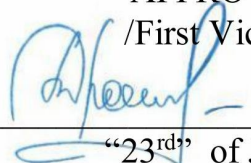


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ФИО: Стегний Кирилл Владимирович
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Дата подписания: 25.09.2026 05:37:43
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**Federal State Budgetary Educational Institution
of Higher Education
"Pacific State Medical University"
of the Ministry of Health of the Russian Federation**

APPROVED BY

/First Vice-Rector

 / Dvoynikova E.R./
"23rd" of June 2026

WORKING PROGRAM OF DISCIPLINE (MODULE)

B1.C.32 Propaedeutics of orthopedic dentistry

(name of the discipline (module))

Speciality:	31.05.03 Dentistry for foreign students
Level of training	specialty
Specialization (profile and field of professional activity)	02 Health care (in the field of dental healthcare)
The form of education	full-time
Educational program duration:	5 years
Institute/department	Institute of Dentistry

Vladivostok, 2026

When developing the working program of the discipline (module) B1.C.32 Propaedeutics of orthopedic dentistry is based on:

1) Federal State Educational Standards of Higher Education in the specialty 31.05.03 Dentistry, approved by Order No. 984 dated August 12, 2020 of the Ministry of Science and Higher Education of the Russian Federation.

2) Curriculum for the 31.05.03 Dentistry for foreign students (English-language program), profile 02 "Healthcare" (in the field of providing health care in patients with dental pathology), approved by the Academic Council of FSBEI HE PSMU of the Ministry of Health of Russia Report No. 1-7/25-26 dated March 27, 2026.

The working program for the discipline was developed by a team of the Institute of Dentistry of the Federal State Budgetary Educational Institution of Higher Education TSMU of the Ministry of Health of Russia, under the supervision of the head of the department / director of the Institute, Dr. of Medical Sciences, Associate Professor Yu. Yu. Pervov.

Developers:

Director of the Institute of Dentistry FSBEI HE PSMU of the Ministry of Health of Russia (current position)	Doctor of Medical Sciences, Associate Professor (academic degree, academic title)	Yu.Yu. Pervov (full name)
Senior lecturer at the Institute of Dentistry FSBEI HE PSMU of the Ministry of Health of Russia (current position)	- (academic degree, academic title)	Yu.Yu. Moskvina (full name)

1. GENERAL PROVISIONS

1.1. The purpose and objectives of mastering the discipline (module) B1.C.32 Propaedeutics of orthopedic dentistry

The purpose of mastering the discipline (module) is B1.C.32 Propaedeutics of orthopedic dentistry is to prepare graduates with a set of universal, general professional, and professional competencies. The level of competencies developed allows graduates to perform certain work activities within the scope of the professional standard "Dentist," which corresponds to the professional activities of graduates.

Objectives of the discipline (module) B1.C.32 Propaedeutics of orthopedic dentistry is:

1. To develop skills in providing dental care in outpatient and day hospital settings.

2. PLACE OF THE DISCIPLINE (MODULE) IN THE STRUCTURE OF THE BASIC EDUCATIONAL PROGRAM

Discipline (module) B1.C.32 Propaedeutics of orthopedic dentistry refers to the part Block 1. Disciplines (modules), The required part of the main educational program the specialty 31.05.03 Dentistry for foreign students (People's Republic of China English-language network educational program), specialization 02 Health care (in the field of dental healthcare) and it is studied in the 5-6 semesters.

3. PLANNED LEARNING OUTCOMES FOR THE DISCIPLINE (MODULE)

3.1. The discipline (module) B1.C.32 Propaedeutics of orthopedic dentistry is aimed at developing such students' competencies as: GPC-5, PC-1. The discipline (module) provides students with the formation of competencies, depending on the types of tasks of professional activity.

Competency code	Formulation of competence	Indicators of Competency Achievement
General professional competencies		
GPC-5	able to examine a patient and make a diagnosis	AI.GPC-5 ₁ - examines the patient using clinical, laboratory and special instrumental methods AI.GPC-5 ₂ - provides a comprehensive evaluation to determine the overall health and functionality of organs and systems to decide if there are no contraindications that might preclude complex and reconstructive dental manipulations AI.GPC-5 ₃ - evaluates the results of the exam to make a diagnosis
Professional competencies		
PC-1	ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods	AI. PC-1 ₁ - identifies basic pathologic conditions, symptoms, syndromes in patients with dental diseases AI. PC-1 ₂ - interprets and evaluates the information received from patients (their relatives/legal representatives), primary and re-examination data, as well as laboratory and instrumental investigations in patients with dental diseases AI. PC-1 ₃ - applying the methods of digital computerized and hardware diagnostics of dental diseases

3.2. Types of professional activities, based on those formed during the implementation of B1.C.32 Propaedeutics of orthopedic dentistry competencies:

Type of professional activity tasks

1. Medical
2. Research
3. Pedagogical

Kind of professional tasks

1. Conducting an examination of the patient to establish a diagnosis.

3.3. The planned learning outcomes in the discipline (module) are expressed in knowledge, skills, and (or) work experience. The outcomes characterize the stages of competence formation and ensure the achievement of the planned results of mastering the basic educational program. The results of training in the discipline are correlated with indicators of competence achievement.

4. SCOPE AND CONTENT OF THE DISCIPLINE (MODULE)

4.1. Scope of the discipline (module) and types of academic work

Type of academic work		Total hours	Semesters	
			5	6
			hours	hours
1		2	3	4
Classroom sessions (total), including:		88	50	38
Lectures		18	10	8
Practical classes		70	40	30
Independent work of the student, including:		56	22	34
Preparation for classes (PC)		38	16	22
Preparation for routine control (PRC)		12	6	6
Preparation for midterm examination (PME)		6		6
Midterm Examination		36		36
Type of midterm examination	credit (C)			
	exam (E)	E		E
Total: Overall labor intensity	hour	180	72	108
	Cr	5	2	3

4.2. Content of the discipline

4.2.1. Lecture topics and number of hours per semester of study of the discipline (module)

№	Lecture topics	Hours
1	2	3
semester 5		
1.	Introduction to the specialty. Functional anatomy and physiology of the dental system. The dental system as a single anatomical and functional complex. A dental therapeutic biotechnical system (according to M.Z. Mirgazitov). Functional anatomy of the oral mucosa. Tactile, temperature, and taste sensitivity of the oral mucosa.	2
2.	Anatomical and functional structure of the dental arches of the upper and lower jaws.	2
3.	Anatomical and functional structure of the periodontium.	2

4.	Anatomical and functional structure of the facial skeleton, chewing and facial muscles.	2
5.	Biodynamics of the lower jaw.	2
	Total hours per semester	10
semester 6		
1.	Fundamentals of diagnostics in orthopedic dentistry. Semiotics. Radiographic studies in orthopedic dentistry.	2
2.	Interaction of dental materials with the human body. Clinical materials science. Zirconium oxide.	2
3.	Single-crown prosthetics. Stamped and cast denture technology. Inlay technology.	2
4.	Removable denture technology. CAD/CAM technologies in orthopedic dentistry .	2
	Total hours per semester	8

4.2.2. Topics of practical classes and number of hours per semester of studying the discipline (module)

№	Practical classes' topics	Hours
1	2	3
semester 5		
1	Introduction to the specialty. Subject and objectives. History of the development of orthopedic dentistry. Relationships between orthopedic dentistry and other sciences and disciplines.	4
2	The dental and maxillary functional system. The skeleton of the masticatory apparatus. The main groups of teeth and their anatomical and topographic characteristics in relation to age. The structure of the dental arches. The concept of the alveolar and basal dental arches. Dental arches and their shape. Occlusal curves and the occlusal plane.	4
3	Anatomical and functional structure of the periodontium. Relationship with the muscles of the masticatory apparatus. Periodontal resistance to load. Functional structure of the periodontium. Pressure transmission through the periodontium. Innervation of the periodontium. Reflexes arising in the dental system. Functional masticatory links. Physiological changes in teeth and periodontium. Tooth abrasion. Brief information on the structure of the oral mucosa. Mobile and immobile oral mucosa. Anatomical features of the mucosa of the upper and lower jaws that are important in prosthetics.	4
4	The temporomandibular joint. Structure and topographic relationships of the joint elements. The glenoid fossa. The articular tubercle. The articular disc, the articular head. The articular cape . Articulation of the mandible with the base of the skull. The relationship between the form and function of the temporomandibular joint.	4
5	Masticatory and facial muscles. Facial structure and its age-related characteristics. Biodynamics of the mandible – mandibular movement. The relationship of all components of the dental system. Phases of masticatory movements of the mandible during biting and chewing.	4
6	Biodynamics of the lower jaw. Articulation, occlusion, and bite. Types of bites and their characteristics. Central occlusion and its articular, muscular, and dental features. Central relationships of the jaws. Movement of the lower jaw during mouth opening. Protrusion of the lower jaw, lateral movements of the lower jaw. Paths and angles of movement. Appliances that reproduce movements of the lower jaw (articulators and occluders).	4
7	Dental materials science. Materials used in orthopedic dentistry, their classification, properties, and requirements. Wax. Wax composites used in the clinic and laboratory, chemical composition, and physical and mechanical properties. Indications for use. Processing techniques.	4

8	Organization of a dental office. Types of dental units (DU), preparation of DU for work, safety precautions. Features of working with turbine handpieces, micromotors, air-water cooling systems, saliva ejectors, dust collectors and other mechanisms. Familiarization with their design, rules of operation and maintenance. A set of instruments for the initial examination of the patient and at subsequent stages of treatment. Disinfection and sterilization. Personal protective equipment. Prevention of infectious and iatrogenic diseases (HIV infection, hepatitis B, "C" and others).	4
9	Four-handed dentistry. Fundamentals of four-handed dental appointment technology. General concepts. New approaches to ergonomics. Patient appointment. Doctor's actions. Assistant's actions. Common errors in doctor-patient positioning. Improving doctor efficiency. Personal patient management.	4
10	Taking impressions of dental arches. Impression trays and their proper selection. Impression materials. Methods for taking impressions using various materials. Practical training – demonstration of practical skills.	4
Total hours per semester		40
semester 6		
1	Technology for producing plaster models of dental arches. Gypsum, chemical composition, physical and mechanical properties, and varieties. Working methods. Fabrication of wax bases with bite rims.	4
2	Tooth preparation (odontopreparation) and tissue response to this intervention. Biological and technical aspects and challenges. Pain issues and pain relief methods. Abrasive materials and cutting instrument requirements. Cutting and grinding instruments. Tooth preparation modes. Black's classification of cavities and the occlusal surface destruction index (OSDI). Inlay preparation rules. Required instruments. Direct inlay fabrication method. Practical training – demonstration of practical skills.	4
3	Tooth preparation (odontopreparation) and tissue response to this intervention. Biological and technical aspects of the problem. Pain and pain relief methods. Abrasive materials. Cutting instrument requirements. Cutting and grinding instruments. Tooth preparation modes. Fabrication of artificial crowns: stamped and cast all-metal.	4
4	Porcelain. Composition and properties of dental porcelain. Technological properties in the manufacture of porcelain crowns and bridges. Glass-crystalline materials. Chemical nature. Physical and mechanical properties. Technological features of application in the manufacture of fixed dentures. Porcelain and plastic crown technology.	4
5	Manufacturing of combined artificial crowns with plastic and ceramic veneers. Fabrication of fixed bridges using stamped-soldered and solid-cast methods. Veneering technology with plastics and ceramics. Metal-ceramics. Bonding between metal and porcelain. Polymer materials for temporary fixed dentures. Methods for fabricating temporary crowns and bridges. Composite polymers. Composition and classification. Polymer materials for dental splinting. Acrylic plastics. Methyl methacrylate. Chemical nature. Varieties. Physicomechanical and technological properties. Hot and cold curing plastics. The polymerization process and its effect on the condition of the finished product. Base plastics and plastics for veneering metal frameworks of dentures. Elastic plastics. Chemical composition. Physicomechanical and technological properties. Indications for use and methods of fabricating dentures from them.	4
6	Fabrication of removable plate dentures for partially edentulous patients. Fabrication of partial dentures. Types of supporting and retaining clasps and their characteristics.	4
7	Masses for duplicating models. Composition. Properties. Method of application. Refractory materials for the production of working models. Molding refractory	4

	materials. Chemical composition. Physicomechanical and technological properties. Definition of the term "compensatory" materials. Retaining elements - clasp, attachment, telescopic crown, beam. Manufacturing technique. Concept of " clasp " line, " clasp plane" of denture fixation. Arrangement of retaining elements on the tooth.	
8	Fabrication of removable plate dentures in the complete absence of teeth. The classical Gysi-Hanau-Bonville theory; Monson's spherical theory - the basis for determining centric occlusion and placing artificial teeth in the complete absence of natural teeth. Artificial standard teeth and their characteristics. Fabrication of orthodontic appliances with mechanical, functional, and combined action. Functional results. Activators. Definition of the concept "magnitude of the force of action of an orthodontic appliance." Modern technologies in orthodontics. Fabrication of maxillofacial appliances and repositioning, fixing, forming, substituting, and combined actions. Ectoprostheses .	2
	Total hours per semester	30

4.2.3. Students' selfwork

№	Name of the section of the academic discipline (module)	Types of Selfwork	Total hours
1	2	3	4
semester 5			
1	The dental functional system. Components of the masticatory system and their functional interactions. Neuromuscular system: control of voluntary and reflexive movements, reflex activity (sensory-motor systems), stretch reflex (muscle tone), coordination of reflex activity, adaptation to changes in the dentition, functional harmony and disharmony of occlusion. Development of dental biotechnical systems	written report on selected topics for classes, preparation for current assessment	4
2	Structure of dental arches. Dental arches and their shape. Concepts of dental, alveolar, and basal arches. Occlusal curves and the occlusal plane.		4
3	Appliances that reproduce the movements of the lower jaw (occluder , articulator). Types of articulators. Reproduction of the opening and closing movements of the lower jaw.		4
4	Radiographic examination methods. Types. Methods and their characteristics. Radiography of periapical tissues according to the isometric projection rule. Interproximal bite - wings - radiography.		4
5	Microprosthetics. Classification of microprostheses. Classification of cavities according to Black and the index of destruction of the occlusal surface of the teeth (IODZ)		4
6	Metals and their alloys. Noble alloys. Solders for soldering prosthetic components made of noble alloys. Chemical composition, physical, mechanical, and technological properties.		2
	Total hours per semester		22
semester 6			
1	Tooth preparation (odontopreparation) and tissue response to this intervention. Biological and technical aspects of the problem.	written report on selected questions for classes, preparation for ongoing monitoring	6
2	Technological features of application in the manufacture of fixed dentures. Porcelain and plastic crown technology		6

3	Methods for fabricating temporary crowns and bridges. Composite polymers. Composition and classification.		6
4	Manufacturing of removable plate dentures for partially missing teeth. Manufacturing of clasp dentures. Types of supporting and retaining clasps and their characteristics.		8
5	Fixation elements - clasp, attachment, telescopic crown, beam. Manufacturing technique. Concept of " clasp " line, " clasp plane" of denture fixation. Location of fixation elements on the tooth.		8
	Total hours per semester		34

5. CONDITIONS FOR THE IMPLEMENTATION OF THE DISCIPLINE (MODULE)

5.1. Educational, methodological and informational support of the academic discipline (module)

Basic literature

№	Name, type of resource	Author(s) /Editor	Output data, email address	Number of copies (accesses) in LIC
1	2	3	4	5
1.	Orthopedic Dentistry: Textbook [Electronic resource]	N. N. Abolmasov , N. G. Abolmasov , I. N. Abolmasov	M.: GEOTAR-Media, 2024. - 680 p. URL: http://www.studentlibrary.ru	Unlimited
2.	Orthopedic Dentistry. Propaedeutic Course: Textbook [Electronic resource]	V. N. Trezubov, V. V. Trezubov; edited by V. N. Trezubova	Moscow: GEOTAR-Media, 2024. - 624 p. URL: http://www.studentlibrary.ru	Unlimited
3.	Propaedeutics of Orthopedic Dentistry: Textbook [Electronic resource]	edited by O. O. Yanushevich	Moscow: GEOTAR-Media, 2024. - 248 p. URL: http://www.studentlibrary.ru	Unlimited
4.	Preclinical course of dentistry. Part I. Introduction to dentistry: textbook	eds AV Sevbitov , AE Dorofeev	M.: GEOTAR-Media, 2024. - 184 p. - EBS "Student Consultant"	Unlimited

Additional literature

№	Name, type of resource	Author(s) /Editor	Output data, email address	Number of copies (accesses) to the LIC
1	2	3	4	5
1.	Propaedeutics of dental diseases [Electronic resource]	edited by S.N. Razumova , I.Yu. Lebedenko, S.Yu. Ivanov	M.: GEOTAR-Media, 2019. URL: http://www.studentlibrary.ru	Unlimited
2.	Orthopedic Dentistry (Propaedeutic Course): Textbook [Electronic Resource]	V. N. Trezubov, L. M. Mishnev , A. S. Shcherbakov, V. V. Trezubov; edited by V. N. Trezubov	M.: GEOTAR-Media, 2022. - 640 p. URL: http://www.studentlibrary.ru	Unlimited

3.	Dental materials science: textbook	edited by SN Razumova	M.: GEOTAR-Media, 2025. - 168 p. - EBS "Student Consultant"	Unlimited
4.	Introduction to prosthetic dentistry : Textbook	A. V. Sevbitov , M. Yu. Kuznetsova, V. V. Borisov [et al.]; cd. by A. V. Sevbitov	M . : MIA , 2020. - 56 p . - EBS " Medlib "	Unlimited

Online resources.

1. EBS "Student Consultant" <http://studmedlib.ru/>
2. EBS "University Library Online" <http://www.biblioclub.ru/>
3. EBS "Yurait" <https://urait.ru/>
4. EBS "BookUp" <https://www.books-up.ru/>
5. Resources of the LIC FSBEI HE PSMU of the Ministry of Health of Russia PSMU <https://tgmru.ru/university/bibliotechno-informacionnyj-centr/resursy-bic/sobstvennye/>

Online resources and instructions for their use are posted on the Library and Information Center page [Library and Information Center — PSMU \(tgmru.ru\)](https://tgmru.ru)



5.2. Material and technical support of the academic discipline (module)

Information about the material and technical support of the discipline is posted on the official website of the university [Logistical support and equipment of the educational process. Pacific State Medical University of the Ministry of Health of the Russian Federation \(tgmru.ru\)](https://tgmru.ru)



5.3. The list of information technologies used for the implementation of the educational process in the discipline (module), information and reference systems, licensed and freely distributed software, including domestic production:

1. PolycomTelepresence M100 Desktop Conferencing Application (BKC)
2. SunRav Software tTester
3. 7-PDF Split & Merge
4. ABBYYFineReader
5. Kaspersky Endpoint Security
6. Online testing system INDIGO
7. Microsoft Windows 7
8. Microsoft Office Pro Plus 2013
9. 1C:University
10. The Guarantor
11. MOODLE(modular object-oriented dynamic learning environment)

6. THE SPECIFICS OF THE DISCIPLINE'S IMPLEMENTATION FOR STUDENTS WITH DISABILITIES AND PEOPLE WITH DISABILITIES

6.1. Availability of appropriate conditions for the implementation of the discipline

For students with disabilities and people with limited health capabilities (LHC), on the basis of a written application, the discipline is implemented taking into account the characteristics of psychophysical development, individual capabilities and health status (hereinafter referred to as individual characteristics). The following general requirements are ensured: the use of special technical means of teaching for collective and individual use, the provision of the services of an assistant (helper) who provides such a student with the necessary technical support, ensuring access to buildings and premises where classes are held, and other conditions without which the study of the discipline is impossible or difficult.

6.2. Ensuring compliance with general requirements

When implementing the discipline on the basis of a written application from the student, the following general requirements are ensured: conducting classes for disabled students and individuals with disabilities (LHC) in the same classroom together with students who do not have disabilities, if this does not create difficulties for the students; the presence in the classroom of an assistant (assistants) providing the students with the necessary technical support, taking into account their individual characteristics; use of the technical means necessary for the student, taking into account their individual characteristics.

6.3. Bringing to the attention of students with disabilities in a form accessible to them all local regulations of the Federal State Budgetary Educational Institution of Higher Education Pacific State Medical University of the Ministry of Health of Russia.

All local regulations of the Federal State Budgetary Educational Institution of Higher Education Pacific State Medical University of the Ministry of Health of the Russian Federation on the implementation of the discipline (module) are communicated to students with disabilities (LHC) in a form accessible to them.

6.4. Implementation of an increase in the duration of the midterm examination in relation to the established duration for students with disabilities

The form of conducting current monitoring and midterm certification in the discipline for disabled students and individuals with limited health capabilities (LHC) is established taking into account individual psychophysical characteristics (orally, in writing on paper, printed on a computer, in the form of testing, etc.).

The duration of the interim certification in relation to the established duration is increased upon written application of the student with disabilities. The duration of the student's preparation for the test is increased by at least 0.5 hours.

7. STAFFING OF THE DISCIPLINE

The scientific and pedagogical staff ensuring the implementation of the educational process in the discipline meets the requirements of the Federal State Educational Standard of Higher Education in the specialty 31.05.03 Dentistry for foreign students (People's Republic of China English-language network educational program) specialization 02 Health care (in the field of dental healthcare) and is posted on the website of the educational organization.



8. UPBRINGING WORK

Type of upbringing work	Forms and directions of upbringing work	Assessment criteria
Assistance in personal development	Open Discipline " Propaedeutics of orthopedic dentistry " Conversations and debates on healthy lifestyle promotion	Portfolio

	Participation in interdepartmental conferences on the formation of a healthy lifestyle culture, development of the ability to maintain and improve health Hidden – creating atmosphere, infrastructure Discipline " Propaedeutics of orthopedic dentistry " Formation of a healthy lifestyle culture, development of the ability to maintain and improve health Creating a friendly and respectful atmosphere with a high level of communication skills in the implementation of discipline	
Civic values	Open Discipline " Propaedeutics of orthopedic dentistry" Conducting events that promote the development of civil and legal culture (round tables, debates, discussions Short, timely disputes during special events Hidden The discipline " Propaedeutics of orthopedic dentistry " Focuses on general civil value orientations and legal culture Conscious civic position in the implementation of professional activities	Portfolio
Social values	Open Discipline " Propaedeutics of orthopedic dentistry" Coverage of issues related to the organization of a healthy lifestyle based on health-saving technologies Coverage of environmental issues, environmental problems as a factor influencing public health and individual population risks Hidden Discipline " Propaedeutics of orthopedic dentistry" Identification in the social structure when obtaining education and carrying out professional activities	Portfolio