

Thematic plan of seminar classes for the course “Neurology, medical genetics, neurosurgery” for students admitted in 2023 in the educational program 31.05.01 General Medicine, specialization (profile): General Medicine (Specialist Degree Program), full-time mode of study for the 2026–2027 academic year

№	Thematic blocks	Practical training within thematic block ³	Hours (academic)⁴
7th semester			
1.	Introduction to neurology. Voluntary movements and their disorders ¹ . Concept of the main types of neurons and neuroglia. Central and peripheral nervous system. Unconditioned reflexes in normal and pathology. Motor system, peripheral and central paresis and paralysis ² .	WP	6
2.	Sensory system, its pathology ¹ . Anatomy of sensory conductors. Semiology of sensory disorders. Types of pain. Types of sensory disturbances. Symptoms of spinal cord lesions at different levels. Brown-Séquard syndrome ² .	WP	6
3.	Extrapyramidal and cerebellar systems. Anatomy, physiology, symptoms of lesion ¹ .	WP	6
4.	Cranial nerves: anatomy, functions, symptoms of lesion ¹ .	WP	6
5.	Cranial nerves: anatomy, functions, symptoms of lesion. Syndromes of combined lesions of cranial nerves. Alternating paralysis ¹ .	WP	6
6.	Thalamus, internal capsule. Higher cortical functions disorders: aphasia, agnosia, apraxia. Symptoms of individual brain lobes lesion. Consciousness disturbances. Hypertension and meningeal syndromes. Autonomic nervous system. Symptoms of lesions ¹ .	WP	6
7.	The subject and objectives of medical genetics. Heredity and pathology. Classification and semiotics of hereditary diseases, principles of diagnosis. Diagnostic methods in medical genetics ¹ .	WP	6
8.	General characteristics of chromosomal diseases. Diagnostic methods. Examples of diseases. General characteristics of single gene diseases. Methods of diagnosis. Examples of diseases. Degrees of kindred. The	WP	6

	dangers of related marriages ¹ .		
9.	Multifactorial diseases. Interaction of hereditary and environmental factors. Prevention of hereditary diseases. Prenatal diagnosis. Genetic counselling. Indications and modalities of genetic counseling. Principles of treatment for hereditary diseases ¹ .	WP	6
10.	Peripheral nervous system diseases ¹ . Mono- and polyneuropathies. Acute demyelinating polyradiculoneuropathy. Analysis of clinical guidelines ² .	WP	6
11.	Peripheral nervous system diseases ¹ . Vertebrogenic radiculopathies. Current clinical guidelines. Plexopathies. Tunnel neuropathies ² .	WP	6
12.	Neuroses. Vegetative dystonia. Primary headaches. Sleep and wakefulness disorders ¹ .	WP	6
8th semester			
13.	Infectious diseases of the nervous system ¹ . Meningitis. Clinical guidelines for diagnosis, treatment and prevention. Encephalitis ² .	WP	6
14.	Infectious diseases of the nervous system ¹ . Epiduritis. Myelitis. Multiple sclerosis. Acute disseminated encephalomyelitis. Poliomyelitis. Rheumatic chorea. Neurosyphilis. Nervous system disorders in AIDS. Curation of patients ² .	WP	6
15.	Vascular brain and spinal cord diseases. Analysis of clinical guidelines ¹ .	WP	6
16.	Injuries and tumors of the nervous system. Epilepsy. Current clinical guidelines of the Russian Ministry of Health ¹ .	WP	6
17.	Hereditary diseases of the nervous system ¹ . Hereditary neuromuscular diseases. Myasthenia. Myasthenic and cholinergic crisis ² .	WP	6
18.	Hereditary diseases of the nervous system ¹ . Hereditary disorders of the extrapyramidal system and cerebellum. Congenital dysplasias ² .	WP	6
Total			108

¹ – topic

² – essential content

³ - WP (work with the patient)

⁴ – one thematic block includes several classes, the duration of one class is 45 minutes, with a break between classes of at least 5 minutes

Approved at the department meeting neurology, neurosurgery, medical genetics
Minutes dated «29» May 2026 г. № 10

Head of Department

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke.

O.V. Kurushina