Federal State Budgetary Educational Institution of Higher Education "Privolzhsky Research Medical University" Ministry of Health of the Russian Federation

> APPROVED Vice-Rector for Academic Affairs E.S. Bogomolova 31 August 2021

WORKING PROGRAM

Name of the academic discipline: MORPHOLOGY OF THE ORAL CAVITY DISEASES

Specialty: 31.05.03 DENTISTRY

Qualification: **DENTIST**

Department: _____ PATHOLOGICAL ANATOMY

Mode of study: _____ FULL-TIME

Labor intensity of the academic discipline: <u>36 academic hours</u>

Nizhny Novgorod 2021 The working program has been developed in accordance with the Federal State Educational Standard for specialty 31.05.03 DENTISTRY approved by Order of the Ministry of Science and Higher Education of the Russian Federation No. 984 of August 12, 2020.

Developers of the working program:

Orlinskaya N.Yu., Grande PhD Medical sciences, Associate Professor, the Head of the Pathological Anatomy Department

Yunusova K.E., PhD in Medical sciences, Associate Professor, Associate Professor of the Pathological Anatomy Department

The program was reviewed and approved at the department meeting (protocol No.5 20.04.21)

Head of the Department, Grande PhD Medical sciences Associate Professor

(Orlinskaya N.Yu.) (signature)

20.04.21

AGREED Deputy Head of EMA ph.d. of biology

Other 1 Lovtsova L.V.

(signature)

20.04.21

1. The purpose and objectives of mastering the academic discipline "Morphology of the oral cavity diseases"

1.1 The purpose and objectives of mastering the discipline "Pathological anatomy - pathological anatomy of the head and neck" (hereinafter referred to as the discipline). The purpose of mastering the discipline: participation in the formation of competence of the GPC-9.

1.2 Objectives of the discipline:

The student should

know:

1. Basic medical terms reflecting the content of the curriculum.

2. Causes, morphological manifestations, complications, outcomes of general pathological processes, major human diseases.

be able to:

1. To recognize pathomorphological changes of organs in diseases of the human oralmaxillary system.

2. To describe morphological changes in the studied macro-preparations, micro-preparations and electronograms.

3. Formulate a conclusion about the pathological process according to the totality of pathomorphological changes.

4. To conduct a comparative assessment of morphological changes in various diseases of the oral cavity.

possess:

1. Skills of describing macroscopic changes in various diseases of the oral cavity.

2. Skills of microscopy of pathohistological preparations.

3. Skills of sketching pathohistological preparations.

4. Understanding of the mechanisms of formation of morphological changes occurring in organs and tissues in various diseases of the oral cavity, the importance for the body.

2. The place of the discipline in the structure of the Main professional educational program of higher education.

2.1 The discipline belongs to the basic part of block 1 "Disciplines (modules)" The main educational program of higher education. The discipline is studied from the hird and fourth semesters.

2.2 To study the discipline, knowledge, skills and abilities formed by previous disciplines are required: biology, physics, chemistry, human anatomy – anatomy of the head and neck; histology, embryology, cytology – oral histology; biological chemistry – oral biochemistry; microbiology, virology; normal physiology – physiology of the maxillofacial region; propaedeutics and prevention of dental diseases.

2.3 The study of the discipline is necessary for the knowledge, skills and abilities formed by subsequent disciplines: internal diseases, clinical pharmacology, therapeutic dentistry, orthopedic dentistry, surgical diseases, outpatient surgical dentistry, radiation diagnostics, infectious diseases, phthisiology, neurology, otorhinolaryngology, ophthalmology, surgical dentistry.

3. Deliverables of mastering the academic discipline and metrics of competence acquisition Mastering the discipline aims at acquiring the following general professional (GPC)

competence

	Compe	The content of	Code and name of the	As a result of mastering the discipline, the students should:				
N⁰	tence code	the competence (or its part)	competence acquisition metric	know	be able to	possess		
	GPC-9	Able to assess morphofunctional , physiological conditions and pathological processes in the human body to solve professional problems	AI-1 Knowledge of pathological anatomy and physiology of human organs and systems AI-2 the ability to evaluate the basic morphofuncti onal data, physiological states and pathological processes in the human body A.I-3 implementati on of practical experience: assessment of basic morphofuncti onal data, physiological processes in the human body	Knows: anatomy, histology, embryology, topographic anatomy, physiology, pathological anatomy and physiology of human organs and systems	Able to: evaluate the basic morphological and functional data, physiological conditions and pathological processes in the human body	Has practical experience in: assessment of basic morphological and functional data, physiological conditions and pathological processes in the human body when solving professional problems		

	solving		
	professional		
	tasks		

	Competen	Section name	The content of the section in
N⁰	ce code	of the discipline	teaching units
	GPC-9	Caries. Fluorosis. Wedge-shaped defects.	The concept of caries, plaque
	010-9	Pathological tooth abrasion. Inflammatory	and tartar, fluorosis: risk
		diseases of the dental system: pulpitis.	factors, modern ideas about
		diseases of the dental system. pulpitis.	pathogenesis, the role of
1.			disorders of general and local
			metabolism, morphology,
			outcomes, complications,
			· •
	GPC-9		pathomorphosis.
	GPC-9	Inflammatory diseases of the dental system:	The most common
		pulpitis, periodontitis, gingivitis,	inflammatory diseases of the
2		periodontitis, periostitis, osteomyelitis,	maxillary system: risk factors,
2.		stomatitis, sialoadenitis. Cysts of the jaw bones.	current understanding of
		Periodontal disease.	pathogenesis, morphology,
		Periodontal disease.	outcomes, complications,
	CDC 0		pathomorphosis.
	GPC-9	Odontogenic infection and odontogenic	Odontogenic sepsis and
		sepsis.	odontogenic infection: modern
			classifications and ideas about
			the etiopathogenesis of these
3.			clinical forms, morphological
			changes, complications, causes
			of death, pathomorphosis.
			Features of odontogenic
			infection and sepsis.
	GPC-9	Precancerous and tumor diseases of the	Tumor-like processes and
		mucous membranes of the oral cavity, lips,	tumors of the dental and
4.		tongue (leukoplakia, dysplasia, cancer).	maxillary apparatus: frequency,
		Odontogenic tumors.	localization, structure,
		Epulid (epulis).	outcomes, principles of
		Tumors of the salivary glands.	morphological diagnosis.

5. Volume of the academic discipline and types of academic work

Type of educational work	Labor i	ntensity	Labor intensity (AH) in	
	volume in	volume in	semesters	
	credit units	academic	3 4	
	(CU)	hours (AH)		
Classroom work, including				
Lectures (L)	0,16	6	6	
Laboratory practicum (LP)*				
Practicals (P)	0,4	16	16	
Clinic practicals (CP)				
Seminars (S)				
Student's individual work (SIW)	0,4	14	14	
Student's Research work (R&D)				

Mid-term assessment				
credit/exam (specify the type)				
TOTAL LABOR INTENSITY	1	36	36	

6. Content of the academic discipline

6.1. Sections of the discipline and types of academic work

Nº	Semester	Name of the section of the academic discipline		Types of academic work* (in AH)				k* (in AH)	
			L	LP	Р	СР	S	SIW	total
1.	3	Caries. Fluorosis. Wedge-shaped defects. Pathological tooth abrasion. Inflammatory diseases of the dental system: pulpitis.	1		3			2,5	7,5
2.	3	Inflammatory diseases of the dental system: pulpitis, periodontitis, gingivitis, periodontitis, periostitis, osteomyelitis, stomatitis, sialoadenitis. Cysts of the jaw bones. Periodontal disease.	1		6			4	12
3.	3	Odontogenic infection and odontogenic sepsis.	2		3			2,5	7,5
4.	3	Precancerous and tumor diseases of the mucous membranes of the oral cavity, lips, tongue (leukoplakia, dysplasia, cancer). Odontogenic tumors. Epulid (epulis). Tumors of the salivary glands.	2		4			3	9
		TOTAL	6		16			14	36

L- lectures LP – Laboratory practicum

P – practicals Clinic practicals (CP) Seminars (S) Student's individual work (SIW)

6.2. Thematic schedule of lectures

п/№	Наименование тем лекций	Объем в А	Ч
		Семестр3	Семестр4
1	Caries. Fluorosis. Wedge-shaped defects. Pathological tooth abrasion. Inflammatory diseases of the dental system: pulpitis.	1	
2	Inflammatory diseases of the dental system: pulpitis, periodontitis, gingivitis, periodontitis, periostitis, osteomyelitis, stomatitis, sialoadenitis. Cysts of the jaw bones. Periodontal disease.	1	
3	Odontogenic infection and odontogenic sepsis.	2	
4	Precancerous and tumor diseases of the mucous membranes of the oral cavity, lips, tongue (leukoplakia, dysplasia, cancer). Odontogenic tumors. Epulid (epulis). Tumors of the salivary glands.	2	
	ИТОГО (АЧ)	6	

6.3. The thematic plan of laboratory practicums is not provided by the federal state educational standard

6.4. Thematic plan of practicals

п/№	Наименование тем практических занятий	Объем в А	Ч
		Семестр3	Семестр4
1	Caries. Fluorosis. Wedge-shaped defects. Pathological tooth abrasion. Inflammatory diseases of the dental system: pulpitis.	3	
2	Inflammatory diseases of the dental system: pulpitis, periodontitis, gingivitis, periodontitis, periostitis, osteomyelitis, stomatitis, sialoadenitis. Cysts of the jaw bones. Periodontal disease.	6	
3	Odontogenic infection and odontogenic sepsis.	3	
4	Precancerous and tumor diseases of the mucous membranes of the oral cavity, lips, tongue (leukoplakia, dysplasia, cancer). Odontogenic tumors. Epulid (epulis). Tumors of the salivary glands.	4	
	TOTAL (BCEFO - 51 AY)	16	

6.5. Thematic plan of seminars is not provided by the federal state educational standard

6.6. Types and topics of student's individual work (SIW)

п/№	Наименование	вида	Объем в АЧ
	CPC*		

		Семестр 3	Семестр 4
1	Caries. Fluorosis. Wedge- shaped defects. Pathological tooth abrasion. Inflammatory diseases of the dental system: pulpitis.	Preparation for practical classes, testing, current control with the help of lecture materials, textbooks, including work with electronic educational resources on the university portal. $-2,5$	
2	Inflammatory diseases of the dental system: pulpitis, periodontitis, gingivitis, periodontitis, periostitis, osteomyelitis, stomatitis, sialoadenitis. Cysts of the jaw bones. Periodontal disease.	Preparation for practical classes, testing, current control with the help of lecture materials, textbooks, including work with electronic educational resources on the university portal -4	
3	Odontogenic infection and odontogenic sepsis.	Preparation for practical classes, testing, current control with the help of lecture materials, textbooks, including work with electronic educational resources on the university portal. $-2,5$	
4	Precancerous and tumor diseases of the mucous membranes of the oral cavity, lips, tongue (leukoplakia, dysplasia, cancer). Odontogenic tumors. Epulid (epulis). Tumors of the salivary glands.	Preparation for practical classes, testing, current control with the help of lecture materials, textbooks, including work with electronic educational resources on the university portal3	
	TOTAL (AH)	12	

7. Types of assessment formats for ongoing monitoring and mid-term assessment

1	Semes ter No. 2 3	Types of control 3 Current	Name of section of academic discipline	types	number of test questions	number of test task options
1 1.		-	4	~		
1.	3	Current		5	6	7
		Current	Caries. Fluorosis. Wedge-	multiple	10	Not limited
		monitoring	shaped defects. Pathological tooth abrasion.	choice		
			Inflammatory diseases of	questions		
			the dental system: pulpitis.	situationa	10	10
		Midterm		l cases		
		assessment				
2.	3	Current	Inflammatory diseases of	multiple	10	Not limited
		monitoring	the dental system: pulpitis, periodontitis, gingivitis, periodontitis, periostitis,	choice questions		

		Midterm assessment	osteomyelitis, stomatitis, sialoadenitis. Cysts of the jaw bones. Periodontal disease.	situationa 1 cases	10	10
3.	3	Current monitoring	Odontogenic infection and odontogenic sepsis.	multiple choice questions	10	Not limited
		Midterm assessment		situationa l cases	10	10
4.	3	Current monitoring	Precancerous and tumor diseases of the mucous membranes of the oral cavity, lips, tongue	multiple choice questions	10	Not limited
		Midterm assessment	(leukoplakia, dysplasia, cancer). Odontogenic tumors.Epulid (epulis).Tumors of the salivary glands.	situationa 1 cases	10	10

Examples of evaluation tools :

Exudative inflammation:

- 1. Highlight the phase of the inflammatory reaction
- 1) fullness of blood 4) repair
- 2) dystrophy 5) regeneration
- 3) exudation
- 2. The main cells in the focus of acute inflammation are
- 1) monocytes 4) neutrophilic leukocytes
- 2) macrophages 5) fibroblasts
- 3) histiocytes
- 3. What is exudate?
- 1) edematous fluid
- 2) inflammatory fluid
- 3) abnormal fluid containing protein
- 4} inflammatory fluid with the addition of red blood cells 5) any pathological fluid
- 4. Specify the type of exudative inflammation
- 1) serous 4) mucosal
- 2) granulomatous 5) chronic
- 3) interstitial
- 5. Highlight the erroneous name of the type of exudative inflammation
- 1) serous 4) fibrous
- 2) purulent 5) putrid
- 3) fibrinous
- 6. Localization, in which only diphtheria inflammation develops and there is no croup
- 1) pleura 4) palatine tonsils
- 2) peritoneum 5) large intestine
- 3) pericardium
- 7, The following type of fibrinous inflammation develops on the oral mucosa:

- 1) phlegmonous:
- 2) interstitial;
- 3) hemorrhagic;
- 4) putrefactive;
- 5) diphtheria.
- 8. With microscopy, purulent exudate is diagnosed by a large number of
- 1) fibrin 4) lymphocytes
- 2) neutrophilic white blood cells 5) red blood cells
- 3) macrophages
- 9. Specify the name of the purulent inflammation
- 1) abscess 4) cyst
- 2) granuloma 5) hematoma
- 3) anasarka
- 10. Specify the types of acute catarrhal inflammation
- 1) serous 4) purulent
- 2) mucus 5) all of the listed
- 3) mucopurulent

PRECANCEROUS AND TUMOR DISEASES OF THE MUCOUS MEMBRANE OF THE ORAL CAVITY, LIPS, TONGUE (leukoplakia, dysplasia, cancer)

- 1. Define epithelial dysplasia. P=1
- 2. List the most frequent precancerous processes.

(diseases) of the mucous membrane of the oral cavity, lips, tongue. P=4

3. Indicate microscopic (histological) changes in

leukoplakia. P=5

- 4. What is the frequency of malignancy of leukoplakia of the oral cavity. P=1
- 5. What is the frequency of erythroplakia malignancy. P=1

6. A patient with a diagnosis of tongue cancer is being treated at the city oncological dispensary. The tumor was discovered during an examination of the oral cavity by a dentist. The diagnosis was confirmed by histological examination of the biopsy material.

- 1. What macroscopic forms of tongue cancer distinguish P=3
- 2. What could the dentist see when examining the oral cavity P=2
- 3. Name the most frequent localization of tongue cancer P=2
- 4. Specify the histological variant of cancer typical for the language P=1
- 5. Describe his histological (microscopic) picture P = 2
- 6. How and where does the cancer of the tongue metastasize P=2
- 7. What opportunities for cancer diagnosis does a biopsy P = 1 provide

Caries. Fluorosis. Wedge-shaped defects. Pathological tooth abrasion.

1. Define dental caries. P=1

2. What stages of tooth decay are distinguished by the depth of enamel and dentin lesions. P=4 3. What microscopic (histological) changes develop with

superficial caries P=4

- 4. Which teeth are most often affected by caries P=4
- 5. In what forms (stages) of fluorosis do defects of the hard tissues of the tooth appear P=2

6. During the examination of the oral cavity, an opaque white spot was found on the chewing surface of a 12-year-old child [6. When probing, the enamel in the spot area is smooth. The diagnosis of caries

was made, therapeutic measures were prescribed according to the revealed pathology.

- 1. Specify the stage of caries in the child. P=1
- 2. Describe in detail the microscopic (histological) changes in this stage of caries. P=4
- 3. What is remineralization and how it happens. P=3
- 4. What are the main parameters used to classify dental caries.P=4

8. Educational, methodological and informational support for mastering the academic discipline (printed, electronic publications, the Internet and other network resources) 8.1 Key literature references

N⁰	Name according to bibliographic requirements	Number of copies	
		at the	in the library
		department	
1.	Robbins Basic Pathology / edited by Vinay Kumar,	0	100
	Abul K. Abbas, Jon C.Aster 9th ed, Elsevier		
	Saunders, 2015, 924 p.		

8.2. Further reading

N⁰	Name according to bibliographic requirements	Number of copies	
		at the	in the library
		department	
1.	Pathological anatomy of general part: manual /	0	50
	A.Artifeksova et al. – Nizhny Novgorod: Publishing House		
	of NNSMA, 2011. – 76 p.		
2.	Pathological anatomy of systemic and infectious diseases:	0	50
	manual / A.Artifeksova et al. – Nizhny Novgorod:		
	Publishing House of NNSMA, 2011. – 48 p.		

8.3. Electronic educational resources for teaching academic subjects

8.3.1. Internal Electronic Library System of the University (IELSU)

Name	of the	Brief description (content)	Access conditions	Number of users
electronic resource				
Internal	Electronic	The works of the academic staff	from any computer located	Not limited
Library	System	of the Academy: textbooks and	on the Internet, using an	
(ELS)		manuals, monographs,	individual login and	
col		collections of scientific papers,	password	
		scientific articles, dissertations,	[Electronic resource] –	
		abstracts of dissertations,	Access mode:	
		patents.	http://95.79.46.206/login.ph	
			р	

8.3.2. Electronic educational resources acquired by the University

Name of the	Brief description (content)	Access conditions	Number of users
electronic resource			
Electronic database	Educational literature +	from any computer located	General PIMU
"Student	additional materials (audio,	on the Internet, using an	subscription
Consultant"	video, interactive materials, test	individual login and	
	tasks) for higher medical and	password	
	pharmaceutical education.	[Electronic resource] –	
	Publications are structured by	Access mode:	
	specialties and disciplines in	http://www.studmedlib.ru/	
	accordance with the current		
	federal state educational		
	standards		

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managing bibliographic		searching, analyzing, and		
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8.3.3 Open access resources

Name of the	Brief description (content)	Access conditions
electronic resource		
Federal Electronic Medical Library	Includes electronic analogues of printed publications and original electronic publications that have no analogues recorded on other media (dissertations, abstracts, books, journals, etc.).	from any computer located on the Internet

	[Electronic resource] – Access mode: http://нэб.рф/	
Scientific Electronic Library	The largest Russian information portal in the field of science, technology, medicine and education,	from any computer located on the Internet.
eLIBRARY.RU	containing abstracts and full texts of scientific articles and publications. [Electronic resource] – Access mode: https://elibrary.ru/	
Open Access Scientific Electronic Library CyberLeninka	Full texts of scientific articles with annotations published in scientific journals of Russia and neighboring countries. [Electronic resource] – Access mode: https://cyberleninka.ru/	from any computer located on the Internet
Russian State Library (RSL)	Abstracts for which there are copyright agreements with permission for their open publication [Electronic resource] – Access mode: http://www.rsl.ru/	from any computer located on the Internet
Legal reference system "Consultant Plus"	Federal and regional legislation, judicial practice, financial advice, comments on legislation, etc. [Electronic resource] – Access mode: http://www.consultant.ru/	from any computer located on the Internet
Official website of the Ministry of Health of the Russian Federation	National clinical guidelines [Electronic resource] – Access mode: cr.rosminzdrav.ru - Clinical recommendations	from any computer located on the Internet
Official website of the Russian Respiratory Society	Modern materials and clinical recommendations for the diagnosis and treatment of respiratory diseases [Electronic resource] – Access mode: www.spulmo.ru – Russian Respiratory Society	from any computer located on the Internet
Official website of the Russian Scientific Society of Therapists	Современные материалы и клинические рекомендации по диагностике и лечению заболеваний внутренних органов [Электронный ресурс] – Режим доступа: <u>www.rnmot.ru</u> – Российское научное общество терапевтов Modern materials and clinical recommendations for the diagnosis and treatment of diseases of internal organs [Electronic resource] – Access mode: www.rnmot.ru – Russian Scientific Society of Therapeutists	from any computer located on the Internet

9. Material and technical support for mastering an academic discipline.

9.1. List of premises for classroom activities for the discipline

- 1. 6 study rooms
- 2. Conference room
- 3. Museum of Macropreparations

*specially equipped rooms (classrooms, offices, laboratories, etc.) for lectures, seminars, practical and clinical-practical classes in the study of disciplines, including:

anatomical hall, anatomical museum, corpse storage;

classrooms equipped with simulation equipment;

offices for working with patients receiving medical care.

9.2. List of equipment for classroom activities for the discipline

Multimedia complex (laptop, projector, screen), personal computers in classrooms -90 pcs, 6 binocular microscopes, monitors, printers. Also 6 binocular microscopes, 1 cryostat, 1 freezing microtome, 1 refrigerator, a set of chemical reagents for the preparation of drugs.

Sets of multimedia visual materials on various sections of the discipline. Wood boards.

9.3. A set of licensed and freely distributed software, including domestic production

Ite	Software	number of	Type of software	Manufactur er	Number in the	Contract No. and date
m no.		licenses			unified register of Russian software	
1	Wtware	100	Thin Client Operating System	Kovalev Andrey Alexandrovi ch	1960	2471/05-18 from 28.05.2018
2	MyOffice is Standard. A corporate user license for educational organizations, with no expiration date, with the right to receive updates for 1 year.	220	Office Application	LLC "NEW CLOUD TECHNOL OGIES"	283	without limitation, with the right to receive updates for 1 year.
3	LibreOffice		Office Application	The Document Foundation	Freely distributed software	
4	Windows 10 Education	700	Operating systems	Microsoft	Azure Dev Tools for Teaching Subscripti on	
5	Yandex. Browser		Browser	«Yandex»	3722	
6	Subscription to MS Office Pro for 170 PCs for FGBOU VO "PIMU" of the Ministry of Health of	170	Office	Minne		23618/HN10 030 LLC "Softline Trade" from 04.12.2020
	Russia	170	Application	Microsoft		

10. List of changes to the working program (to be filled out by the template)

N⁰	Date of changes	No. of the minutes of the meeting of the department, date	Content of the change	Signature

Federal State Budgetary Educational Institution of Higher Education "Privolzhsky Research Medical University" Ministry of Health of the Russian Federation (FSBEI HE "PRMU" of the Ministry of Health of Russia)

Department of Pathological anatomy

CHANGE REGISTRATION SHEET

working program for the academic discipline PATHOLOGICAL ANATOMY – CLINICAL PATHOLOGICAL ANATOMY

Field of study / specialty / scientific specialty:

Training profile: _____

(name) - for master's degree programs

Mode of study: _____

full-time/mixed attendance mode/extramural

Position	Number and name of the program section	Contents of the changes made	Effective date of the changes	Contributor's signature
1				

Approved at the department meeting Protocol No. _____of _____20___

Head of the Department

department name, academic title

signature

N.Y.Orlinskaya print name

(code, name)