### Federal State Budgetary Educational Institution of Higher Education "NORTH OSSETIAN STATE MEDICAL ACADEMY" of the Ministry of Health of the Russian Federation

#### УТВЕРЖДАЮ

Ректор ФГБОУ ВО СОГМА Минздрава России

«17» april 2024 г.

## WORKING PROGRAM OF THE DISCIPLINE INNOVATIVE TECHNOLOGIES IN ORTHOPEDIC DENTISTRY

the main professional educational program of higher education is the specialty program in the specialty 31.05.03 Dentistry, approved on 17.04.2024.

Term of development MPEP HE \_\_\_\_\_5 years

Chair dentistry № 1

Vladikavkaz, 2024

When developing the educational training programme, the discipline is based on:

1. Federal State budget educational standards of Higher Education on specialty 31.05.03 Dentistry, approved by the Ministry of Education and Science of the Russian Federation. August «12», 2020 N984

2. The curriculum for specialty 31.05.03 Dentistry, Стом-21-01-21 Стом-21-02-22 Стом-21-03-23 Стом-21-04-24 approved by the Academic Council of the Federal State Budgetary Educational Institution of Higher Education «North-Ossetia State Medical Academy» of the Ministry of Healthcare of the Russian Federation, 17.04.2024, protocol № 6

The educational training programme of the discipline was approved at the meeting of the department on 27.03.2024, protocol №7

The educational training programme of the discipline was approved at the meeting of the central coordinating training and methodological council from 02.02.2024, Protocol  $N_{2}$  4

The educational training programme is approved by the Academic Council of the Federal State Budgetary Educational Institution of Higher Education «North-Ossetia State Medical Academy» of the Ministry of Healthcare of the Russian Federation, 17.04.2024, protocol № 6

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### CONTENT OF THE WORK PROGRAM

- 1. name of the discipline;
- 2. a list of planned results of training in the discipline, correlated with the planned results of mastering the educational program;
- 3. indication of the place of the discipline in the structure of the educational program;
- 4. the volume of the discipline in credit units with an indication of 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 is structured according to topics (sections) with an indication of the number of academic or astronomical hours allocated to them and the types of training sessions.
- 6. the list of educational and methodological support for independent work of students in the discipline;
- 7. fund of assessment funds for conducting intermediate certification of students in the discipline;
- 8. a list of basic and additional educational literature required for mastering the discipline;
- 9. the list of resources of the information and telecommunication network "Internet", necessary for mastering the discipline;
- 10. methodological guidelines for mastering the discipline for students;
- 11. a 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.

No /	a Number /	Content of the	Tonio of the losson (reation)	Indicators of achievement	Results of mastering			
JNº N /	competence	(or part thereof)	1 opic of the lesson (section)	of competencies	know	be able	to master	
1	2	3	4	5	6	7	8	
	OPK-5	is able to conduct a patient's examination in order to establish a diagnosis in solving professional problems	<ol> <li>Innovative methods of examination, diagnostics, in orthopedic dentistry and dentistry.</li> </ol>	ID-1 OPK-5 Master the algorithm of clinical examination of the patient. ID-2 OPK-5 Be able to draw up a plan for laboratory and instrumental diagnostics. ID-3 OPK-5 Master the algorithm of clinical, laboratory and functional diagnostics in solving professional problems. ID-4 OPK-5 Be able to evaluate the results of clinical, laboratory and functional diagnostics in solving professional problems.	1. Innovative methods of examination, diagnostics, in orthopedic dentistry and dentistry.	1. Apply innovative methods of examination and diagnostics in orthopedic dentistry and dentistry.	<ol> <li>One of the methods of innovative diagnostics in dentistry (Dopplerography)</li> </ol>	
	PC-3	Development, implementation and monitoring of the effectiveness of individual rehabilitation programs	<ol> <li>Innovative methods for prosthetics of defects in the crown part of teeth, and treatment of periodontal pathology</li> </ol>	ID-1 Develop a rehabilitation plan for patients with diseases of the maxillofacial region ID-2 Carry out rehabilitation measures for diseases of the maxillofacial region ID-3 Apply methods of comprehensive rehabilitation of patients with dental diseases with taking into account the general condition of the body and the presence of concomitant pathology ID-4 Apply personal protective	1. equipment Innovative methods of prosthetics of defects of the crown part of teeth, and treatment of periodontal pathology	<ol> <li>perform prosthetics of defects of the crown part of teeth, and treatment of periodontal pathology using innovative methods</li> </ol>	<ol> <li>one of the methods of innovationoprosthe tics of defects of the crown part of teeth, and treatment of periodontal pathology</li> </ol>	
	PC-3	Development, implementation and monitoring of	1. Innovative methods of permanent prosthetics of dental defects, aesthetic	ID-1 Develop a rehabilitation plan for patients with diseases of the maxillofacial	1. equipment Innovative methods of	1. perform permanent prosthetics of dental defects,	1. one of the methods of permanent prosthetics of	

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

	the effectiveness of individual rehabilitation programs	dentistry	region ID-2 Carry out rehabilitation measures for diseases of the maxillofacial region ID-3 Apply methods of comprehensive rehabilitation of patients with dental diseases, taking into account the general condition of the body and the presence of concomitant pathologies ID-4 Apply personal protective	permanent prosthetics of dental defects, aesthetic dentistry	using innovative methods	dental defects, using innovative methods
PC-3	Development, implementation and monitoring of the effectiveness of individual rehabilitation programs	1. Innovative methods of removable prosthetics	ID-1 Develop a rehabilitation plan for patients with diseases of the maxillofacial region ID-2 Carry out rehabilitation measures for diseases of the maxillofacial region ID-3 Apply methods of comprehensive rehabilitation of patients with dental diseases, taking into account the general condition of the body and the presence of concomitant pathology ID-4 Apply personal protective	<ol> <li>equipment Types of the mucous membrane of toothless jaws types of covering dentures</li> </ol>	1. Determine indications for prosthetics with covering dentures	<ol> <li>by the algorithm of examination of extensive defects of the dentition rows</li> </ol>

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# **3.** Place of the discipline in the structure of educational programs

The academic discipline belongs to the part formed by the participants of the educational relations of Block 1 of the Federal State Educational Standard for Higher Education in the specialty "Dentistry"

Types of professional activities underlying the teaching of this discipline:

Preventive work.

Diagnostic information.

Therapeutic area.

					Semesters
Nº n/	a Type of w	Total credits	Total hours	10	
11 /		creatis		hours	
1	2		3	4	5
1	Students ' contact work with the teacher (total), including:		2	72	72
2	Lectures (L)		-8	8	8
3	Clinical practical exercises (PZ)		-64	64	64
4	Seminars (S)		-	-	-
5	Laboratory wo	rk (LR)		-	-
6	Student's independe	nt work (SR)	1	36	36
7	Type of intermediate	credit (H)		credit	credit
/	certification	exam (E)			-8
0	<b>TOTAL:</b> Total LABOR	intensity of hours		108	108
8		Z	3		3

## 4. Scope of the discipline

5.	Content	of	the	disci	pline
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N⁰n	Semester number	a no. semesra Module section name		pes of e tivities, lepende udents	ducatio includ ent wor (in hou	Current performance monitoring forms (by semester	
			$\mathbf{L}$	PZ	SRS	Total	week)
1	10	Innovative methods of examination, diagnosis, in orthopedic dentistry	2	16	10	28	S, TZ, NW,
2	10	Innovative methods of prosthetics of defects of the crown part of teeth, and treatment of periodontal pathology	2	16	8	26	S, NW,
3	10	Innovative methods of permanent prosthetics of dental defects, aesthetic dentistry.	2	16	10	28	S, TK, NW, UZ
4	10	Innovative methods of removable prosthetics	2	16	8	26	S, TK, NW, UZ
		Total	8	64	36	108	

Note: S – interview, TK-test tasks, SZ-situational tasks, UZ – training tasks

# 6. List of educational and methodological support for independent work of students in the discipline

No. /p	<u>№</u> Semester	name of the educational and methodical development 1
1	10	Guidelines for students to prepare for independent training in the discipline "Innovative technologies in orthopedic dentistry". Dzgoeva M. G., Khetagurov S. K.
2	10	Practical exercises on orthopedic dentistry for students of the Faculty of Dentistry. Dzgoeva M. G., Khetagurov S. K.
3	10	Innovative technologies in orthopedic dentistry. Methodological recommendations for practical classes for students of the 5th year of the 10th semester. Khetagurov S. K.

### 7. Fund of assessment funds for conducting intermediate certification of students in the discipline

n/	a List of competencies	№ Semester No	. Assessment indicator(s) Assessment	criterion (s) Assessment	scale	Name of the FOS
1	2	3	4	5	6	7
1	OPK5, PK3	10	see standard for assessing the quality of education, approved by the Ministry of Education of the Russian Federation. By Order No. 264 / o of the	the Russian Federation dated 10.07.2018, see standard for assessing the quality of education, approved by the Ministry of Education of the Russian Federation By	the Russian Federation dated 10.07.2018, see standard for assessing the quality of education, approved by the Ministry of Education of the Russian Federation By	Test tasks; Control tasks.

State Budgetary	Order No. 264 /	Order No. 264 of	
Educational	o of the	the Federal State	
Institution of	SOGMA Federal	Budgetary	
Higher	State Budgetary	Educational	
Education of the	Educational	Institution of	
Ministry of	Institution of	Higher	
Health of	Higher	Professional	
	Education of the	Education of the	
	Ministry of	Ministry of	
	Health of	Health of the	
		Russian	
		Federation dated	
		10.07.2018 / o	

# 8. List of basic and additional educational literature required for mastering the

# discipline

### **Basic literature**

n / №	Name	Author(s)	Year, place of publication	Number of in the bible	of copies. to the departm ent.	Name of the EBS/ Link in the EBS
1.	Orthopedic dentistry: textbook	ed. by I. Y. Lebedenko.	Moscow: GEOTAR- Media, 2011, 2012	36 copies	-	"Student's consultant" http://www.studme dlib.ru/book/ISBN9 785970420881.htm l
2.	Orthopedic dentistry: textbook	by N. G. Abolmasov et al	. : MEDpress- inform, 2007, 2008, 2009, 2011	51 copies		

#### Additional literature

			Vaar	Number	of copies.	Nome of the
n / №	Name	Author(s)	place of publication	in the bible	to the departmen t.	EBS/ Link in the EBS
1.	Orthopedic dentistry : a national guide	ed. by I. Y. Lebedenko	Moscow: GEOTAR- Media, 2016	2 copies.	-	
2.	Guide to practical exercises on prosthetics of dentition rows (complex prosthetics)	ed. by I. Yu. Lebedenko.	Moscow: Prakticheskaya meditsina Publ., 2014	, 3 copies.	-	
3.	Orthopedic treatment of pathological erasability, dentoalveolar anomalies and secondary deformities of the dentition rows: method. recommendations for practical classes in orthopedic dentistry	M. G. Dzgoeva, S. K. Khetagurov.	Vladikavkaz, 2011	88 copies.	-	
4.	Orthopedic treatment of pathology of hard tissues of teeth: textbookmethod. manual of orthopedic dentistry	M. G. Dzgoeva, S. K. Khetagurov.	Vladikavkaz, 2010	68 copies	10	
5.	Encyclopedia of orthopedic dentistry	V. N. Trezubov, L. M. Mishnev,	St. Petersburg: Foliant, 2007	1 copy		

СОГЛАДОВАНО В. Годталь

## 9 List of resources of the information and telecommunication network "Internet" required for mastering the discipline

#	Resource name	Address
1	ModernLib-Electronic Library	modernlib.ru
2	Archive of Poly Media Press Publishing	stomgazeta.ru
3	Information resource for medical university	studmedlib.ru
4	Dental Information	denta-info.ru
5	Medical literature on стоматологии.mmbook.ru	mmbook.ru
6	Russian Dental Institute Портал.stom.ru	stom.ru
7	eDentWorld Dental Portal	edentworld.ru
8	Federal Electronic Medical Library (FEMB)	feml.scsml.rssi.ru/feml
9	Electronic books on dentistry.	web-4-u.ru/stomatinfo

#### 10. Guidelines for students on mastering the discipline

Training consists of classroom sessions (72 hours), including a lecture course and practical exercises, and independent work (36 hours). The main academic time is allocated for practical work on mastering theoretical knowledge, acquiring practical skills and abilities.

When studying an academic discipline, it is necessary to use the entire resource of basic and additional educational literature, lecture material, visual aids and demonstration material, and master practical skills acquired during working with visual demonstration aids, working with patients and solving situational problems.

Practical classes are conducted in the form of preclinical and clinical practice. Preclinical practice is carried out in classrooms with the use of video and photo materials, and situational tasks are solved. Then the analysis of clinical patients is carried out.

In accordance with the requirements of the Federal State Educational широко используются Standard for Higher Education, interactive forms of teaching are widely used in the educational process (developing and problem-based learning in the form of role-playing games, mastering practical skills on phantoms, analyzing a specific situation, discussing a theoretical analysis of a topic, multimedia training). The share of classes conducted in interactive forms is at least 10% of classroom classes.

Independent work of students implies preparation for seminars and practical classes and includes: working with visual materials, educational basic and additional literature, Internet resources, writing a medical history, an abstract.

Working with educational literature is considered as a type of educational work in the specialty "Dentistry" and is performed within the hours allotted for its study (in the section SRS).

Each student is provided with access to the library collections of the Academy and the Department.

Methodological recommendations for students and guidelines for teachers have been developed for each section of the discipline.

During the study of the academic discipline, patients are examined independently, a medical history is drawn up, and an abstract is submitted.

Writing an abstract contributes to the formation of skills in working with educational literature, systematization of knowledge and contributes to the formation of general cultural and professional skills.

Writing an educational medical history forms the ability to analyze medical problems, contributes to mastering the culture of thinking, the ability to correctly formulate its results in writing, the formation of a systematic approach to the analysis of medical information, and the perception of innovations.

The student's work in a group creates a sense of teamwork and sociability.

The training of students contributes to the development of communication skills with the patient, taking into account the ethical and deontological features of pathology and patients. Independent work with patients contributes to the formation of professional behavior, responsibility, accuracy, discipline.

The initial level of knowledge of students is determined by testing, the current control of mastering the subject is determined by an oral survey during classes, during clinical reviews, when solving typical situational problems and answering test tasks.

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

The educational technologies used in the study of this discipline include at least 15% of interactive classes from the total volume of classroom classes. $\$ 

- simulation, a) non-game simulation technologies, contextual learning; b) game simulation technologies, role-playing business games.

Semester	Type of classes L, PR,S,	Educational technologies used (active, interactive)	Number of hours	% of interactive classes	Software list
10	L	Set of slides, videos for a traditional lecture	8		Microsoft Office PowerPoint; Internet Exploer
10	PR	Set of questions and tasks for a practical task, a set of situational tasks for emergency situations, a set of case histories for analyzing clinical cases.	64	20	Microsoft Office Test Program
10	S	Questions and tasks for independent work	36		Microsoft Office Internet Exploer

- non-simulation technologies: problem lectures.

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

The Department of Dentistry No. 1 is located on the basis of the dental polyclinic of SOGMA (66 Kirova St.). The total area used by the department for the educational process is  $61 \text{ sq. m}^2$ .

Part of the classes are held in the educational building No. 2 on the territory of the Federal State Budgetary Educational Institution of Higher Education of the Russian State Medical Academy, in the classrooms allocated for this purpose.

The department has three rooms:

- an orthopedic office equipped with a dental unit, combined with the office of the head of the department (9 sq. m $^{2}$ ), in which classes are also held with students,

- one phantom class for 5 phantoms and 8 computers (32 sq. m<sup>2</sup>),

- orthopedic office for 3 dental units (20 sq.  $m^2$ ), which also provides practical classes for students.

n/ p	a Equipment Name	Quantity	Technical condition				
1	2	3	4				
Special equipment							
1	Laptop	1	Good				
2	Projector	1	satisfactory				

3	Camera	1	Good				
4	PC	6	Good				
5	Dental installations	3	satisfactory				
Phantoms							
1	Dental phantoms	5	satisfactory				
Dummies							
1	Preparation jaws	20	satisfactory				

1

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

In the context 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 conducting face-to-face training sessions, it is possible to study this discipline or part of it using e-learning and distance educational 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, current monitoring of academic performance, as well as intermediate certification of students, platforms of the electronic information and educational environment of the academy and/or other e-learning systems recommended for use in 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 modes. Seminars can be held in the form of web conferences.