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
_____ / Trankovskaya L.V./
"9" июня 2025

DISCIPLINE WORK PROGRAM

Б1.О.23 Neurology

(name of discipline)

Specialty	**31.05.01 General Medicine for international students (in English)** (code, name)
Degree	Specialist's degree
Profile	02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system)
Mode of study	Full-time
Period of mastering the BEP	**6 years** (nominal length of study)
Institute	of Clinical Neurology and Medical Rehabilitation

Vladivostok, 2025

Program of the discipline **Б1.О.23 Neurology** is based on:
1) Federal State Educational Standard of Higher Education for the specialty approved by the Order No. 988 of Ministry of Science and Higher Education of the Russian Federation dated August 12, 2020.

2) Curriculum for the 31.05.01 General Medicine for international students (in English), profile 02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system), approved by the Academic Council of FSBEI HE PSMU of the Ministry of Health of Russia, Report No. 8/24-25 dated March 31, 2025.

Work program for the discipline was developed by the writing team of the Institute of Clinical Neurology and Medical Rehabilitation of the FSBEI HE PSMU of the Ministry of Health of Russia, under the guidance of the director of the institute, Candidate of Medical Sciences Shestopalov E.Yu.

Developed by:

Assistant professor	Candidate of Medical Sciences, Associate professor	Kuzmina T.N.
(position held)	(academic degree, academic title)	(full name)
Assistant professor	Candidate of Medical Sciences, Associate professor	Lantukh A.V.
(position held)	(academic degree, academic title)	(full name)
Assistant	-	Nazarenko D.S.
(position held)	(academic degree, academic title)	(full name)
Assistant	-	Shepeta E.I.
(position held)	(academic degree, academic title)	(full name)

1. GENERAL PROVISIONS

1.1. Purpose and Objectives of Mastering Б1.О.23 Neurology

The purpose of mastering the discipline is to develop competencies that provide theoretical and fundamental knowledge of the basics and patterns of the normal and pathological functioning of the nervous system; master skills and abilities required to solve professional problems necessary for a general practitioner.

Objectives of mastering the discipline:

1. Developing the skill of basic clinical and neurological examination and description of the neurological status of the patient;
2. Learning to identify neurological syndromes and make a tentative topical diagnosis according to the results of clinical and neurological examination;
3. Studying basics of epidemiology, social significance, etiology, pathogenesis, clinical picture and diagnosis of the main and most common diseases of the nervous system, including medical emergencies, necessary for making a preliminary diagnosis, determining the plan of further examination and differential diagnosis;
4. Learning to formulate a clinical diagnosis taking into account the current International Statistical Classification of Diseases and Health-Related Problems (ICD);
5. Learning to choose the tactics of patient management, determine the indications for emergency hospitalization, prescribe basic treatment, including in collaboration with specialist doctors, plan and conduct rehabilitation measures for the most common diseases and emergency conditions associated with damage to the nervous system, in accordance with the current procedures of providing medical care, clinical guidelines (treatment protocols) on the provision of medical care, taking into account the standards of providing medical care;
6. Developing the ability to identify risk factors, conduct primary and secondary prevention of the most common diseases of the nervous system and their complications.

2. DISCIPLINE AS PART OF THE BASIC EDUCATIONAL PROGRAM

Discipline **Б1.О.23 Neurology** is included in the Mandatory part of the Unit 1 of the basic educational program for the specialty 31.05.01 General Medicine for international students (in English), profile 02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system), and is part of the 7th and 8th semesters' curriculum

3. PLANNED LEARNING OUTCOMES OF THE DISCIPLINE

3.1. Mastering the discipline **Б1.О.23 Neurology** is aimed at the development of students' competencies. The discipline facilitates the development of students' competencies corresponding to the types of professional activity.

Name of competency category (group) / Labor function	**Code and Name of competency of the graduate**	**Competency Indicators**
General Professional Competencies		
Etiology and pathogenesis	GPC-5. Is able to assess morphofunctional status, physiological states, and pathological processes in the human body when working to achieve objectives of professional activity	CI.GPC-5_1- assesses the morphofunctional state based on the acquired knowledge CI.GPC-5_2- distinguishes between pathological and physiological processes, identifies etiology of changes CI.GPC-5_3- provides diagnostic assessment of the identified changes
Professional Competencies		
A/01.7 Providing emergency or urgent medical care to the	PC-2 Ability and readiness to recognize urgent and life-threatening conditions in	CI.PC-2_1- has a grasp of life-threatening conditions in acute surgical pathology, traumatic conditions, pregnancy and

patient	acute surgical pathology, traumatic conditions, diseases of the female genital organs and pregnancy requiring urgent and emergency medical care	childbirth, that require urgent and emergency medical care; CI.PC-2_2- demonstrates skills and selects the tactics of patient management in infectious and noninfectious diseases requiring emergency and urgent medical care; CI.PC-2_3- diagnoses life-threatening and emergency conditions in diseases of the organs of visual system and ENT organs, determines the tactics of patient management and providing emergency medical care

3.2. Types of professional activity corresponding to competencies developed over the course of mastering **Б1.О.24 Psychiatry and narcology**:

Types of professional activity objectives

1. *Medical*

Kinds of professional activity objectives

1. *Diagnostics*
2. *Treatment*

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**	
			7	**8**
			hours	**hours**
1		2	3	4
Classroom hours (total), including:		**102**	**62**	**40**
Lectures (L)		36	20	16
Practical classes (C)		66	42	24
Independent work of the student (IW), including:		**78**	**46**	**32**
Writing a medical record		20		20
Preparing for classes (CP)		28	16	12
Preparing for continuous assessment (CAP)		16	16	
Preparation for interim assessment (IAP)		14	14	
Interim assessment		36		36
Type of interim assessment	pass/fail test (T)			
	exam (E)	E		E
TOTAL: TOTAL credit value	hrs.	**216**	**108**	**108**
	credits	**6**	**3**	**3**

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. 7	
1.	Sensation and sensory impairment. Central and peripheral pain mechanisms	2
2.	Voluntary movements and movement disorders. Symptoms of cortical-muscular pathway damage at different levels	2
3.	Symptoms and syndromes of spinal cord, spinal roots, and peripheral nerves damage	2
4.	Movement coordination and coordination disorders	2
5.	Extrapyramidal system and symptoms of damage	2
6.	Symptoms and syndromes of brainstem and cranial nerve damage	2
7.	Higher nervous function and its disorders: aphasia, apraxia, agnosia, amnesia, dementia. Syndromes of damage to individual lobes and hemispheres of the brain	2
8.	Brain membranes (meninges), cerebrospinal fluid. Meningeal syndrome and intracranial hypertension. Hydrocephalus	2
9.	Autonomic nervous system and autonomic disorders. Neurogenic dysfunction of pelvic organs	2
10.	Infectious diseases of the nervous system	2
	Hours per semester total	**20**
	Semester No. 8	
1.	Hereditary metabolic disorders	2
2.	Hereditary extrapyramidal system disorders	2
3.	Demyelinating diseases. Diseases of the peripheral nervous system	2
4.	Cerebral vascular accidents. Chronic cerebral circulation insufficiency	2
5.	Tumors of the nervous system. Phakomatoses	2
6.	Paroxysmal disorders of consciousness. Epilepsy	2
7.	Perinatal brain damage and its outcomes	2
8.	Hereditary neuromuscular diseases	2
	Hours per semester total	**16**

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

No.	Practical Class Topic	Hours
1	2	3
	Semester No. 7	
1	Principles of structure and function of the nervous system. Nervous system examination methods. Principles of topical diagnosis in neurology	4
2	Sensory assessment and sensory impairment. Types and kinds of sensory impairments. Pain	4
3	Voluntary movements and movement disorders. Symptoms of cortical-muscular pathway damage at different levels. Symptoms and syndromes of spinal cord and spinal roots damage	4
4	Movement coordination, coordination disorders. Extrapyramidal system and symptoms of damage	4
5	Symptoms and syndromes of brainstem and cranial nerve damage	4
6	Higher nervous function and its disorders: aphasia, apraxia, agnosia, amnesia, dementia. Syndromes of damage to individual lobes and hemispheres of the brain	4
7	Brain membranes (meninges), cerebrospinal fluid. Meningeal syndrome and	6

	intracranial hypertension. Hydrocephalus	
8	Autonomic nervous system and autonomic disorders. Neurogenic dysfunction of pelvic organs	6
9	Infectious diseases of the nervous system: meningitis	6
	Hours per semester total	**42**
	Semester No. 8	
1	Infectious diseases of the nervous system: encephalitis, myelitis. Acute poliomyelitis	6
2	Demyelinating diseases. Diseases of the peripheral nervous system. Hereditary neuromuscular diseases	6
3	Hereditary extrapyramidal system disorders, hereditary ataxia and hereditary metabolic disorders	6
4	Cerebral vascular accidents. Chronic cerebral circulation insufficiency. Perinatal brain damage and its outcomes. Paroxysmal disorders of consciousness. Epilepsy. Tumors of the nervous system. Phakomatoses	6
	Hours per semester total	**24**

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. 7		
1	General neurology, topical diagnostics	Preparing for practical classes, preparing for tests, preparing for continuous assessment	46
	Hours per semester total		**46**
	Semester No. 8		
2	Specialty neurology	Preparing for practical classes, preparing for tests, preparing for continuous assessment, writing a medical record	32
	Hours per semester total		**32**

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	Private neurology: study guide = Specialized Neurology: Educational Manual [Electronic resource]	S. M. Karpov, I. A. Vyshlova	M.: GEOTAR-Media, 2025. Electronic Library System (ELS) «Student Consultant» URL: http://www.studentlibrary.ru/	Unlimited access
2	Topical diagnosis of diseases of the nervous system = Topical Diagnosis of Nervous System	S. M. Karpov, I. N. Dolgova	M. : GEOTAR-Media, 2018. Electronic Library System (ELS) «Student	Unlimited access

	Diseases: a textbook in English and Russian languages [Electronic resource]		Consultant» URL: http://www.studentlibrary.ru/	

Supplementary 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	Neurology and neurosurgery. Vol. 1. Neurology : textbook : in 2 vol. [Electronic resource]	E.I. Gusev, A.N. Konovalov, V.I. Skvortsova	M. : GEOTAR-Media, 2023. Electronic Library System (ELS) «Student Consultant» URL: http://www.studentlibrary.ru/	Unlimited access
2	Neurology and neurosurgery. Vol. 2. Neurosurgery : textbook : in 2 vol. [Electronic resource]	ed. by A. N. Konovalov, A. V. Kozlov	M. : GEOTAR-Media, 2023. Electronic Library System (ELS) «Student Consultant». http://www.studentlibrary.ru	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)

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)" 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 31.05.01 General Medicine for international students (in English) 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 Participation in Student Research Society: 1. Student Research Society workplan 2. Student research activity plan 3. Participation in events aimed at promoting healthy lifestyle 4. Talks and problem-centric debates on ethics and deontology 5. Participation in academic workshops	Portfolio
	Covert – creating atmosphere and infrastructure. Developing a culture of healthy lifestyle, the ability to preserve and improve health. Creating atmosphere of kindness and respect with a high level of communication during implementation of the discipline.	
Civic position and values	Overt Short discussions on current significant events in case the latter occur.	Portfolio
	Covert Cultivating mindful social position during professional activity.	
Social values	Overt Highlighting aspects of organization of healthy lifestyle based on health-preserving technologies.	Portfolio
	Covert Identification in social structure and professional community during period of education and in professional activity.	