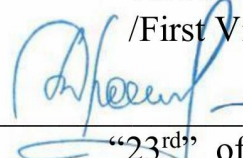


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Federal State Budget Educational Institution of Higher Education
«Pacific State Medical University»
of the Ministry of Health of the Russian Federation

APPROVED BY

/First Vice-Rector



/ Dvoynikova E.R./

“23rd” of June 2026

THE COURSE (MODULE) PROGRAM

B1.O.14 Pathological physiology-Pathophysiology of head and neck

Title of discipline	
Speciality	31.05.03 Dentistry for the preparation of international students (code, name)
Degree Level	Specialist Degree
Specialization	02 Healthcare
Mode of Study	full-time
Duration of the CEP	5 years (standard duration of study)
Institute/department	Department of Normal and Pathological Physiology

Vladivostok, 2026

The working program of discipline (module) **B1.O.14 Pathological physiology-Pathophysiology of head and neck** is based on:

- 1) FSES HE in the direction of training (specialty) 31.05.03 Dentistry, Order No. 984 of August 26, 2020, approved by 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 of the discipline is developed by the author's team of the Department of Normal and Pathological Physiology of FSBEI HE PSMU of the MOH of Russia, under the guidance of the head of the department, Professor, Dr.Sci (Medicine) Markelova Elena Vladimirovna.

Developers:

Associate Professor	Cand.Sci (Medicine), Assoc. Prof.	Knysh S.V.
(position)	(academic degree, academic title)	(Full name)

1. GENERAL PROVISIONS

1.1. Purpose and objectives of mastering the discipline (module) B1.O.14 Pathological physiology-Pathophysiology of head and neck

The purpose of mastering the discipline (module) is to :

formation of students' ability to effectively solve professional medical problems on the basis of pathophysiological analysis of data on pathological processes, clinical syndromes and diseases by using knowledge about the general regularities of their occurrence, development and outcomes, as well as the formation of principles (algorithm, strategies) and methods of their detection (diagnosis), treatment, prevention and rehabilitation.

Tasks of mastering the discipline (module):

1. Formation of students' basic knowledge and modern concepts of general nosology, social and biological basics of diseases;
2. acquisition by students the knowledge of etiology, pathogenesis, principles of detection, treatment and prevention of the most significant clinical syndromes, diseases and pathological processes in dentistry;
3. training students to be able to conduct pathophysiological analysis of data on pathological processes, clinical syndromes, typical forms of pathology and individual diseases;
4. formation of students' methodological and methodical skills of clinical thinking and rational action of a doctor.

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

Discipline **B1.O.14 Pathological physiology-Pathophysiology of head and neck** belongs to the compulsory part of the basic educational program 31.05.03 Dentistry for the preparation of international students (network educational program, language of instruction is English, by People's Republic of China) and is studied in semester 3,4.

3. PLANNED LEARNING OUTCOMES OF THE DISCIPLINE (MODULE)

3.1. Mastering the discipline **B1.O.14 Pathological physiology-Pathophysiology of head and neck** is aimed to the formation of competencies in students. The discipline provides the formation of competencies of students, depending on the types of professional activity tasks.

Name of the category (group) of general professional competences	Code and name of the general professional competence of the graduate	Indicators of achievement of general professional competence
General professional competences		
Basics of fundamental and natural science knowledge	GPC-9. Able to evaluate morphofunctional, physiological conditions and pathological processes in the human body to solve professional problems	AI.GPC-9 ₁ evaluates morphofunctional state of organs AI.GPC-9 ₂ distinguishes between pathologic and physiologic processes, determines etiology causes of changes AI.GPC-9 ₃ provides diagnostic evaluation of the revealed changes

3.2. Types of professional activity on the basis of competences formed during realization of discipline **B1.O.14 Pathological physiology-Pathophysiology of head and neck**:

Type of professional activity tasks

1. Medical

Kind of professional activity tasks

1. Diagnostic activity
2. Treatment activity

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

4. SCOPE AND CONTENT OF THE DISCIPLINE (MODULE)

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

Type of academic work		Total hours	Semesters	
			4	5
			hours	hours
1		2	3	4
Auditorium classes (total), including:		80	72	40
Lectures (L)		24	20	14
Practical classes (PC)		56	52	28
Individual work of the student (IW), including:		64	36	30
<i>Electronic educational resource (EER)</i>		-	-	-
<i>Preparing for classes</i>		56	28	28
<i>Preparation for current control (PCC))</i>		10	8	2
<i>Preparation for interim assessment (PIA)</i>		2	-	2
Interim assessment		36	-	36
Type of interim assessment	Credit (C)	-	-	-
	Exam (E)	36	-	36
TOTAL: Total labour intensity	Hours	216	108	108
	Credits	6	3	3

4.2. Content of the discipline

4.2.1. Topics of lectures and number of hours by semesters of study of discipline (module)

№	Lecture topics	Hours
1	2	3
Semester 3		
1.	Introduction to the discipline. Basic concepts of general nosology. The doctrine of etiology and pathogenesis. The doctrine of reactivity and resistance.	4
2.	Pathophysiology of peripheral blood circulation and microcirculation disorders	4
3.	Pathophysiology of hypoxia	4
4.	Pathophysiology of inflammation. Acute phase response. Fever	4
5.	Pathophysiology of immune reactivity disorders. Hypersensitivity reactions	4
6.	Pathophysiology of water-mineral balance and acid-base balance disorders	2
	Total semester hours	20
Semester 4		

1.	Pathophysiology of disorders in the blood system	4
2.	Pathophysiology of disorders in the cardiovascular system.	2
3.	Pathophysiology of respiratory system disorders	2
4.	Pathophysiology of disorders in the digestive and excretory systems	2
5.	Pathophysiology of disorders in the endocrine system	2
6.	Pathophysiology of disorders in the nervous system	2
	Total semester hours	14

4.2.2. Topics of practical classes and number of hours by semesters of study of discipline (module)

№	Topics of practical classes	Hours
1	2	3
Semester 3		
1	Etiology and pathogenesis. General concepts. The doctrine of reactivity and resistance	8
2	Typical forms of peripheral blood circulation disorders. Microcirculation and its disorders	8
3	Pathophysiology of hypoxic and hyperoxic conditions	8
4	Pathophysiology of inflammation and acute phase response. Fever and hyperthermia	8
5	Pathophysiology of immune reactivity disorders. Hypersensitivity reactions	8
6	Pathophysiology of water-mineral balance disorders. Pathophysiology of acid-base balance disorders	8
7	Pathophysiology of metabolic disorders	4
	Total semester hours	52
Semester 4		
1	Pathophysiology of disorders in the blood system.	4
2	Pathophysiology of disorders in the cardiovascular system.	4
3	Pathophysiology of respiratory system disorders	4
4	Pathophysiology of disorders in the digestive and excretory systems	4
5	Pathophysiology of disorders in the endocrine system	4
6	Pathophysiology of disorders in the nervous system	4
7	Pathophysiology of disorders in the oral cavity	4
	Total semester hours	28

4.2.3. Individual work of the student

№	Name of the section of the academic discipline	Types of IW	Total hours
1	2	3	4
Semester 3			
1	General pathophysiology. Typical forms of disorders	Working with lecture notes, additional literature, and methodological materials.	28

		Preparing analytical block diagrams and annotations.	
2	Preparation for current control	Working with lecture notes, teaching materials, and additional literature	4
	Total semester hours		36
Semester 4			
1	Special pathophysiology	Working with lecture notes, additional literature, and methodological materials. Preparing analytical block diagrams and annotations.	26
2	Preparation for current control	Working with lecture notes, teaching materials, and additional literature	2
3	Preparation for interim assessment	Working with lecture notes, teaching materials, and additional literature	2
	Total semester hours		30

5. CONDITIONS OF REALIZATION OF THE DISCIPLINE (MODULE)

5.1. Educational-methodical and informational support of the discipline (module)

Main literature

n/ №	Name, type of resource	Author(s)/editor	Output data, e-mail address	Number of copies (accesses) In library
1	2	3	4	5
1	Pathophysiology: concise lectures, tests, cases : tutorial guide	P. F. Litvitsky, S. V. Pirozhkov, I. A. Budnik.	4th ed. - Moscow : GEOTAR-Media, 2025. - 376 c. - ISBN 978-5-9704-8600-9, DOI: 10.33029/9704-8600-9-PAT-2025-1-376. - Electronic version available on the site of EBS "Student's Consultant" : [website]. URL: https://www.studentlibrary.ru/book/ISBN9785970486009.html (date of reference: 03.06.2025). - Access mode: by subscription. - Text: electronic	Unlimited access
2	Pathophysiology : Course of Lectures	G. V. Poryadin, J.M. Salmasi	M. : MIA, 2020. - 572 + IV p. - ELS "Medlib"	Unlimited access

Additional literature

n/ №	Name, type of resource	Author(s)/editor	Output data, e-mail address	Number of copies (accesses) In library
1	2	3	4	5
1	Pathophysiology of the immune system : учеб.	E. V. Markelova, A.	- Vladivostok : DV Medicine, 2024. - 160	Unlimited access

	пособие /	V. Kostyushko, E. P. Turmova et al.	с. - EBS "Bukap"	
2	Pathophysiology, clinical pathophysiology: general nosology : training manual	B. E. Krasnikov, E. A. Chagina, E. V. Markelova, A. Y. Shubina.	Vladivostok : DV Medicine, 2021. - 156 с. - ELS "Bukap"	Unlimited access

1. Internet resources
2. ELS "Student's Consultant" <http://studmedlib.ru/>
3. ELS "University Library Online" <http://www.biblioclub.ru/>
4. ELS "Urait" <https://urait.ru/>
5. ELS "BookUp" <https://www.books-up.ru/>
6. Own resources of FSBEI HE PSMU of MOH of Russia <https://tgmu.ru/university/bibliotechno-informacionnyj-centr/resursy-bic/sobstvennye/>

Internet resources and instructions for their use are placed on the page of the Library and Information Center [Library and Information Center - TSMU \(tgmu.ru\)](http://tgmu.ru).



5.2. Material and technical support of educational discipline (module)

Information about material and technical support of the discipline is placed on the page of the official website of the University [Material and technical support and equipment of the educational process. Pacific State Medical University of the Ministry of Health of the Russian Federation \(tgmu.ru\)](http://tgmu.ru)



5.3. 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 (VCS)
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
11. MOODLE (modular object-oriented dynamic learning environment)

6. PECULIARITIES OF REALIZATION OF DISCIPLINE FOR STUDENTS WITH DISABILITIES AND DISABLED PEOPLE

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

For students from among the disabled and persons with disabilities (PWD) on the basis of a written application the discipline is realized taking into account the peculiarities of psychophysical development, individual capabilities and health status (hereinafter - individual characteristics). Compliance with the following general requirements is ensured: the use of special technical means of training collective and individual use, the provision of services of an assistant (assistant), providing such a student with the necessary technical assistance, providing access to buildings and premises where classes are held, other conditions without which it is impossible or difficult to study the discipline.

6.2 Ensuring compliance with general requirements

In the implementation of the discipline on the basis of a written application of the student provides compliance with the following general requirements: the conduct of classes for students with disabilities and persons with disabilities in the same classroom together with students who do not have disabilities, if it does not create difficulties for students, the presence in the classroom assistant (assistants), providing(s) students with the necessary technical assistance, taking into account their individual characteristics, the use of technical means necessary for students, taking into account their individual characteristics, the use of technical means necessary for students with disabilities and persons with disabilities, taking into account their individual characteristics, the use of technical means necessary for students with disabilities and persons with disabilities.

6.3 Bringing to the attention of students with disabilities in an accessible form all local normative acts of FSBEI HE PSMU of MOH of Russia

All local normative acts of FSBEI HE PSMU of MOH of Russia on the implementation of the discipline (module) are brought to the attention of students with disabilities in an accessible form.

6.4 Realization of the increase in the duration of interim certification in relation to the established duration for a student with disabilities

The form of current and interim attestation on the discipline for students with disabilities and persons with disabilities is established taking into account individual psychophysical features (orally, in writing on paper, in writing on the computer, in the form of testing, etc.). Duration of passing interim certification in relation to the established duration is increased at the written request of a student with disabilities. The duration of preparation of the student to the answer to the credit is increased by at least 0.5 hours.

7. STAFFING OF THE DISCIPLINE

The composition of scientific and pedagogical staff, providing the implementation of the educational process in the discipline, meets the requirements of the FSSES HE in the specialty 31.05.03 Dentistry and is posted on the website of the educational organization.

