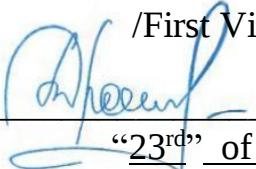


Документ подписан простой электронной подписью  
Информация о владельце:  
ФИО: Стегний Кирилл Владимирович  
Должность: И.о. ректора  
Дата подписания: 16.09.2026 09:40:49  
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Federal State Budget Educational Institution  
of Higher Education  
Pacific State Medical University  
of the Ministry of Health of the Russian Federation

APPROVED BY

/First Vice-Rector

 / Dvoynikova E.R./  
“23<sup>rd</sup>” of June 2026

## DISCIPLINE WORK PROGRAM

### B1.V.02 Diagnostic radiology

(name of discipline)

**Specialty**

**31.05.03 Dentistry for foreign  
students (English-language program)**  
(code, name)

**Degree**

Specialist's degree

**Profile**

02 "Healthcare"  
(in the field of providing health care in  
patients with dental pathology)

**Mode of study**

Full-time

**Period of mastering the BEP**

**5 years**  
(nominal length of study)

**Department**

of Therapy (Internal Medicine) with  
Diagnostic Radiology Course

Program of the discipline **B1.V.02 Diagnostic radiology** is based on:

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

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.

Work program for the discipline was developed by the writing team of the Department of Therapy (Internal Medicine) with Diagnostic Radiology Course of the FSBEI HE PSMU of the Ministry of Health of Russia, under the guidance of the head of the Department, Doctor of Medical Sciences Kabalyk M.A.

**Developed by:**

|                                               |                                                                           |                                    |
|-----------------------------------------------|---------------------------------------------------------------------------|------------------------------------|
| <u>Professor</u><br>(position held)           | <u>Doctor of Medical Sciences</u><br>(academic degree, academic title)    | <u>Kabalyk M.A.</u><br>(full name) |
| <u>Assistant Professor</u><br>(position held) | <u>Candidate of Medical Sciences</u><br>(academic degree, academic title) | <u>Primak N.V.</u><br>(full name)  |

## 1. GENERAL PROVISIONS

### 1.1. Purpose and Objectives of Mastering B1.V.02 Diagnostic radiology

**The purpose** of mastering the discipline is to achieve competencies necessary to perform professional functions outlined in the Occupational standard "Dentist (General Dental Practitioner)" (Order of the Ministry of Labor and Social Protection No.227n dated May 10, 2016); to develop skills of multifaceted application of modern imaging methods in order to identify the most common diseases in clinical practice of a dentist.

**Objectives** of mastering the discipline:

1. Study principles of achieving an image using radiological diagnostic methods;
2. Examine diagnostic potential of various methods of diagnostic radiology;
3. Learn to select optimal diagnostic method in patients with dental pathology; develop skills of multifaceted application of modern imaging methods in clinical practice of a dentist;
4. Develop skills of identifying organs and their main anatomical structures on the images achieved with radiological diagnostic methods;
5. Study radiological symptoms and syndromes of the main pathologic conditions of organs and organ systems;
6. Develop skills of interpreting results of imaging methods.

## 2. DISCIPLINE AS PART OF THE BASIC EDUCATIONAL PROGRAM

Discipline **B1.V.02 Diagnostic radiology** is included in the Variative part of the Block 1 of the basic educational program for the specialty 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), and is part of the 6th semester's curriculum

### 3. PLANNED LEARNING OUTCOMES OF THE DISCIPLINE

3.1. Mastering the discipline **B1.V.02 Diagnostic radiology** is aimed at the development of students' competencies. The discipline facilitates the development of students' competencies corresponding to the types of professional activity.

| Labor function                                 | Code and Name of competency of the graduate                                                                            | Competency Indicators                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Professional Competencies</b>               |                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| A/01.7 Patient examination. Making a diagnosis | PC-1. ability and willingness to implement activities aimed at diagnosing dental diseases using digital health methods | AI. PC-1 <sub>1</sub> - identifies basic pathologic conditions, symptoms, syndromes in patients with dental diseases<br>AI. PC-1 <sub>2</sub> - 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<br>AI. PC-1 <sub>3</sub> - applying the methods of digital computerized and hardware diagnostics of dental diseases |

3.2. Types of professional activity corresponding to competencies developed over the course of mastering **B1.V.02 Diagnostic radiology**:

Types of professional activity objectives

1. *Medical*

Kinds of professional activity objectives

1. examination of the patient in order to make a diagnosis;

3.3. Planned learning outcomes of mastering the discipline are represented by knowledge, skills, abilities and/or experience, characterize the stages of developing competencies and ensure achievement of the planned outcomes of mastering the basic educational program. Learning outcomes of a discipline are correlated with competency indicators.

#### 4. SCOPE AND CONTENT OF THE DISCIPLINE

##### 4.1. Scope of the Discipline and Types of Academic Work

| Type of Academic Work                                   |                    | Total Hours | Semesters  |
|---------------------------------------------------------|--------------------|-------------|------------|
|                                                         |                    |             | 6          |
|                                                         |                    |             | hours      |
| 1                                                       |                    | 2           | 3          |
| <b>Classroom hours (total), including:</b>              |                    | <b>72</b>   | <b>72</b>  |
| Lectures (L)                                            |                    | 20          | 20         |
| Practical classes (C)                                   |                    | 52          | 52         |
| <b>Independent work of the student (IW), including:</b> |                    | <b>36</b>   | <b>36</b>  |
| Preparing for classes (CP)                              |                    | 16          | 16         |
| Preparing for continuous assessment (CAP)               |                    | 12          | 12         |
| Preparation for interim assessment (IAP)                |                    | 8           | 8          |
| Interim assessment                                      |                    |             |            |
| <b>Type of interim assessment</b>                       | pass/fail test (T) | T           | T          |
|                                                         | exam (E)           |             |            |
| <b>TOTAL: TOTAL credit value</b>                        | hrs.               | <b>108</b>  | <b>108</b> |
|                                                         | credits            | <b>3</b>    | <b>3</b>   |

##### 4.2. Contents of the Discipline

##### 4.2.1. Topics of Discipline Lectures and Academic Hours per Semester

| No.            | Lecture Topic                                                                                                    | Hours     |
|----------------|------------------------------------------------------------------------------------------------------------------|-----------|
| 1              | 2                                                                                                                | 3         |
| Semester No. 6 |                                                                                                                  |           |
| 1.             | Methods and physical and technical basis of diagnostic radiology. Radiation safety. Diagnostic radiopaque agents | 2         |
| 2.             | Diagnosing diseases of the musculoskeletal system using imaging methods                                          | 2         |
| 3.             | Congenital defects and anomalies of teeth and jaws. Traumatic injuries of the teeth and jaws                     | 2         |
| 4.             | Inflammatory diseases of the teeth and jaws                                                                      | 2         |
| 5.             | Mass lesions of the jaws. Diseases of the salivary glands                                                        | 2         |
| 6.             | Diagnosing infectious diseases and lesions of the head and neck using imaging methods                            | 2         |
| 7.             | Diagnosing diseases of the respiratory organs using imaging methods                                              | 2         |
| 8.             | Diagnosing diseases of the cardiovascular system using imaging methods                                           | 2         |
| 9.             | Diagnosing diseases of the digestive organs using imaging methods                                                | 2         |
| 10.            | Diagnosing diseases of the genitourinary system using imaging methods                                            | 2         |
|                | <b>Hours per semester total</b>                                                                                  | <b>20</b> |

#### 4.2.2. Topics of Discipline Practical Classes and Academic Hours per Semester

| No.                             | Practical Class Topic                                                                                                                                                                                               | Hours     |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| 1                               | 2                                                                                                                                                                                                                   | 3         |
| Semester No. 6                  |                                                                                                                                                                                                                     |           |
| 1                               | Imaging methods. Physical and technical basis of diagnostic radiology. Radiation safety. Diagnostic radiopaque agents and their application                                                                         | 4         |
| 2                               | Diagnosing diseases and injuries of bones and joints using imaging methods. Congenital anomalies of the bones and joints                                                                                            | 4         |
| 3                               | Radiological anatomy of the maxillofacial region. Diagnosing defects and anomalies of the dentofacial system using imaging methods. Diagnosing traumatic injuries of the maxillofacial region using imaging methods | 8         |
| 4                               | Diagnosing inflammatory processes and dystrophic changes of the maxillofacial region using imaging methods                                                                                                          | 8         |
| 5                               | Diagnosing cysts and lesions of the maxillofacial region using imaging methods                                                                                                                                      | 4         |
| 6                               | Diagnosing infectious diseases of the head and neck using imaging methods. Diagnosing mass lesions of the head and neck using imaging methods                                                                       | 8         |
| 7                               | Radiological anatomy of the thoracic organs. Radiographic signs of diseases of the lungs and pleura                                                                                                                 | 4         |
| 8                               | Radiological anatomy of the heart and major vessels. Normal and pathological configurations of the cardiovascular silhouette. Congenital and acquired heart defects                                                 | 4         |
| 9                               | Radiological anatomy of the abdominal organs. Diagnosing diseases and injuries of the digestive organs using imaging methods                                                                                        | 4         |
| 10                              | Radiological anatomy of the urinary system. Diagnosing diseases of the genitourinary system using imaging methods                                                                                                   | 4         |
| <b>Hours per semester total</b> |                                                                                                                                                                                                                     | <b>52</b> |

#### 4.2.3. Independent Work of the Student

| No.            | Name of the Discipline Section                                                                                                                                                                                      | Type of IW                                                                                             | Total Hours |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-------------|
| 1              | 3                                                                                                                                                                                                                   | 4                                                                                                      | 5           |
| Semester No. 6 |                                                                                                                                                                                                                     |                                                                                                        |             |
| 1              | Imaging methods. Physical and technical basis of diagnostic radiology. Radiation safety. Diagnostic radiopaque agents and their application                                                                         | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 6           |
| 2              | Diagnosing diseases and injuries of bones and joints using imaging methods. Congenital anomalies of the bones and joints                                                                                            | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3           |
| 3              | Radiological anatomy of the maxillofacial region. Diagnosing defects and anomalies of the dentofacial system using imaging methods. Diagnosing traumatic injuries of the maxillofacial region using imaging methods | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3           |
| 4              | Diagnosing inflammatory processes and dystrophic changes of the maxillofacial region using imaging methods                                                                                                          | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3           |

|                                 |                                                                                                                                                                     |                                                                                                        |           |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|-----------|
| 5                               | Diagnosing cysts and lesions of the maxillofacial region using imaging methods                                                                                      | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3         |
| 6                               | Diagnosing infectious diseases of the head and neck using imaging methods. Diagnosing mass lesions of the head and neck using imaging methods                       | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 6         |
| 7                               | Radiological anatomy of the thoracic organs. Radiographic signs of diseases of the lungs and pleura                                                                 | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3         |
| 8                               | Radiological anatomy of the heart and major vessels. Normal and pathological configurations of the cardiovascular silhouette. Congenital and acquired heart defects | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3         |
| 9                               | Radiological anatomy of the abdominal organs. Diagnosing diseases and injuries of the digestive organs using imaging methods                                        | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3         |
| 10                              | Radiological anatomy of the urinary system. Diagnosing diseases of the genitourinary system using imaging methods                                                   | Preparing for practical classes, preparing for continuous assessment, preparing for interim assessment | 3         |
| <b>Hours per semester total</b> |                                                                                                                                                                     |                                                                                                        | <b>36</b> |

## 5. REQUIREMENTS FOR IMPLEMENTATION OF DISCIPLINE

### 5.1. Discipline Requirements for Educational Materials and Provided Information

#### Essential reading

| No. | Name/Title, Resource Type                                       | Author(s)/Editor                                                                | Publisher Imprint, Web Address                                                                                                       | Number of Copies (accesses) in the Library and Information Center |
|-----|-----------------------------------------------------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1   | 2                                                               | 3                                                                               | 4                                                                                                                                    | 5                                                                 |
| 1   | Radiation diagnostics: a textbook [Electronic resource]         | E. B. Ilyasova, M. L. Chekhonatskaya, V. N. Priezzheva                          | M.: GEOTAR-Media, 2021. - 432 p. URL: <a href="http://www.studentlibrary.ru">http://www.studentlibrary.ru</a>                        | Unlimited access                                                  |
| 2   | Computed tomography in emergency medicine [Electronic resource] | edited by S. Mirsadre, K. Mankad, E. Chalmers                                   | M.: Knowledge Laboratory, 2021. - 242 p. URL: <a href="http://www.studentlibrary.ru/">http://www.studentlibrary.ru/</a> Unlimited d. | Unlimited access                                                  |
| 3   | Diagnostic radiology :                                          | G. E. Trufanov, R. M. Akiev, K. N. Alekseev [et al.] ; ed. by V. Yu. Grigorieva | M. : ГЭОТАР-Медиа, 2021. - 444 с. - ЭБС «Консультант студента»                                                                       | Unlimited access                                                  |

#### Supplementary reading

| No. | Name/Title, Resource Type | Author(s)/Editor | Publisher Imprint, Web Address | Number of Copies (accesses) in the Library and |
|-----|---------------------------|------------------|--------------------------------|------------------------------------------------|
|-----|---------------------------|------------------|--------------------------------|------------------------------------------------|

|          |                                                                                      |                                                           |                                                                                                                 | <b>Information Center</b> |
|----------|--------------------------------------------------------------------------------------|-----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|---------------------------|
| <b>1</b> | <b>2</b>                                                                             | <b>3</b>                                                  | <b>4</b>                                                                                                        | <b>5</b>                  |
| <b>1</b> | Radiation diagnostics: textbook [Electronic resource]                                | edited by G. E. Trufanov                                  | M.: GEOTAR-Media, 2015. - 496 p. URL: <a href="http://www.studentlibrary.ru">http://www.studentlibrary.ru</a>   | Unlimited access          |
| <b>2</b> | Radiation diagnostics of the chest organs: national guidelines [Electronic resource] | Edited by V. N. Troyan, A. I. Shekhter                    | M.: GEOTAR-Media, 2014. - 584 p. URL: <a href="http://www.studentlibrary.ru/">http://www.studentlibrary.ru/</a> | Unlimited access          |
| <b>3</b> | Atlas of X-ray anatomy and positioning: manual for doctors [Electronic resource]     | M. V. Rostovtsev, G. I. Bratnikova, E. P. Korneva, et al. | M.: GEOTAR-Media, 2023. - 320 p. URL: <a href="http://www.studentlibrary.ru">http://www.studentlibrary.ru</a>   | Unlimited access          |

#### Online resources

1. Electronic library system "Student Consultant" <http://studmedlib.ru/>
2. Electronic library system "University Library Online" <http://www.biblioclub.ru/>
3. Electronic library system "Urait" <https://urait.ru/>
4. Electronic library system "BookUp" <https://www.books-up.ru/>
5. Resources owned by the Library and Information Center of FSBEI HE PSMU of the Ministry of Health of Russia <https://tgmu.ru/university/bibliotechno-informacionnyj-centr/resursy-bic/sobstvennye/>

Online resources and respective user guides are available on the Library and Information Center website [Library and Information Center — PSMU \(tgmu.ru\)](http://tgmu.ru)



#### 5.2. Discipline Requirements for Facilities and Resources

Information on the facility and resource availability and requirements of the discipline is available on the [Facility and resource availability and requirements. FSBEI HE PSMU of the Ministry of Health of Russia \(tgmu.ru\)](http://tgmu.ru) page of the official website of the university.



#### 5.3. List of Information Technologies, Information and Reference Systems, Licensed and Free Software (Including Domestically-developed Software):

1. PolycomTelepresence M100 Desktop Conferencing Application (Videoconference system)
2. SunRav Software tTester
3. 7-PDF Split & Merge
4. ABBYYFineReader
5. Kaspersky Endpoint Security
6. INDIGO online testing system
7. Microsoft Windows 7
8. Microsoft Office Pro Plus 2013
9. 1C:University
10. GARANT system

## 11. MOODLE (Modular Object-Oriented Dynamic Learning Environment)

### 6. ASPECTS OF THE IMPLEMENTATION OF THE DISCIPLINE FOR STUDENTS WITH DISABILITIES AND SPECIAL NEEDS

#### 6.1. Availability of Accessible Environment

For students with disabilities and special needs, if a written application is submitted, lectures and practical classes are carried out taking into account health limitations, individual capabilities and medical status (hereinafter referred to as individual characteristics) of the student. Compliance with the following general requirements is ensured: teaching aids for collective and individual use are provided, required technical assistance is provided by an assistant; buildings and premises where lectures and practical classes are taking place meet accessibility requirements, other arrangements lack of which makes it impossible or difficult to master the discipline are made.

#### 6.2. Ensuring Compliance with General Requirements

When lectures and practical classes are carried out at the written application of the student, the following general requirements are met: lectures and practical classes for students with disabilities and special needs take place at the same location as for students who do not have disabilities, if this does not cause difficulties for students; an assistant (assistants), who provide(s) students with the necessary technical assistance taking into account individual characteristics of the student, is (are) provided; necessary teaching aids are provided, taking into account individual characteristics of the student.

#### 6.3. Availability of the Internal Policies and Procedures of FSBEI HE PSMU of the Ministry of Health of Russia to Students with Disabilities in a Format Accessible to Them.

All internal policies and procedures of FSBEI HE PSMU of the Ministry of Health of Russia concerning the discipline are made available to students with disabilities in a format accessible to them.

#### 6.4. Increase in the Time Limit of Interim Assessment for Students with Disabilities and Special Needs in Relation to the Established duration

Format of the interim assessment of academic performance within the scope of the discipline conducted for students with disabilities and special needs is selected taking into account individual characteristics of the students (orally, by writing on paper, by typing on a computer, as a test, etc.). The duration of the interim assessment in relation to the established duration is increased at the written application of the student with disabilities. Time limit for the student's preparation for the test is increased by at least 0.5 hours.

### 7. STAFFING REQUIREMENTS OF THE DISCIPLINE

Academic teaching personnel that ensure the implementation of the discipline education process meet the requirements of the Federal State Educational Standard of Higher Education for the 31.05.03 Dentistry specialty; list of the aforementioned personnel is available on the website of the educational organization.



### 8. TUTORIAL WORK

| Type of tutorial work         | Forms and approaches to tutorial work                                                                                                                                                                                                             | Assessment criteria |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Assistance in personal growth | Overt<br>Talks and problem-centric debates aimed at promotion of healthy lifestyle.<br>Participation in interdepartmental conferences aimed at formation of healthy lifestyle and development of skills necessary to preserve and improve health. | Portfolio           |

|                           |                                                                                                                                                                                                                                                                                |           |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
|                           | <p>Covert – creating atmosphere and infrastructure.<br/>Developing a culture of healthy lifestyle, the ability to preserve and improve health.<br/>Creating atmosphere of kindness and respect with a high level of communication during implementation of the discipline.</p> |           |
| Civic position and values | <p>Overt<br/>Conducting events that facilitate development of civil culture (roundtable discussions, discussions/debates, and talks).<br/>Short discussions on current significant events in case the latter occur.</p>                                                        | Portfolio |
|                           | <p>Covert<br/>Focusing on civic values-oriented position and legal awareness.<br/>Cultivating mindful social position during professional activity.</p>                                                                                                                        |           |
| Social values             | <p>Overt<br/>Highlighting aspects of organization of healthy lifestyle based on health-preserving technologies.<br/>Highlighting ecology-related questions, environmental issues as a factor affecting population health and select population risks.</p>                      | Portfolio |
|                           | <p>Covert<br/>Identification in social structure during period of education and in professional activity.</p>                                                                                                                                                                  |           |