

**Thematic plan of seminar-type classes
in discipline «Neurology, medical genetics, neurosurgery»
for students of 2022 year of admission
under the educational programme
31.05.01 General Medicine,
specialisation (profile) General Medicine
(Specialist's degree),
form of study full-time
for the 2025-2026 academic year**

№	Thematic blocks	Practical training within thematic block ³	Hours (academic) ³
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-Séguard 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 syndrome. Meningeal syndrome. Autonomic nervous system. Symptoms of lesions ¹ .	WP	6
7.	Peripheral nervous system diseases ¹ . Mono- and polyneuropathies. Plexopathies. Acute demyelinating	WP	6

	polyradiculoneuropathy ² .		
8.	Peripheral nervous system diseases ¹ . Vertebrogenic radiculopathies. Tunnel neuropathies ² .	WP	6
9.	Neuroses. Vegetative dystonia. Primary headaches. Sleep and wakefulness disorders ¹ .	WP	6
10.	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
11.	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 dangers of related marriages ¹ .	WP	6
12.	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
8th semester			
13.	Infectious diseases of the nervous system ¹ . Meningitis. Encephalitis. Curation of patients 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 ¹ .	WP	6
16.	Injuries and tumors of the nervous system. Epilepsy ¹ .	WP	6
17.	Hereditary diseases of the nervous system ¹ . Hereditary neuromuscular diseases. Myasthenia. Myasthenic and cholinergic crisis	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

Considered at the department meeting Neurology, neurosurgery, medical genetics, protocol of 20.06.2025. № 11.

Head of the Department

A handwritten signature in blue ink, consisting of several loops and a long horizontal stroke, positioned between the text 'Head of the Department' and 'O.V. Kurushina'.

O.V. Kurushina