Документ подписан простой электронной подписью Информация о владельце: ФИО: Ястребов Олег Але**Federal State Autonomous Educational Institution of Higher Education** Должность: Ректор **PEOPLES** Дата подписания: 04.10.2024 14:01:30 **NANIED AFTER PATRICE LUMUMBA** Уникальный программный ключ: ca953a0120d891083f939673078ef1a989dae18a RUDN University Institute of Medicine

educational division (faculty/institute/academy) as higher education programme developer

## **COURSE SYLLABUS**

**Prosthodontics (Complex Prosthetics)** 

course title

### **Recommended by the Didactic Council for the Education Field of:**

31.05.03 Dentistry

field of studies / speciality code and title

The course instruction is implemented within the professional education programme of higher education:

Dentistry higher education programme profile/specialisation title

2024 - 2025

# 1. COURSE GOAL(s)

The goal of the course "Prosthodontics (complex prosthetics)" is to train a dentist who is able to diagnose and plan the prosthetic stage of the complex treatment of patients with diseases of the dentition, taking into account the individual characteristics of the disease andthe age of the patient.

# 2. REQUIREMENTS FOR LEARNING OUTCOMES

Mastering the course (module) "Prosthodontics (complex prosthetics)" is aimed at the formation of the following competencies (parts of competencies): GC-1, GPC-5, GPC-6, PC-1, PC-5, PC-6.

Competence code	Competence descriptor	<b>Competence formation indicators</b> (within this course)
GC-1	Being able to implement critical analysis of problem situations based on systems approach, develop an action strategy.	<b>GC-1.1.</b> Students should be able analysing the problem situation as a system identifying its components and links between them.
GPC-5	Being able to examine patients to determine a diagnosis when solving professional tasks	<ul> <li>GPC-5.1. Gathering anamnesis by analysing the patient's complaints, making a physical examination at a dental appointment.</li> <li>GPC-5.2. Formulating a preliminary diagnosis and drawing up a plan for laboratory and instrumental examinations of a dental patient.</li> <li>GPC-5.3. Compiling medical documentation for a dental patient in accordance with regulatory requirements.</li> <li>GPC-5.8. Conducting differential diagnosis with other diseases/conditions, including the urgent ones.</li> <li>GPC-5.9. Making a diagnosis based on the current international statistical classification of diseases and health problems.</li> </ul>
GPC-6	Being able to prescribe non-drug and drug treatment, monitor its efficacy and safety when solving professional tasks	GPC-6.1. Developing a plan for dental disease treatment taking into account the diagnosis, age and clinical picture in accordance with the current procedures for the provision of medical care, clinical guidelines (treatment protocols) on the provision of medical care taking into account the medical care standards. GPC-6.2. Selecting medical products (including dental materials) for drawing up a comprehensive plan for dental disease treatment. Following up the treatment of a patient
PC-1	Being able to make an	PC-1.1. Making an initial examination and/or

Table 2.1. List of competences that students acquire through the course study

Competence	Competence descriptor	<b>Competence formation indicators</b> (within this course)
coue	examination of a patient in	reexamination of a patient in order to make a
	order to determine a	preliminary diagnosis.
	diagnosis.	PC-1.2. Receiving information from patients
		(their relatives/legal representatives); conducting
		a questionnaire survey of patients regarding
		their general health status; identifying
		concomitant diseases in order to make a
		preliminary diagnosis.
		PC-1.3. Detecting if patients have dentoalveolar,
		facial anomalies, deformities and prerequisites
		for their development, defects in the crowns of
		teeth and dentition on the basis of the patient
		examination; laboratory, instrumental, and
		additional examinations in order to make a
		preliminary/final diagnosis.
		PC-1.4. Detecting if patients have risk factors
		for oncopathology (including various
		background processes, precancerous conditions)
		based on laboratory, instrumental and additional
		examinations in order to make a
		preliminary/final diagnosis.
		PC-1.5. Making a preliminary/final diagnosis
		based on the patient examination; laboratory and
		instrumental examinations.
PC-2		PC-2.6. Providing orthopaedic treatment for
		persons with defects in teeth, dentition within
		the temporization procedure, rehabilitation of
	Being able to prescribe,	single defects in the dentition, dental
	monitor the efficacy and	prostheses of up to three units (excluding
	safety of non-drug and	dental implants prosthetics), partial and
	drug treatment	complete removable laminar denture using
		modern treatment methods approved for use in
		medical practice.
PC-6		PC-2.6. Providing orthopaedic treatment for
	Being able to analyze	persons with defects in teeth, dentition within
	and present in public	the temporization procedure, rehabilitation of
	medical information	single defects in the dentition, dental
	head on avidence head	prostheses of up to three units (excluding
	based on evidence-based medicine, participate in	dental implants prosthetics), partial and
		complete removable laminar denture using
	scientific research,	modern treatment methods approved for use in
	introduce new methods	medical practice.
	and techniques aimed at	PC-6.1. Searching for medical information
		based on evidence-based medicine. interpreting

Competence code	Competence descriptor	Competence formation indicators (within this course)
	protecting public health	data from scientific publications and/or preparing a presentation to make medical information, the results of scientific research public.

#### **3.COURSE IN HIGHER EDUCATION PROGRAMME STRUCTURE**

The course refers to the <u>core/variable/elective\*</u> component of (B1) block of the higher educational programme curriculum.

\* - Underline whatever applicable.

Within the higher education programme students also master other (modules) and / or internships that contribute to the achievement of the expected learning outcomes as results of the course study.

Table 3.1. The list of the higher education programme components/disciplines that contribute to the achievement of the expected learning outcomes as the course study results

Compete nce code	Competence descriptor	Previous courses/modules*	Subsequent courses/modules*
CC-1.	Able to carry out a critical analysis of problem situations based on a systematic approach, to develop an action strategy.	<ul> <li>Cariesology and the disease of hard dental tissues.</li> <li>Prosthodontics (simple prosthetics)</li> </ul>	<ul> <li>Prosthodontics (complex prosthetics)</li> <li>Gnathology and functional diagnostics of temporomandibular joint</li> </ul>
GPC-5.	Able to conduct a patient examination in order to establish a diagnosis in solving professional problems	<ul> <li>Cariesology and the disease of hard dental tissues.</li> <li>Prosthodontics (simple prosthetics)</li> </ul>	<ul> <li>Prosthodontics (complex prosthetics)</li> <li>Gnathology and functional diagnostics of temporomandibular joint</li> </ul>

GPC-6.	Able to prescribe, monitor the effectiveness and safety of non-drug and drug treatment in solving professional problems	•	Cariesology and the disease of hard dental tissues. Prosthodontics (simple prosthetics)	•	Prosthodontics (complex prosthetics) Gnathology and functional diagnostics of temporomandibular joint
PC-1.	Able to conduct examination of the patient to establish a diagnosis.	•	Cariesology and the disease of hard dental tissues. Prosthodontics (simple prosthetics)	•	Prosthodontics (complex prosthetics) Gnathology and functional diagnostics of temporomandibular joint
PC-2.	Capable of prescribing, monitoring the efficacy and safety of non-drug and drug treatments	•	Cariesology and the disease of hard dental tissues. Prosthodontics (simple prosthetics)	•	Prosthodontics (complex prosthetics) Gnathology and functional diagnostics of temporomandibular joint
РС-6.	Able to analyze and publicly present medical information based on evidence- based medicine, to participate in scientific research, to introduce new methods and techniques aimed at protecting public health	•	Cariesology and the disease of hard dental tissues. Prosthodontics (simple prosthetics)	•	Prosthodontics (complex prosthetics) Gnathology and functional diagnostics of temporomandibular joint

\* To be filled in according to the competence matrix of the higher education programme.

### 4. COURSE WORKLOAD AND ACADEMIC ACTIVITIES

The total workload of the course "Prosthodontics (complex prosthetics) is 8 credits (288 academic hours).

Table 4.1. Types of academic activities during the periods of higher education programme mastering (*full-time training*)\*

	Total	Sen	nesters/tra	ining mod	ules
Type of academic activities	academic hours	7	8	9	
Contact academic hours	179	72	72	144	
including:					

Type of academic activities		Total	Sen	Semesters/training modules		
		academic hours	7	8	9	
Lectures (LC)						
Lab work (LW)		179	<b>48</b>	51	80	
Seminars (workshops/tutorials) (S)						
Self-studies		76	21	18	37	
Evaluation and assessment (exam/passing/failing grade)		33	3	3	27	
Course workload	academic hours_	288	72	72	144	
	credits	8	2	2	4	

\* To be filled in regarding the higher education programme correspondence training mode.

## **5. COURSE CONTENTS**

Course module title	Course module contents (topics)	Academic activities types
	Topic 1.1. Partial teeth absence. Methods of patient examination. Clinical and biomechanical justification of the use of dental bridges. Indications and	LW
Section 1. Replacement of dentition defects with	contraindications for the use of bridges. Criteria for choosing the number of abutment teeth. Types of dental bridges. Fitting and fixation the bridges. Quality criterias of prosthetic treatment with bridges. Instruction for dental bridges usage.	LW
prosthodontics	Topic 1.2. Clinical and lab stages of prosthetic treatment with bridges.	LW
structures	Topic 1.3. Peculiarities of abutment teeth preparation while manufacturing a bridge.	LW
	Topic 1.4 Fitting and fixation of a bridge. Quality criterias of prosthetic treatment with bridges. Instruction for dental bridges usage.	LW
	Topic 2.1. Examination of patient with partial teeth absence for future planing removable prostheses. Indications and contraindications for removable denture.	LW
Section 2. Removable denture treatment	Topic 2.2. Types of removable dentures in case of partial absence of teeth. Clinical and laboratory stages of prosthetic treatment with removable dentures. Fixation methods for partial lamellar dentures, quality criteria.	LW
	Topic 2.3. Clasp dentures. Indications for use, basic structural elements. Clinical and laboratory stages of their manufacturing. Quality criteria. Rules for the use and care of lamellar and clasp dentures.	LW
Section 3. Prosthetic treatment of	Topic 3.1. Etiology, pathogenesis, classification, clinical manifestations of periodontal disease. Modern methods of diagnosis in the clinic of prosthetic dentistry.	LW
periodontal	Topic 3.2. Clinical and biomechanical substantiation	LW

Table 5.1. Course contents and academic activities types

		LW
diseases	of the orthopedic stage of complex treatment of patients	
	with periodontal disease, especially the design of	
	medical devices and prostheses.	
	Topic 3.3. Clinical and laboratory stages of	LW
	manufacturing splinting structures.	
Section 4.	Topic 4.1. Etiology, pathogeny, classification, and	
Prosthetic	clinical symptoms of excessive attrition of teeth.	I W
treatment of	Diagnostic aids and prosthetic restoration of excessive	LVV
increased abrasion	attrition of teeth.	LW
of hard tissues of		
teeth		T XX7
	ropic 4.2. Methods of preparing the oral cavity for	LW
	Topic 4.3 Methods of prosthetic treatment of patients	I W
	with various clinical manifestations of tooth attrition	
Section 5	Topic 5.1 Etiology pathogenesis classification clinical	I W
Prosthetic treatment	manifestations of deformation of the dentition and hite in	L **
of deformations and	the partial absence of teeth Modern methods of	
anomalies of	diagnosis	
dentition and bite.	Topic 5.2 Methods of elimination of deformation and	IW
	iustification of factics of management of national with	L **
	this pathology. Stages of treatment	
	Topic 6.1 Indications and contraindications to the use of	IW
	implant supported denturs. Features of clinical and	L
Section 6.	laboratory stages of prosthetic treatment with removable	
Prosthetic treatment	and fixed implant-supported dentures.	
of patients with	Topic 6.2. Features of clinical and laboratory stages of	LW
dentures supported	prosthetic treatment with removable implant-supported	
by implants	dentures.	
	Topic 6.3. Features of clinical and laboratory stages of	LW
	prosthetic treatment with implant-supported fixed	
	dentures.	
Section 7.	Topic 7.1. Tactics of prosthetic treatment patients with	LW
Prosthetic	somatic pathology (CVS, GIT, endocrine diseases,	
treatment of	cancer of oral cavity, mental diseases, infection diseases	
patients with	(HIV, tuberculosis, candida), chronic diseases of skin	
somatic diseases.	and mucous of oral cavity and lips) who are in need of	
Prosthetic	prosthetic rehabilitation.	* ***
treatment of	Topic 7.2. Intolerance of materials and structures of	LW
patients with	dentures. Diagnosis, prevention, leatures of secondary	
chronic diseases of	prostnetics.	
the oral		
cavity.		T XX7
Section 8.	1 opic 8.1. Fundamentals of phonetics and articulation in	LW
Phonetic aspects	prostnetic dentistry. Influence of design features of	
of prosthetic	removable denture bases, location of posterior teeth,	
treatment with the	crown neight, palatal surface shape, interalveolar	
use of removable	uistance on sound pronunciation disorders. The main	
and inverteestheses	dentistry	
and Jaw prostneses	uchusuy.	

\* - to be filled in only for **<u>full</u>**-time training: *LC* - *lectures; LW* - *lab work; S* - *seminars.* 

# 6. CLASSROOM EQUIPMENT AND TECHNOLOGY SUPPORT REQUIREMENTS

		Specialised educational / laboratory
Type of academic	Classroom	equipment, software, and materials for
activities	equipment	course study
		(if necessary)
Lab-work №1	An auditorium for laboratory work, individual consultations, current control, and intermediate certification, equipped with a set of specialized furniture and equipment.	12 sets of specialized furniture - tables for simulators and 2 dental simulators "Saratoga S.p.a" (retractable blocks of a doctor [2 M4 turbine hoses] and an assistant [multifunctional gun, saliva ejector, vacuum cleaner], multifunctional pedal, water and compressed air supply system for simulators, aspiration Venturi system with a centralized electric pump, FRASAKO dental phantoms (Germany) on a minitorso with an articulator, models of the upper and lower jaws of the ChVN 28 type (Zarnitsa, Russia) with a face mask and mechanical adjustment of the phantom position along 2 axes in the form of a long table for 12 vis-a-vis places and 2 places for a four-seat module in the form of a "chamomile." Wooden chair with a back on wheels - 14 pcs. Special sink made of stainless steel with two sinks and a gypsum trap. Gypsum tables for 14 jobs. Mobile waste bin with 250 liter lid. -School school desk double -15, - chair for student 14 and teacher 1, - cabinet for storage of dental materials and instruments -2 pcs, - glass case for visual aids, -LCD panel, - a personal computer with Internet access, The chair is dental. White magnetic board for drawing with felt- tip pens <b>Specialized educational/laboratory</b> <b>equipment:</b> Vibrating table - 4
		Vibrating table - 4. Trimmer -1.

 Table 6.1. Classroom equipment and technology support requirements

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline
		(if necessary)
		Vacuum plaster mixer - 2. Scales for gypsum-7 Buckets for plaster and scoops-7 Apparatus for cleaning and lubricating tips "Assistina"-1. Steam jet device for cleaning dentures - 1
		Parallelometers -14 Electric water bath 4 Dental electric spatula -14.
		Dental drill -14. Apparatus for choosing the color of teeth
		Apparatus for determining the damping capacity of the periodontium Periotest-1. Light-curing lamps 14.
		<i>Toolkit (each semester):</i> Disposable examination kits 14 kits per subgroup per semester;
		turbine tips - 14 pcs., straight tips -14,
		Protective screens for a dentist -14 Silicone flasks for mixing gypsum-14, Spatulas for kneading gypsum -14 Plaster knife - 14
		Dental spatula - 14 pcs. Impression spoons number 3 for the upper and lower jaws metal perforated by 14. Glass for mixing cement - 14
		Crown removers of various types -7 Crampon tongs -14
		<i>Consumables</i> Clasp wire 2 cm per student in the 8th semester.
		Models of the upper and lower jaws ChVN 28A - 14 sets
		Zarnitsa type teeth for ChVN28A - No. 36, No. 34, No. 11 - 1 tooth per student in 7 and 9 semesters
		Alginate weight 200 g per student in each semester
		Gypsum Grade 2 500 g per student in each semester
		Periodontal probes 14. Burs for preparation set of 5 Vladmiva burs per student in 7th and 9th semesters.

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline
		(If necessary)
		Articulation paper 100 microns thick - 2 sheets for each student in each semester. C-silicone for impressions - a set of 900 grams of the main mass and corrective with a catalyst for each subgroup in 7 and 9 semesters. Water dentin -1 g per student in semester 7. Insulating cotton swabs, 2 per student in the
		7th semester. Plastic bridge for teeth 36 and 34 for model ChVN28A - 1 per student in the 7th
		semester A set of materials for adhesive fixation -1. Flowable composite for temporary splinting of teeth 1g per student in the 8th semester. Set for splinting "Armosplin" 1 per group in the 8th semester. A set of wax blanks for Akker clasps 1 per group in the 8th semester. Dense light-curing composite 1.0 g per student in semester 9
		Visual tutorials: Set of IRIS implant system - 7 per subgroup in the 9th semester Set of Straumann implant system 7 per subgroup in semester 9 Plastic models with 2 Straumann implant analogues 7 per subgroup in semester 9
		Plastic LF models with 4 analogs of IRIS-7 implants per subgroup in the 9th semester Forms with the dental formula of the Infodent -14 program in the 9th semester Forms of odontoparodontograms -14 in the 8th semester
		Orthopantomograms with periodontal pathology -14 in the 8th semester. Stand with types of tooth preparation for various types of prostheses.
		A set of materials and devices "Stages of manufacturing a stamped-brazed bridge prosthesis", "Stages of manufacturing a metal-ceramic bridge prosthesis". Phantom
		model with different types of bridges Non-adjustable articulators (occluders) with models with deformation of the dentition and a bridge-like apparatus for the

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline (if necessary)
		restructuring of the Popov phenomenon -14 per group in the 9th semester
Lab-work №2	An auditorium for practical work of students with computer training programs, equipped with a set of specialized furniture and computers with Internet access.	15 workplaces (office tables with computers) with Internet access and Avantis 3D software Software Infodent "Dental Clinic" Software Exokad "Bugel prostheses" LCD panel
Dental office №1	Dental office of a dental medical institution, provided under an agreement with RUDN University for conducting practical clinical classes for 5th year students, equipped with a dental unit and all necessary equipment, instruments and materials for dental prosthetic treatment in accordance with the Procedure for providing dental care to the adult population of the Russian Federation	Personal computer with Avantis 3D software Software Infodent "Dental Clinic" Apparatus Periotest M Apparatus AFS Semi-adjustable articulator with face bow Alginate and silicone impression materials, sets of metal perforated impression trays, masks, gloves
Dental office №2	Dental office of a dental medical institution, provided under an agreement with RUDN University for conducting practical clinical classes for 5th year students, equipped with a dental unit and all necessary equipment, instruments and materials for dental prosthetic treatment in accordance with the Procedure for providing dental care to the adult population of the Russian Federation	Personal computer with Avantis 3D software Software Infodent "Dental Clinic" Apparatus Periotest M Apparatus AFS Semi-adjustable articulator with face bow Alginate and silicone impression materials, sets of metal perforated impression trays, masks, gloves
Self-studies	An auditorium for independent work of students (can be used for seminars and consultations), equipped with a set of specialized furniture and computers	Avantis 3D software Software Infodent "Dental Clinic" Software Exocad "Bugel prostheses" Educational videos Basic and additional educational materials

Classroom type	Equipment of the classroom	Specialized educational / laboratory equipment, software and materials for mastering the discipline (if necessary)
	with access to the EIOS.	

#### 1. METHODOLOGICAL AND INFORMATIONAL SUPPORT FOR THE DISCIPLINE

#### Main literature:

1. Orthopedic dentistry: textbook / S.D. Arutyunov, E.A. Bragin, S.I. Burlutskaya [and others]; edited by E.S. Kalivradjian, I.Yu. Lebedenko, E.A. Bragin, I.P. Ryzhova. - 3rd ed., Rev. and add. - M.: GEOTAR-Media, 2020 --- 800 p. : ill. - ISBN 978-5-9704-5272-1: 2200.00.

2. Technology of dental and maxillary prosthetics [Text]: a guide for practical training / V. N. Trezubov, E. A. Bulycheva, S. D. Arutyunov. - Moscow: Practical Medicine, 2020 .-- 167 p. : ill., color. silt ; 25 cm. - Bibliography: p. 167 (10 titles). - 500 copies - ISBN 978-5-98811-582-3 (in translation)

3. Guide to practical exercises in orthopedic dentistry for 3rd year students / edited by I. Yu. Lebedenko, V. V. Erichev, B. P. Markov / (Authors: S. D. Arutyunov, etc.) allowance. - M .: Practical Medicine, 2006. (Part I. - 432 s).

4. Denture technology: textbook / S.D. Arutyunov, D.M. Bulgakova, M.G. Grishkina [and others]; ed. M.M. Rasulova, T.I. Ibragimova, I. Yu. Lebedenko. - 2nd ed., Rev. and add. - M.: GEOTAR-Media, 2016 .-- 384 p. - ISBN 978-5-9704-3830-5. http://lib.rudn.ru/MegaPro/UserEntry?Action=Rudn\_FindDoc&id=475755&idb=0

### Additional literature

- Prosthetic dentistry [Text]: Textbook / V.N. Kopeikin [and others]; Ed. V.N. Kopeikina, M.Z. dental faculties of medical universities). - ISBN 5-225-04598-Mirgazizova. - 2nd ed., Add. - M.: Medicine, 2001 .-- 624 p. : ill. - (Educational literature for students 7: 276.00.56.6 - O-70
- I.Yu. Lebedenko, T.I. Ibragimov, A.N. Ryakhovsky Functional and instrumental research methods in orthopedic dentistry [Text]: Textbook for universities. - M.: Medical Information Agency, 2003. - 128 p. : ill. - ISBN 5-89481-135-X: 260.00.56.6 - L33.
- Fixed prosthetics: the technology of manufacturing a steel stamped crown [Electronic resource]: Teaching aid / L.S. Sergeeva. SPb. : Publishing house "Lan", 2018. 52 p. (Textbooks for universities. Special literature). ISBN 978-5-8114-2863-2.
- 4. Prosthetic dentistry: national leadership / ed. I.Yu. Lebedenko, S.D. Arutyunova, A.N. Ryakhovsky. GEOTAR Media, 2016 --- 824 p.
- 5. Orthopedic dentistry: national guidelines. Volume 2. / ed. I.Yu. Lebedenko, S.D. Arutyunova, A.N. Ryakhovsky. GEOTAR Media, 2022. 416 p. ISBN: 978-5-9704-6367-3.

### Resources of the information and telecommunications network "Internet":

1. RUDN ELS and third-party ELS, to which university students have access based on concluded agreements:

- RUDN Electronic Library System - RUDN EBS http://lib.rudn.ru/MegaPro/Web

- ELS "University Library Online" http://www.biblioclub.ru

		13	3

HEAD **OF HIGHER EDUCATION PROGRAMME:** 

**DEVELOPERS:** 

Professor of the Department

of prosthetic dentistry

position, department

\* The assessment toolkit and the grading system are formed on the basis of the requirements of the relevant local normative act of RUDN University (regulations / order).

(Complex Prosthetics).

Training toolkit for self- studies to master the course \*:

- electronic fund of legal and normative-technical documentation http://docs.cntd.ru/

- abstract database SCOPUS http://www.elsevierscience.ru/products/scopus/

1. The set of lectures on the course Prosthodontics (Complex Prosthetics).

2. The laboratory workshop (if any) on the course Prosthodontics (Complex Prosthetics). 3. The guidelines for writing a course paper / project (if any) on the course Prosthodontics

4. ....

\* The training toolkit for self- studies to master the course is placed on the course page in the university telecommunication training and information system under the set procedure.

# 8. ASSESSMENT TOOLKIT AND GRADING SYSTEM\* FOR EVALUATION OF STUDENTS' COMPETENCES LEVEL UPON COURSE COMPLETION

level (GC-1, GPC-5, GPC-6, PC-1, PC-5, PC-6.) upon the course study completion are

The assessment toolkit and the grading system<sup>\*</sup> to evaluate the competences formation

specified in the Appendix to the course syllabus.

- EBS Yurayt http://www.biblio-online.ru

- EBS "Lan" http://e.lanbook.com/

2.Databases and search engines:

- EBS "Trinity Bridge"

- ELS "Student Consultant" www.studentlibrary.ru

- Yandex search engine https://www.yandex.ru/ - Google search engine https://www.google.ru/

signature

name and surname

Lebedenko. L.Yu

Bykova M. V.

HEAD OF EDUCATIONAL DEPARTMENT: of Prosthetic Dentistry,

name of department

Professor

signature

name and surname

First Deputy Director of

# Medical Institute for academic

affairs in the field of Dentistry

Razumova S.N

position, department

signature

name and surname