pulp and periapical tissues of the tooth	2	4	4	10	testing solving situational problems oral interview
7.	4	Gum and periodontal diseases. Diseases of the salivary glands. Diseases of the jaws	2	4	2	8	testing solving situational problems oral interview
8.	4	Inflammatory lesions of the soft tissues of the head and neck. Tumor diseases of the orofacial region. Pathology of the lymph nodes of the neck. Malformations of the orofacial region	2	4	2	8	testing solving situational problems oral interview

9.	4	Modular classes	-	6	-	6	solving situational problems oral interview
10.		**TOTAL:**	**28**	**68**	**48**	**144**	

6. A list of educational and methodological support for independent work of students in the discipline

№	Semester No.	Name of the educational and methodological development
1.	**3**	Metabolic disorders in cells and tissues. Damage and death of cells and tissues. Methodological guidelines for practical classes for students
2.		Disorders of blood and lymph circulation. Methodological guidelines for practical classes for students
3.		Inflammation. Pathology of the immune system. Methodological guidelines for practical classes for students
4.		Regeneration and adaptation processes. Methodological guidelines for practical classes for students
5.		Tumor growth. Tumors from epithelial tissue. Methodological guidelines for practical classes for students
6.		Tumors from mesenchymal, nervous and melanin-forming tissue. Methodological guidelines for practical classes for students
7.		Diseases of the organs of hematopoiesis and lymphoid tissue. Lung diseases. Methodological guidelines for practical classes for students
8.		Diseases of the heart, blood vessels and connective tissue. Methodological guidelines for practical classes for students
9.	**4**	Diseases of the gastrointestinal tract. Liver diseases. Kidney diseases. Methodological guidelines for practical classes for students
10.		Morphology of the infectious process Bacterial airborne infections Viral infections, Tuberculosis. Syphilis. Sepsis. Methodological guidelines for practical classes for students
11.		General characteristics and classification of diseases of the dental system. Pathology of the oral mucosa. Diseases of the hard tissues of the tooth. Diseases of the pulp and periapical tissues of the tooth. Methodological guidelines for practical classes for students
12.		Gum and periodontal diseases. Diseases of the salivary glands. Diseases of the jaws. Methodological guidelines for practical classes for students
13.		Inflammatory lesions of the soft tissues of the head and neck. Tumor diseases of the orofacial region. Pathology of the lymph nodes of the neck. Malformations of the orofacial region. Methodological guidelines for practical classes for students
14.	**3,4**	Workshop on general pathological anatomy. K.M. Kozyrev, K.D. Salbiev, A.A.Ephiev
15.	**3,4**	Workshop on private pathological anatomy. K.M. Kozyrev, T.M. Gatagonova,

		Z.T. Astakhova, K.D. Salbiev

7. evaluation materials for conducting intermediate certification of students in the discipline

№	List of competencies	Semester No.	Evaluation indicator(s)	Evaluation criterion(s)	Rating scale	Name of the EF
1	**2**	**3**	**4**	**5**	**6**	**7**
1	ОПК-9	3	See the standard for assessing the quality of education, approved by Order FSBEI of HE NOSMA of the Ministry of Health of the Russian Federation dated 10.07.2018 No. 264/0	See the standard for assessing the quality of education, approved by Order FSBEI of HE NOSMA of the Ministry of Health of the Russian Federation dated 10.07.2018 No. 264/0	See the standard for assessing the quality of education, approved by Order FSBEI of HE NOSMA of the Ministry of Health of the Russian Federation dated 10.07.2018 No. 264/0	Exam tickets; Test tasks; Modular questions
2	ПК-1	4	See the standard for assessing the quality of education, approved by Order FSBEI of HE NOSMA of the Ministry of Health of the Russian Federation dated 10.07.2018 No. 264/0	See the standard for assessing the quality of education, approved by Order FSBEI of HE NOSMA of the Ministry of Health of the Russian Federation dated 10.07.2018 No. 264/0	See the standard for assessing the quality of education, approved by Order FSBEI of HE NOSMA of the Ministry of Health of the Russian Federation dated 10.07.2018 No. 264/0	Exam tickets; Test tasks; Modular questions

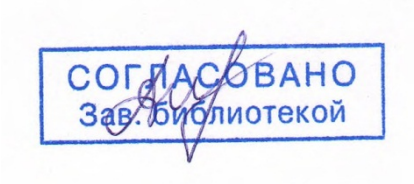
8.The list of basic and additional educational literature necessary for the development of the discipline

№	Name	Author(s)	Year, place of publication	Number of instances		Name of the ELS/ Link to ELS
				in the library	at the department	

1	2	3	4	5	6	7
Basic literature						
1.	Pathological anatomy: textbook	A.I.Strukov, V.V.Serov.	Moscow: GEOTAR Media, 2014	50	-	**"Student Consultant"** http://www.studmedli b.ru/ru/book/ISBN97 85970432600.html
2.	Pathological anatomy: textbook	A.I.Strukov, V.V.Serov.	Moscow: Litera, 2010.	196	2	**"Student Consultant"** http://www.studmedli b.ru/ru/book/ISBN97 85970432600.html

Additional literature						
1	**2**	**3**	**4**	**5**	**6**	**7**
1.	A guide to practical classes in pathological anatomy.	M. A. Palcev N. M. Anichkov M.G.Rybakova	M.: Medicine, 2002.	7	1	-
2.	Atlas of pathological anatomy.	M. A. Palcev A.B.Ponomarev	M.: Medicine, 2005.	36	1	-
3.	Workshop on general pathological anatomy.	K.M. Kozyrev K.D. Salbiev A.A.Ephiev	Vladikavkaz: Project Press, 2006	59	2	-
4.	A series of lectures on pathological anatomy.	G.Z. Lekoev	Vladikavkaz, 2010	138	4	-
5.	Pathological anatomy Textbook in 2 volumes	M. A. Palcev N. M. Anichkov	M.: Medicine, 2005.	35	1	-
6.	Pathological anatomy. Atlas	V.V. Serov N.E. Yarygin V.S. Paukov	M.: Medicine, 1986.	317	2	-
7.	Guidelines for the biopsy-sectional course	M. A. Palcev	M.: Medicine, 2004.	22	-	-
8.	Pathological anatomy.	V.V. Serov N.E. Yarygin	M.: Medicine,	3	-	-

	Atlas	V.S. Paukov	2015.			



9. The list of resources of the information and telecommunication network "Internet", necessary for the development of the discipline

Information and legal system "Garant"
Information and legal system "Gosreestr"
Microsoft Office
PowerPoint
Acrobat reader
Internet Explorer Internet Resources http: www.studentlibrary.ru - student consultant "Student Consultant"
https://www.studentlibrary.ru/ru/book/ISBN9785970432600.html

10.. Methodological guidelines for students on the development of the discipline

The training consists of contact work (96 hours), including a lecture course (28 hours) and practical classes (68 hours), and independent work (48 hours). The main study time is allocated to practical work on the study and disclosure of the fundamental laws of the development of changes inherent in a particular pathological process or disease, the understanding of which is necessary for further training in clinical disciplines. When studying an academic discipline, it is necessary to use the basic and additional recommended literature and master practical skills in macro- and microscopic diagnostics of pathological processes.
Practical classes are conducted in the form of an oral interview, demonstration of macro- and micro-preparations, presence at pathoanatomical autopsies, use of visual aids, solving situational problems, answers to test tasks.
In accordance with the requirements of the FSES of HE, active and interactive forms of classes (videos, situational tasks, independent extracurricular work) are widely used in the educational process. The proportion of classes conducted in interactive forms is at least 10% of classroom classes.
Independent work of students implies preparation for the formation of a systematic approach to the analysis of medical information and includes writing abstracts, studying additional literature.
Work with educational literature is considered as a type of educational work in the discipline of pathological anatomy and is performed within the hours allotted for its study (in the section of the SRS).
Each student is provided with access to the library collections of the Academy and the department.
During the study of the discipline, students independently study macro- and micro-preparations, make out a practical album.
Writing an abstract forms the ability to analyze medical problems, contributes to the acquisition of additional knowledge.
The student's work in the group forms a sense of collectivism and sociability.
The training of students contributes to the education of their communication skills with the patient, taking into account the ethical and deontological features of pathology and patients.
The initial level of students' knowledge is determined by testing, the current control of the

assimilation of the subject is determined by an oral survey during classes, during clinical reviews, when solving typical situational tasks and answers to test tasks.
At the end of the study of the discipline, an intermediate control of knowledge is carried out using test control, checking practical skills and solving situational problems.

11.. List of information technologies used in the implementation of the educational process in the discipline

- Microsoft Office
- Internet Explorer

12. Description of the material and technical base necessary for the implementation of the educational process in the discipline

№	Name of the equipment	Quantity	Technical condition
1	**2**	**3**	**4**
Special equipment			
1.	PC	4	satisfactory
2.	Multimedia projector	2	good
3.	A laptop	1	good
4.	Tables	90	Need to be replaced
5.	Videos	3	good
6.	Microscopes	35	satisfactory
Office equipment			
7.	MFD	2	satisfactory
8.	Printer for black and white printing	2	satisfactory

13. Conducting educational activities using e-learning and distance learning technologies

In the conditions of the introduction of restrictive measures (quarantine) associated with an unfavorable epidemiological situation, the threat of the spread of a new coronavirus infection and other force majeure events that do not allow for face-to-face training, it is possible to study this discipline or part of it using e-learning and distance learning technologies.
Teaching the discipline in the situations described above will be carried out through the development of an electronic course with access to video lectures and interactive course materials: presentations, articles, additional materials, tests and various tasks. When conducting training sessions, ongoing monitoring of academic performance, as well as intermediate certification of students, the Academy's electronic information and educational environment platforms and/or other e-learning systems recommended for use at the academy, such as Moodle, Zoom, Webinar, etc. can be used.
Lectures can be presented in the form of audio, video files, "live lectures", etc.
Seminars and practical classes can be held on-line in both synchronous and asynchronous mode. Seminars can be held in the form of web conferences or web conferences.