


<p style="text-align: center;"> <small>ONTUSTIK-KAZAKHSTAN</small>  <b>MEDISINA</b>  <b>AKADEMIASY</b>  <small>«Оңтүстік Қазақстан медицина академиясы» АҚ</small> </p>		<p style="text-align: center;">   <small>SOUTH KAZAKHSTAN</small>  <b>MEDICAL</b>  <b>ACADEMY</b>  <small>АО «Южно-Казахстанская медицинская академия»</small> </p>
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## SYLLABUS

### Working training program of the discipline: «Neurology» 6B10101«General Medicine» the educational program

1.	General information about the course		
1.1	Course Code:Neur 5306	1.6	Academic year:2025-2026
1.2	Course name:Neurology	1.7	Year:5
1.3	Prerequisites: introduction to the clinic, the basics of childhood diseases 1, 2, the basics of internal diseases 1, 2.	1.8	Term:9
1.4	Post-requisites: neurology in general practice, childhood diseases	1.9	Number of credits (ECTS):5 150 hours
1.5	Cycle: PD	1.10	Component: HEIC
2.	Course description (maximum 50 words)		
The discipline forms fundamental theoretical knowledge of the patterns of structure and functions of the nervous system, symptoms and syndromes of damage to its various departments, blood supply to the central nervous system, and also studies the etiology, pathogenesis, methods of diagnosis, treatment and prevention of neurovascular, neuromuscular, demyelinating diseases, motor disorders.			
3.	Summative assessment form		
3.1	Testing✓	3.5	Coursework
3.2	Writing	3.6	Essay
3.3	Oral	3.7	Project
3.4	OSPE / OSCE or Practical Skills Acceptance✓	3.8	Other (specify)
4.	Discipline objectives		
The formation of knowledge, skills and practical skills necessary: for the early diagnosis of neurological, mental and narcological diseases in adults and children in the clinic and at home; for carrying out a complex of medical and preventive measures at the pre-hospital stage and in the treatment of neurological, mental and narcological diseases of patients at home; for the diagnosis of emergency conditions and the provision of medical care for neurological, mental and narcological diseases at the pre-hospital and hospital stage and the determination of forensic psychiatric and narcological examinations.			
5.	Learning outcomes (Course learning outcomes)		
CLO1.	Demonstrates knowledge of the basics of diagnosing neurological patients; clinical indications for hospitalization; home management rules		
CLO2.	Participates in the preparation of patients taking part in the implementation of laboratory and instrumental methods of research; applies safety principles when working with neurological patients, participates in the organization of preventive measures; applies methods of scientific research and academic writing in neurology; applying knowledge and understanding of facts, events, theories and complex dependencies between them in neurology; understands the importance of the principles and culture of academic integrity;		
CLO3.	Formulates a standard definition of urgent neurological, mental and drug addiction conditions; medical history in these patients;		
CLO4.	Observes the principles at work confidentially with neurological, psychiatric and substance abuse patients, independently solve problems in the field of professional activity. Forms positive relationships with colleagues		
CLO 5.	Uses of treatment protocols for selecting a drug		

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<p style="text-align: center;"><b>Department of Neurology, Psychiatry, Rehabilitology and Neurosurgery</b></p>		<p>56-11b 2 page out of 27</p>
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CLO6.	Interprets, justifies the history data, prepares medical records					
CLO 7.	Aware of the need to maintain confidentiality in professional relationships when working with neurological, mental and narcological patients, is willing to work independently. Demonstrates commitment to professional ethics.					
5.1	Course learning outcomes	The learning outcomes of the EP, which are related to the learning outcomes of the course				
	CLO 1 CLO 2 CLO 3	CLO1 Provides patient-centered care in the field of biomedical, clinical, epidemiological and socio-behavioral sciences for the most common diseases.				
	CLO 4 CLO5	CLO2Carries out his/her activities within the framework of the legislation of the Republic of Kazakhstan in the field of healthcare, is guided by them in his/her practical activities to ensure optimal medical care.				
	CLO 7	CLO3Adheres to the rules of ethics, deontology and subordination, demonstrates interpersonal and communication skills that lead to effective information exchange and cooperation with patients, their families and medical professionals.				
	CLO 6	CLO 4Conducts effective measures aimed at the diagnosis, treatment, prevention of common and early forms of diseases.				
6.	Details of thecourse					
6.1	Location (building, auditorium): Medical Centre “Ai Nury”,microdistrict 4, 22/2. Email address: <a href="mailto:kafedranevrologii@bk.ru">kafedranevrologii@bk.ru</a>					
6.2	Number of hours	Lectures	Prac. Lessons	SIW	SIWT	
		15	35	85	15	
7.	Information about teachers					
№	Full name	Degrees and title	Email address			
1.	Polukchi Tatyana Vasilyevna	PhD doctor, assistant	E-mail: <a href="mailto:tatyana_polukchi@mail.ru">tatyana_polukchi@mail.ru</a> Contact number: 87479838388			
2.	Yessetova Aynur Amirhanovna	Assistant	E-mail: <a href="mailto:esetova.aynura@mail.ru">esetova.aynura@mail.ru</a> Contact number: 87789474404			
3.	Abdraimova Saltanat Orynbasarovna	PhD doctor, assistant	E-mail: <a href="mailto:salta1403@mail.ru">salta1403@mail.ru</a> Contact number: 87018820308			
4.	Suleymenov Murat Anarbekovich	Assistant	E-mail: <a href="mailto:suleymenov_mura@mail.ru">suleymenov_mura@mail.ru</a> Contact number: 87754881848			
8.	Thematic plan					
Week/ Day	Topic	Summary	Course learning outcomes	Numbe r of hours	Forms / methods / learning technolo gies	Forms / assess ment method s
1	Lecture. Theme:	Description and history of development	CLO 1 CLO 2	2	Review	Feedba ck



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<p>Introduction to the specialty. Structural elements of the nervous system. Transmission of information in the nervous system. Sensitivity, symptoms and syndromes of lesion, research methods.</p>	<p>of neurology. Transmission of information in the nervous system. Mediators and receptors. Ascending pathways of the spinal cord, classification of types of sensitivity, symptoms and syndromes of damage.</p>				
<p><b>Practical lesson.</b> <b>Theme:</b> Sensitivity, symptoms and syndromes of lesion, research methods.</p>	<p>Peripheral and central sections of the somatosensory system. Anterior spinothalamic tract. Lateral spinothalamic tract. Sensory disorders depending on the level of damage to sensitive pathways. Superficial and deep sensitivity studies. Syndromes of disorders of superficial and deep sensitivity. Topical diagnosis of sensory lesions.</p>	<p>CLO 1 CLO 2 CLO 3</p>	<p>3</p>	<p>TBL, Case-study, thematic discussion.</p>	<p>oral and written survey, working with didactic material</p>
<p><b>SIWT.</b> <b>Consultation on the implementation of SIW 1. SIW task</b> 1. Transverse myelitis 2. Multiple sclerosis 3. Guillain-Barré syndrome</p>	<p>Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis.</p> <p><b>Project topic:</b> <b>Clinical and demographic analysis of Parkinson's disease in the southern region of Kazakhstan</b> <b>Plan:</b></p>	<p>CLO 2 CLO 3</p>	<p>1-7</p>	<p>Format of delivery glossary, TVL, Case-study, analysis of scientific medical articles.</p>	<p>Assessment of the quality of design, oral questioning.</p>


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		<p>1) Identification and concretization of the problem and definition of the goal, objectives, hypothesis of the project. Development of the concept of the project. Selecting the type of project product;</p> <p>2) Determination of methods for solving the problem, sources of information (databases, regulatory documentation, etc.), methods for collecting and analyzing it.</p> <p>3) Determining how to present the result, project structure, content, drawing up a roadmap, distribution of roles in the project.</p> <p>4) Working with information. Conducting research, calculations. Application of data processing methods, analysis methods and tools, etc.</p> <p>5) Implementation of the developed action plan of the project. Project design. Collective analysis of project results and self-assessment. Project protection. Responsible for the project: Zharkinbekova N.A., Abdraimova S.O. - determination of the leaders of the project activities of students</p>				
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		<p>and the organization of project teams; - definition of the topic; - identifying one or more problems; - clarification of the goals of the final result; - getting advice from project participants on the use of the Trello board in project work.</p>				
2.	<p><b>Lecture. Theme</b> The pyramidal system, symptoms and syndromes of lesion, research methods.</p>	<p>Central division pyramidal system and syndromes his defeat. Motor zones of the cortex. Cortico-spinal and cortico-nuclear pathways. Syndromes of the defeat of the central part of the pyramidal system. The peripheral division of the pyramidal system and syndromes of its defeat. Topical diagnosis of the defeat of the pyramidal system.</p>	<p>CLO 1 CLO 2 CLO 3</p>	2	Review	Feedback
	<p><b>Practical lesson. Theme</b> Pyramidal system, symptoms and syndromes of lesion, research methods.</p>	<p>Central Components of the Motor System and Clinical Syndromes of lesions affecting them. Motor cortical areas. Corticospinal tract (Pyramidal tract) and Corticonuclear (Corticobulbar) Tract. Lesions of central motor pathways.</p>	<p>CLO 1 CLO 2 CLO 3</p>	3	TBL, Case-study, thematic discussion.	Check list oral survey
	<p><b>SIWT. Consultation on the implementation of SIW 1. SIW task</b></p>	<p>Nosology to the selected student must make a clinical case: complaints, history and general</p>	<p>CLO 1 CLO 2 CLO 3</p>	1-7	Format of delivery Microsoft	Assessment of the quality of

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	<p>1. Amyotrophic lateral sclerosis 2. Stroke the spinal cord 3. Acute disseminated encephalomyelitis 4. The syndrome of infringement of the brachial plexus 5. Syndrome infringement of the radial nerve 6. infringement of the ulnar nerve syndrome 7. The median nerve syndrome infringement</p>	<p>examination, diagnosis and differential. diagnostics, treatment tactics and prognosis.</p> <p>For the selected nosology, the student must draw up a clinical case: complaints, anamnesis and general examination, diagnosis and differential. diagnosis, treatment tactics and prognosis.</p> <p><b>Project:</b></p> <ul style="list-style-type: none"> <li>- determination of the leaders of the project activities of students and the organization of project teams;</li> <li>- definition of the topic;</li> <li>- identifying one or more problems;</li> <li>- clarification of the goals of the final result;</li> <li>- getting advice from project participants on the use of the Trello board in project work.</li> </ul>			<p>PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.</p>	<p>design, oral questioning</p>
3.	<p><b>Lecture. Theme</b> The extrapyramidal system symptoms and syndromes of lesion, research methods. Cerebellum. Afferent and efferent pathways of the cerebellum. Cerebellar function and syndromes of its defeat.</p>	<p>The structure and role of the extrapyramidal system in human motor function. Basic clinical syndromes of defeat extrapyramidal system: akinetic-rigid syndrome, hyperkinetic syndrome. Topical diagnosis of lesions of the extrapyramidal system.</p>	<p>CLO 1 CLO 2 CLO 3</p>	2	Review	Feedback
	<p><b>Practical lesson. Theme</b></p>	<p>The structure and role of the extrapyramidal</p>	<p>CLO 4 CLO 5</p>	3	TBL, Case-	Check list




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	<p>The extrapyramidal system symptoms and syndromes of lesion, research methods. Cerebellum. Afferent and efferent pathways of the cerebellum. Cerebellar function and syndromes of its defeat.</p>	<p>system in human motor function. The main clinical syndromes of extrapyramidal system lesion: akinetic-rigid syndrome, hyperkinetic 2 syndrome. Topical diagnosis of extrapyramidal system lesions. Cerebellum. The internal structure of the cerebellum. Afferent and efferent projections of the cerebellar cortex. Cerebellar function and syndromes of its defeat: vestibulocerebellar, spinocerebellar and cerebrocerebellar syndrome. Methods for studying cerebellar function. Topical diagnosis of cerebellar lesions.</p>	CLO 6		study, thematic discussion.	oral survey
<p><b>SIWT.</b> <b>Consultation on the implementation of SIW 1. SIW task</b> 1. Disease of Wilson - Westphal - Konovalov 2. Chorea of Huntington. 3. Myasthenia Gravis</p>	<p>Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - determination of the leaders of the project activities of students and the organization of project teams; - definition of the topic; - identifying one or more problems;</p>	<p>CLO 4 CLO 5 CLO 6</p>	1-7	Format of delivery glossary, TVL, Case-study, analysis of scientific medical articles.	Assesment of the quality of design, oral questioning.	

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		<ul style="list-style-type: none"> <li>- clarification of the goals of the final result;</li> <li>- getting advice from project participants on the use of the Trello board in project work.</li> </ul>				
4.	<p><b>Lecture. Theme</b> Functions and methods of the examination 12 pairs of cranial nerves. I, II, III, IV, V, VI pairs of cranial nerves.</p>	<p>Brainstem: medulla, pons, midbrain. Topographic anatomy of the brain stem. Motor, sensory and mixed cranial nerves. CN: nuclei, composition and functions of 1-6 pairs of cranial nerves.</p>	<p>CLO 1 CLO 2</p>	2	Review	Feedback
	<p><b>Practical lesson. Theme</b> Functions and methods of the examination 12 pairs of cranial nerves. I, II, III, IV, V, VI pairs of cranial nerves.</p>	<p>Brainstem: medulla, pons, midbrain. Topographic anatomy of the brain stem. Motor, sensory and mixed cranial nerves. CN: nuclei, composition and functions of 1-6 pairs of cranial nerves.</p>	<p>CLO 1 CLO 2 CLO 3</p>	2	TBL, Case-study, thematic discussion.	Check list oral survey
	<p><b>SIWT. Consultation on the implementation of SIW 1. SIW task</b> 1. Neuralgia of the trigeminal nerve 2. Refsum's disease</p>	<p>Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - analysis of the problem, hypotheses, substantiation of each of the hypotheses; - selection of the optimal solution to the problem; - determination of sources of information, methods of its</p>	<p>CLO 1 CLO 2 CLO 3</p>	1-7	Format of delivery Microsoft PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.	Assessment of the quality of design, oral questioning.




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		<p>collection and analysis;</p> <ul style="list-style-type: none"> <li>- distribution of roles in the team;</li> <li>- setting goals and discussing the criteria for evaluating results;</li> <li>- determining how the results will be presented.</li> </ul>				
5.	<p><b>Lecture. Theme</b> Functions and research methods of 12 pairs of cranial nerves. VII, VIII, IX, X, XI, XII pairs of cranial nerves</p>	<p>Brain stem: medulla oblongata, bridge, midbrain. Brain stem topographic anatomy. Motor, sensory and mixed cranial nerves. CN: nuclei, composition and functions of 7-12 pairs of cranial nerves. Alternating syndromes. Topical diagnosis of lesions of the cranial nerves. Methods for studying the function of the cranial nerves.</p>	<p>CLO 1 CLO 2 CLO 3</p>	2	Review	Feedback
	<p><b>Practical lesson. Theme</b> Functions and research methods of 12 pairs of cranial nerves. VII, VIII, IX, X, XI, XII pairs of cranial nerves</p>	<p>Brain stem: medulla oblongata, bridge, midbrain. Brainstem topographic anatomy. Motor, sensory and mixed cranial nerves. CN: nuclei, composition and functions of 7-12 pairs of cranial nerves. Alternating syndromes. Topical diagnosis of lesions of the cranial nerves. Methods for studying the function of the cranial nerves</p>	<p>CLO 1 CLO 2 CLO 3</p>	2	TBL, Case-study, thematic discussion.	Check list oral survey
	<p><b>SIWT. Consultation on the</b></p>	<p>Nosology to the selected student must make a clinical case:</p>	<p>CLO 1 CLO 2 CLO 3</p>	1-7	Format of delivery	Assessment of the

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	<p><b>implementation of SIW 1. SIW task</b></p> <p>1. Neuropathies and neuritis of the facial nerve.</p> <p>2. Neuralgia of the glossopharyngeal nerve</p> <p>3. Cochlear and vestibular neuropathies</p>	<p>complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis.</p> <p><b>Project:</b></p> <ul style="list-style-type: none"> <li>- analysis of the problem, hypotheses, substantiation of each of the hypotheses;</li> <li>- selection of the optimal solution to the problem;</li> <li>- determination of sources of information, methods of its collection and analysis;</li> <li>- distribution of roles in the team;</li> <li>- setting goals and discussing the criteria for evaluating results;</li> <li>- determining how the results will be presented.</li> </ul> <p>Interim project report</p>			<p>Microsoft PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.</p>	<p>quality of design, oral questioning.</p>
	<b>Cross-border control 1</b>				Testing, Oral survey.	Testing, Oral survey.
6.	<p><b>Lecture. Theme</b></p> <p>Higher mental /cognitive functions, symptoms and syndromes of lesion. Research methods.</p>	<p>Brain. Projection, associative, commissural fibers. Localization of functions in the cerebral cortex. Higher mental functions and syndromes of violation in the defeat of the cortex. Violations of gnosis, praxis, thinking, memory, speech, etc. Research methods of higher mental functions. Topical diagnosis of</p>	<p>CLO 1 CLO 2 CLO 3</p>	2	Review	Feedback



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		damage to higher mental functions.				
	<b>Practical lesson.</b> <b>Theme</b> Higher mental /cognitive functions, symptoms and syndromes of lesion. Research methods.	Brain. Projection, associative, commissural fibers. Localization of functions in the cerebral cortex. Higher mental functions and syndromes of violation in the defeat of the cortex. Violations of gnosis, praxis, thinking, memory, speech, etc. Research methods of higher mental functions. Topical diagnosis of damage to higher mental functions.	CLO 3 CLO 4 CLO 5	2	TBL, Case-study, thematic discussion.	Check list oral survey
	<b>SIWT.</b> <b>Consultation on the implementation of SIW 1. SIW task</b> 1. Marie-Foix-Alajuanin's ataxia. 2. Pierre-Marie's ataxia. 3. Gilles de Tourette's syndrome	Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - search for the necessary information, confirming or refuting the hypothesis; - adjustment of the algorithm of work on the project, taking into account intermediate results; - project implementation; - Interim report on project work.	CLO 3 CLO 4 CLO 5	1-7	Format of delivery Microsoft PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.	Assessment of the quality of design, oral questioning.
	<b>Midterm Assessment 1</b>				Multiple-choice questions and oral	Multiple-choice question


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					examination	tests and oral examination
7.	<p><b>Lecture. Theme</b> The meninges of the brain. Liquor. Meningeal syndrome, intracranial hypertension syndrome. Modern laboratory instrumental, neuroimaging research methods in neurology</p>	<p>Dura mater. Arachnoid. Pia mater. The ventricular system of the brain. Functions of the cerebrospinal fluid. General cerebral symptoms. Shell symptoms. Diagnosis of diseases of the nervous system. Instrumental and laboratory methods in neurology. CT and MRI in neurology. Computed and magnetic resonance imaging in neurology. Angiography in neurology. Ultrasound in neurology. Myelography in neurology. Electroencephalography in neurology</p>	<p>CLO 4 CLO 5 CLO 6</p>	1	Review	Feedback
	<p><b>Practical lesson. Theme</b> The meninges of the brain. Liquor. Meningeal syndrome, intracranial hypertension syndrome. Modern laboratory instrumental, neuroimaging research methods in neurology</p>	<p>Dura mater. Arachnoid. Pia mater. The ventricular system of the brain. Functions of the cerebrospinal fluid. General cerebral symptoms. Shell symptoms. Diagnosis of diseases of the nervous system. Instrumental and laboratory methods in neurology. CT and MRI in neurology. Computed and magnetic resonance imaging in neurology. Angiography in neurology. Ultrasound in neurology.</p>	<p>CLO 4 CLO 5 CLO 6</p>	3	TBL, Case-study, thematic discussion.	tests, oral and written survey, working with didactic material




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		Myelography in neurology. Electroencephalography in neurology				
	<p><b>SIWT.</b> <b>Consultation on the implementation of SIW 1. SIW task</b> 1. Neurobrucellosis 2. Neurosyphilis</p>	<p>Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - search for the necessary information, confirming or refuting the hypothesis; - adjustment of the algorithm of work on the project, taking into account intermediate results; - project implementation; - Interim report on project work.</p>	<p>CLO 4 CLO 5 CLO 6</p>	1-7	<p>Format of delivery Microsoft PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.</p>	<p>Assessment of the quality of design, oral questioning.</p>
8.	<p><b>Lecture. Theme</b> Blood supply to the brain and spinal cord. Vascular diseases of the central nervous system.</p>	<p>Blood supply to the brain. Arteries, veins of the brain. Blood supply to the spinal cord. Ischemia of the brain and spinal cord. Intracranial hemorrhage. Topical diagnosis of damage to the vascular pools of the brain</p>	<p>CLO 4 CLO 5 CLO 6</p>	1	Review	Feedback
	<p><b>Practical lesson. Theme</b> Blood supply to the brain and spinal cord. Vascular diseases of the central nervous system. Damage to the nervous system</p>	<p>Blood supply to the brain. Arteries, veins of the brain. Blood supply to the spinal cord. Ischemia of the brain and spinal cord. Intracranial hemorrhage. Topical diagnosis of damage to</p>	<p>CLO 3 CLO 4</p>	3	<p>TBL, Case-study, thematic discussion.</p>	<p>Check list oral survey</p>


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	with Covid 19. Acute cerebrovascular accident. Acute meningencephalitis. Guillain-Barré syndrome. Features of diagnosis and treatment of neurological complications of coronavirus infection.	the vascular pools of the brain. Damage to the nervous system with Covid 19. Acute cerebrovascular accident. Acute meningencephalitis. Guillain-Barré syndrome. Features of diagnosis and treatment of neurological complications of coronavirus infection.				
	<b>SIWT. Consultation on the implementation of SIW 1. SIW task</b> 1. Hemorrhagic stroke 2. Ischemic stroke 3. Aneurysm of cerebral vessels, cerebral hemorrhage	Collection of research information-literature (articles) published in scientific domestic and foreign journals (PubMed, MEDLINE, Web of Science and etc.) <b>Project:</b> - analysis of the obtained results; - project implementation; - preparation and presentation of the report.	CLO 3 CLO 4	1-8	Discussion, analysis and objective evaluation of scientific articles. Critical, stylistic and factor analysis.	Check list oral survey
9.	<b>Lecture. Theme</b> The concept of epilepsy. Etiology, pathogenesis, classification of epilepsy	Etiology, pathogenesis, classification of epilepsy. Mechanisms for the development of seizures in epilepsy. Triggers of epilepsy. Epileptic focus. Epileptic status, emergency care.	CLO 2 CLO 3	1	Review	Feedback
	<b>Practical lesson. Them</b> The concept of epilepsy. Etiology, pathogenesis, classification of epilepsye	Etiology, pathogenesis, classification of epilepsy. Mechanisms for the development of seizures in epilepsy. Triggers of epilepsy. Epileptic focus.	CLO 4 CLO 5 CLO 6	1	TBL, Case-study, thematic discussion.	Check list oral survey



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		Epileptic status, emergency care.				
	<b>SIWT.</b> <b>Consultation on the implementation of SIW 1. SIW task</b> 1. Photogenic primary generalized epilepsy 2. Traumatic brain injury 3. Spinal injury	Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - analysis of the obtained results; - project implementation; - preparation and presentation of the report.	CLO 4 CLO 5 CLO 6	1-8	Format of delivery Microsoft PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.	Assessment of the quality of design, oral questioning.
10	<b>Practical lesson.</b> <b>Theme</b> Project: Clinical and demographic analysis of Parkinson's disease in the southern region of Kazakhstan	<b>Project:</b> - collective protection of the project - analysis of project implementation, results achieved (successes and failures); - analysis of the achievement of the set goal; - evaluation of results, identification of new problems <b>Project Protection</b>	CLO 4 CLO 5 CLO 6	2-4		
	<b>SIWT.</b> <b>Consultation on the implementation of SIW 1. SIW task</b> 1. Amnestic syndrome 2. Broca's aphasia 3. Wernicke's aphasia	Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - analysis of the obtained results;	CLO 4 CLO 5 CLO 6	2-7	Format of delivery Microsoft PowerPoint presentation, glossary, TVL, Case-	Assessment of the quality of design, oral questioning.


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	4. Paroxysmal disorders of consciousness	- project implementation; - preparation and presentation of the report.			study, analysis of scientific medical articles.	
11	<b>Practical lesson. Theme</b> Autonomic nervous system, symptoms and syndromes of damage, research methods.	Hypothalamus. Afferent and efferent connections of the hypothalamus. Functions of the hypothalamus. The autonomic nervous system. Sympathetic and parasympathetic nervous system. Symptoms and syndromes of the lesion. Visceral and reflected pain. Research methods of the autonomic nervous system. Topical diagnosis of damage to the autonomic nervous system	CLO 4 CLO 5 CLO 6	2-4	TBL, Case-study, thematic discussion.	Check list oral survey
	<b>SIWT. Consultation on the implementation of SIW 1. SIW task</b> 1. Meningococcal meningitis 2. Tuberculous meningitis 3. Tick-borne encephalitis	Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - analysis of the obtained results; - project implementation; - preparation and presentation of the report.	CLO 4 CLO 5 CLO 6	2-7	Format of delivery Microsoft PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.	Assessment of the quality of design, oral questioning.
12	<b>Practical lesson. Theme</b>	Peripheral components of the motor system and clinical syndromes	CLO 6	3	TBL, Case-study,	Check list




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	Peripheral nervous system, symptoms and syndromes of damage, research methods.	of lesions affecting them. Topical diagnosis clinical syndromes of lesions pyramidal tracts.			thematic discussion.	oral survey
	<b>SIWT. Consultation on the implementation of SIW 1. SIW task</b> 1. Transient ischemic attack 2. Neuroinvasiveness and neurovirality of the SARS CoV virus. Cavernous sinus thrombosis associated with Covid-19.	Nosology to the selected student must make a clinical case: complaints, history and general examination, diagnosis and differential. diagnostics, treatment tactics and prognosis. <b>Project:</b> - analysis of the obtained results; - project implementation; - preparation and presentation of the report.	CLO 4 CLO 5 CLO 6	2-6	Format of delivery Microsoft PowerPoint presentation, glossary, TVL, Case-study, analysis of scientific medical articles.	Assessment of the quality of design, oral questioning.
<b>13</b>	<b>Midterm Assessment2</b>				Testing	Testing
	Preparation and conduct of intermediate certification			15		
<b>9.</b>	<b>Training and Teaching Methods</b>					
9.1	Lectures	Review, thematic.				
9.2	Practical lessons	TBL, Case-study, oral survey.				
9.3	SIW / SIWT	working with educational and additional literature, solving and preparing test tasks for a clinical case developed by a student, analyzing scientific medical articles, working with a search database (PubMed, MEDLINE, Web of Science, etc.), self-supervision of patients, writing an educational case history, science project. preparation of essay to check for plagiarism; preparation and defense of the presentation; essay; preparation of first aid algorithms;				
9.4	Mid-term examination	Testing				
<b>10.</b>	<b>Evaluation criteria</b>					
<b>10.1 Criteria for evaluating the results of discipline training</b>						
<b>№ RT</b>	<b>Name of learning outcomes</b>	<b>Unsatisfactory</b>	<b>Satisfactory</b>	<b>Well</b>	<b>Excellent</b>	


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<b>RT 1</b>	Demonstrates knowledge of the basics of diagnosis of neurological diseases of adults and children; clinical indications for hospitalization; rules for the management of patients at home	Does not demonstrate the basics of the diagnosis of neurological diseases and clinical indications of adults and children;	Understands the basics of diagnosis of neurological diseases of adults and children	Applies knowledge in the diagnosis of neurological diseases and clinical indications in adults and children;	Analyzes and demonstrates knowledge of the basics of diagnosis of neurological diseases of adults and children; clinical indications for hospitalization; rules for managing patients at home
<b>RT 2</b>	Participates in the preparation of patients, participates in the implementation of laboratory and instrumental research methods; applies safety principles when working with mental and drug-related patients, participates in the organization of preventive measures; applies the methods of scientific research and academic writing in neurology, psychiatry and psychology; applies knowledge and understanding of facts, phenomena, theories and complex dependencies between them in	Does not name the basics of performing laboratory and instrumental research methods and does not apply the methods of scientific research and academic writing in neurology, psychiatry and psychology; does not apply knowledge and understanding of facts, phenomena, theories and complex dependencies between them in neurology, psychiatry and psychology; does not understand the importance of principles and culture of academic honesty;	Understands the importance of work in the preparation of patients and the implementation of laboratory and instrumental research methods.	Applies knowledge in the preparation of patients and participates in the organization of preventive measures;	Analyzes regulatory documents




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	neurology, psychiatry and psychology; understands the importance of the principles and culture of academic integrity;				
<b>RT 3</b>	Formulates a standard definition of acute neurological, mental and narcological conditions; collection of anamnesis in this category of patients;	Does not know how to determine acute neurological, mental and narcological conditions. He does not name the symptoms of acute neurological, mental and narcological conditions. Does not know the principles and features of collecting anamnesis in neurological, mental and narcological patients with acute conditions.	Does not fully know how to determine acute neurological, mental and narcological conditions. He does not fully name the symptoms of acute neurological, mental and narcological conditions. Does not fully know the principles and features of the collection of anamnesis in neurological, mental and narcological patients with acute conditions.	Determines acute neurological, mental and narcological conditions. Names the symptoms of acute neurological, mental and narcological conditions. Knows and applies the principles and features of anamnesis collection in neurological, mental and narcological patients with acute conditions.	Formulates the definition of acute neurological, mental and narcological conditions. Interprets and classifies symptoms and syndromes of neurological, mental and narcological conditions. Demonstrates the principles and analyzes the features of anamnesis collection in patients with acute neurological, mental and narcological conditions.
<b>RT 4</b>	Adheres to the principles of confidentiality when working with neurological, mental and	Does not comply with the principles of confidentiality when working with neurological,	Makes mistakes in maintaining confidentiality when working with	Adheres to the principles of confidentiality when working with neurological,	Demonstrates and adheres to the principles of confidentiality when working with

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	<p>narcological patients, independently solves problems in the field of professional activity. Forms positive relationships with colleagues.</p>	<p>mental and narcological patients. Does not know how to solve problems independently in the field of professional activity. Does not know the principles of forming positive relationships with colleagues.</p>	<p>neurological, mental and narcological patients. Does not fully solve problems in the field of professional activity independently. Does not fully understand the importance of the principles of forming positive relationships with colleagues.</p>	<p>mental and narcological patients. Independently solves problems in the field of professional activity. Knows the principles of forming positive relationships with colleagues.</p>	<p>neurological, mental and narcological patients. Independently makes decisions in problems in the field of professional activity. Analyzes the principles of forming positive relationships with colleagues.</p>
<b>RT 5</b>	<p>Uses treatment protocols to select a drug</p>	<p>Does not demonstrate knowledge of treatment protocols for neurological, mental and drug-related diseases. Does not know how to choose the necessary medicines.</p>	<p>Does not have sufficient confidence in the use of treatment protocols. Does not show a properly reasoned position in the choice of a drug.</p>	<p>In accordance with the requirements, he uses treatment protocols, but does not show independence of thinking. With inaccuracies, he argues his own position in the choice of a drug.</p>	<p>Demonstrates a complete understanding and knowledge of protocols, drugs of choice for a certain nosology. He shows independence of thinking and argues his own position in choosing a drug.</p>
<b>RT 6</b>	<p>Interprets, substantiates anamnesis data, draws up medical documentation</p>	<p>Does not know the technique of patient management, cannot justify and link the data of the conducted examinations</p>	<p>Allows inaccuracies and violates the logical sequence when filling out medical documentation .</p>	<p>Correctly describes the sequence of examinations and results, judgments differ in a comprehensive study of the patient's condition, small stylistic errors are made.</p>	<p>Demonstrates a comprehensive in-depth analysis and evaluation of data in the implementation of monitoring and patient care, competently fills in patient management diaries. Has its own reasoned position.</p>



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<b>RT 7</b>	<p>He is aware of the need to maintain confidentiality in professional relationships when working with neurological, mental and narcological patients, and is willing to work independently. Demonstrates commitment to professional ethical standards.</p>	<p>Does not know the principles of confidentiality in professional relations when working with neurological, mental and drug-related patients. Does not know how to work independently. Does not show adherence to professional ethical standards.</p>	<p>He cannot single out the main thing in the principles of confidentiality in professional relations when working with neurological, mental and narcological patients. Does not know how to fully exercise independence. It does not sufficiently demonstrate adherence to professional ethical standards.</p>	<p>Is aware of the need to maintain confidentiality in professional relationships when working with neurological, mental and narcological patients. Shows willingness to work independently. Demonstrates commitment to professional ethical standards</p>	<p>Analyzes and justifies the need for confidentiality in professional relationships when working with neurological, mental and drug-related patients. Demonstrates independence in decision-making. Has its own position regarding adherence to professional ethical standards.</p>
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## 10.2 Evaluation criteria

### Checklist for practical lessons

Form of control	Evaluation	Evaluation criteria
<b>Oral response</b>	<p><b>Excellent</b></p> <p>Corresponds to the ratings: A (4,0; 95-100%); A- (3,67; 90-94%)</p>	<p>-It is put in the event that the student did not make any mistakes or inaccuracies during the answer. -focuses on the theories, concepts and directions of the studied discipline and gives them a critical assessment -uses the scientific achievements of other disciplines.</p>
	<p><b>Good</b></p> <p>Corresponds to estimates: B+ (3,33; 85-89%); B (3,0; 80-84%); B- (2,67; 75-79%); C+ (2,33; 70-74%);</p>	<p>-confident knowledge of the material and ability to apply it in practice. -solves complex problems with minimal errors. -argues their answers well and expresses their thoughts clearly. -demonstrates independence in learning and uses additional resources.</p>

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	<b>Satisfactory</b> Corresponds to estimates C (2,0; 65-69%); C- (1,67; 60-64%); D+ (1,33; 55-59%); D (1,0; 50-54%)	-it is put in the event that the student made inaccuracies and unprincipled mistakes during the answer, -was limited only to the educational literature specified by the teacher, - experienced great difficulties in systematizing the material.
	<b>Unsatisfactory</b> FX(0,5; 25-49%) F(0; 0-24%)	-placed in the case if student during the answer has made a fundamental error - not worked the basic literature on the topic; -not able to use scientific terminology of discipline, answers with rough stylistic and logical errors.

Form of control	Evaluation	Evaluation criteria
Performing test tasks	<b>Excellent</b> Corresponds to the ratings: A (4,0; 95-100%); A- (3,67; 90-94%)	-solved the case study with a detailed description of the main and additional examination methods, differential diagnosis -diagnosis and its justification from the point of view of aetiology and pathogenesis, and was able to effectively draw up a rational treatment plan -as a result of a complete understanding of the aetiology and pathogenesis -possesses strong clinical thinking skills. -able to defend his point of view and propose alternative treatment methods in cases where classic treatment methods are not possible.
	<b>Good</b> Corresponds to estimates: B+ (3,33; 85-89%); B (3,0; 80-84%); B- (2,67; 75-79%)	-solved the case study with a detailed description of the main and additional methods of examination, differential diagnosis, and diagnosis. -he is able to draw up a treatment plan using data on the aetiology and pathogenesis of the disease and has determined the prognosis. -he has good clinical reasoning skills.



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<p><b>Satisfactory</b> Corresponds to estimates C+ (2,33; 70-74%); C (2,0; 65-69%); C- (1,67; 60-64%); D+ (1,33; 55-59%); D (1,0; 50-54%)</p>	<p>-the tasks were completed with difficulty, and there are errors or omissions. -the examination methods are incomplete or do not follow logical application. -differential diagnosis is limited to one or two options. -the diagnosis is assumed but not sufficiently substantiated. -the treatment plan is fragmentary and not related to the pathogenesis. -the prognosis is formal or inaccurate. -clinical thinking is at a basic level and is unstable.</p>
<p><b>Unsatisfactory</b> FX(0,5; 25-49%) F(0; 0-24%)</p>	<p>-solved the case study without describing the main and additional examination methods announced an incorrect differential diagnosis and diagnosis -drew up a treatment plan only in conjunction with the teacher -used inaccurate data on the aetiology and pathogenesis of the disease, and determined the prognosis. - lacks clinical thinking.</p>


### Midterm Assessment

The test assignment is assessed using a multi-point grading system.

Grade by letter system	Numeric equivalent of points	Percentage	Grade by traditional system
A	4,0	95-100	Excellent
A-	3,67	90-94	
B+	3,33	85-89	Good
B	3,0	80-84	
B-	2,67	75-79	
C+	2,33	70-74	
C	2,0	65-69	Satisfactorily
C-	1,67	60-64	
D+	1,33	55-59	
D-	1,0	50-54	
FX	0,5	25-49	Unsatisfactory
F	0	0-24	

11.

Learning resources


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Electronic resources, including, but not limited to: databases, animation simulators, professional blogs, websites, other electronic reference materials (for example: video, audio, digests)	<ol style="list-style-type: none"> <li>1. Electronic library SKMA- <a href="https://e-lib.skma.edu.kz/genres">https://e-lib.skma.edu.kz/genres</a></li> <li>2. Republican Interuniversity Electronic Library (RMEB) <a href="http://rmebrk.kz/">http://rmebrk.kz/</a></li> <li>3. Digital library "Aknurpress" - <a href="https://www.aknurpress.kz//">https://www.aknurpress.kz//</a></li> <li>4. Electronic library "Epigraph" - <a href="http://www.elib.kz/">http://www.elib.kz/</a></li> <li>5. Epigraph is a portal of multimedia textbooks - <a href="https://mbook.kz/ru/index/">https://mbook.kz/ru/index/</a></li> <li>6. ЭБС IPR SMART <a href="https://www.iprbookshop.ru/auth">https://www.iprbookshop.ru/auth</a></li> <li>7. Information and legal system "Law" <a href="https://zan.kz/ru">https://zan.kz/ru</a></li> <li>8. Cochrane Library - <a href="https://www.cochranelibrary.com/">https://www.cochranelibrary.com/</a></li> <li>9. eBook Medical Collection EBSCO</li> <li>10. Scopus - <a href="https://www.scopus.com/">https://www.scopus.com/</a></li> </ol>
Electronic textbooks	<ol style="list-style-type: none"> <li>1. Atlas of Neurology by Kispayeva T.T., 2015. <a href="https://www.aknurpress.kz/reader/web/1412">https://www.aknurpress.kz/reader/web/1412</a></li> <li>2. Modern Principles of Rehabilitation for Neurological Patients by Abdrakhmanova M.G., Epifantseva E.V., Shaikenov D.S., 2019. <a href="https://www.aknurpress.kz/reader/web/1410">https://www.aknurpress.kz/reader/web/1410</a></li> <li>3. Lectures on Neurology by Kispayeva T.T., 2014. Link <a href="https://www.aknurpress.kz/reader/web/1408">https://www.aknurpress.kz/reader/web/1408</a></li> <li>4. Dispensary Monitoring of Neurological Patients at the Outpatient Level: Study Guide by Anarbaeva A.A. - Turkestan: Turan, 2018. - 119 pages. - ISBN 978-601-243-899-4. Link <a href="http://rmebrk.kz/">http://rmebrk.kz/</a></li> <li>5. Neurology in Tables and Algorithms by Dushanova G.A. - Almaty: "Evero," 2020. - 104 pages. <a href="https://www.elib.kz/ru/search/read_book/3129/">https://www.elib.kz/ru/search/read_book/3129/</a></li> <li>6. Neurology (Fundamentals of Topical Diagnosis) by Bokebaev T.T., Bokebaev Zh.T. - Textbook for Students. - Almaty: "Evero" Publishing House, 2020. - 136 pages. Link <a href="https://www.elib.kz/ru/search/read_book/3129/">https://www.elib.kz/ru/search/read_book/3129/</a></li> <li>7. Neurology. Part 1, Study Guide by Dushanova. - Almaty: Evero, 2020. - 105 pages. Link <a href="https://www.elib.kz/ru/search/read_book/790/">https://www.elib.kz/ru/search/read_book/790/</a></li> <li>8. Neurology. Part II, Study Guide by Dushanova. - Almaty: Evero Publishing House, 2020. - 188 pages. Link <a href="https://www.elib.kz/ru/search/read_book/179/">https://www.elib.kz/ru/search/read_book/179/</a></li> <li>9. General Neurology by Toleusarov A.M., Nurgozhaev E.S. - Almaty: "Evero" Publishing House, 2020. - 374 pages. Link <a href="https://www.elib.kz/ru/search/read_book/181/">https://www.elib.kz/ru/search/read_book/181/</a></li> <li>10. Markova, M. P. The basis of neurology: educational and methodological manual / M. P. Markova, E. A. Homeland. — Tula: Tula State Pedagogical University named after L.N. Tolstoy, 2021. — 97 c. // Digital educational resource IPR SMART: [сайт]. — URL: <a href="https://www.iprbookshop.ru/119692.html">https://www.iprbookshop.ru/119692.html</a></li> <li>11. Ponomarev, V. V. Rare clinical cases in neurology (cases from practice): a guide for doctors / V. V. Ponomarev. — St. Petersburg: Foliant, 2020. — 364 c. // Digital educational resource IPR SMART:</li> </ol>



<p style="text-align: center;"> </p> <p style="text-align: center;"> ONTÜSTİK-QAZAQSTAN MEDISINA AKADEMIASY «Оңтүстік Қазақстан медицина академиясы» АҚ </p> <p style="text-align: center;"> SOUTH KAZAKHSTAN MEDICAL ACADEMY АО «Южно-Казахстанская медицинская академия» </p>	
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	<p>[сайт]. — URL: <a href="https://www.iprbookshop.ru/120017.html">https://www.iprbookshop.ru/120017.html</a></p> <p>12. Emergency neurology: early surgical prevention of atherothrombotic stroke in carotid artery stenosis and occlusion (decision-making algorithm): methodological recommendations / I. A. Vozniuk, P. V. Chechulov, S. Sh. Zabirow [and others]; edited by I. M. Barsukova. — St. Petersburg: Styx Firm, 2019. // Digital educational resource IPR SMART: [сайт]. — URL: <a href="https://www.iprbookshop.ru/120562.html">https://www.iprbookshop.ru/120562.html</a></p>
Laboratory physical resources	
Special programs	<p><a href="http://10.10.202.52">http://10.10.202.52</a></p> <p><a href="http://89.218.155.74">http://89.218.155.74</a></p>
Journals (e-journals)	
Literature	<p><b>Main References:</b></p> <ol style="list-style-type: none"> <li>1. Kaishibaev, S. Neurology. 1 - book. Basics of topical and syndromological diagnosis: textbook / S. Kaishibaev. - Almaty: Evero, 2016</li> <li>2. Kaishibaev, S. Neurology. Book 2. Special neuropathology [Text]: textbook / S. Kaishibaev. - Almaty: Evero, 2016. - 484 pages. s</li> <li>3. Kispäeva, T. T. Lectures on neurology [Text]: educational tool / Vol. T. Kispäeva. - 3rd head. - Karaganda: AKNUR, 2019. - 168 p. s.</li> <li>4. Akhmetova J.B. Semiotics of cranial nerve damage: textbook / Zh. B. Akhmetova. - 2nd research. - Karaganda: AKNUR, 2019. - 162 p</li> <li>5. Akhmetova, Zh.B. - Karaganda: AKNYR, 2016</li> <li>6. Kispäeva T. T. Atlas of neurology: textbook / T. T. Kispäeva. - 2nd ed. - Karaganda: AKHYR, 2019. - 126 p.</li> <li>7. Gusev, E. I. Neurology and neurosurgery. In 2 volumes. T. 1. Neurology: textbook. - 4th ed. extra; Min. education and science of the Russian Federation. Recommended by the State Budgetary Educational Institution of Higher Professional Education "First Moscow State Medical University named after I.M. Sechenov." - M.: GEOTAR - Media, 2015.</li> <li>8. Gusev, E. I. Neurology and neurosurgery. 2 volumes. 1 vol. Neurology [Text]: textbook / E. I. Gusev, A. N. Konovalov, V. I. Skvortsova; Kazakh language. aud. Sh. K. Omarova. - M.: GEOTAR - Media, 2016. - 488 pages. +people Opt. disk (CD-ROM)</li> <li>9. Gusev, E. I. Neurology and neurosurgery. 2 volumes. 2 t. Neurosurgery textbook / Kazakh language. aud. Sh. K. Omarova. - M.: GEOTAR - Media, 2016. - 312 pages. s.</li> </ol> <p><b>Additional literature</b></p> <ol style="list-style-type: none"> <li>1. Neurology. National leadership. Short version: manual / pod ed. E. I. Guseva. - M.: GEOTAR - Media, 2016.</li> </ol>

<p style="text-align: center;"> <small>ONTUSTIK-QAZAQSTAN MEDISINA AKADEMIASY</small>  <small>«Оңтүстік Қазақстан медицина академиясы» АҚ</small> </p> <p style="text-align: center;">  <small>SOUTH KAZAKHSTAN MEDICAL ACADEMY</small>  <small>АО «Южно-Казахстанская медицинская академия»</small> </p>	
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	<ol style="list-style-type: none"> <li>1. Abdrakhmanova, M. G. Modern principles of rehabilitation of neurological patients: educational and methodological tool / M. G. Abdrakhmanova, E. V. Epifantseva, D. S. Shaikenov; Ministry of Health and Social Development of the Republic of Kazakhstan. KMSU. - Karaganda: AKNUR, 2015.</li> <li>2. Abdrakhmanova, M. G. Modern principles of rehabilitation of neurological patients: teaching manual / M. G. Abdrakhmanova, E. V. Epifantseva, D. S. Shaikenov; Master of Health and Social Development of the Republic of Kazakhstan. KSMU. - Karaganda: IP "Aknur", 2015</li> </ol>
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<b>12.</b>	<b>Course policy</b>
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Student requirements, attendance, behavior, grading policies, penalties, incentives, etc..

- in the classroom, be in special clothing (white coats, caps);
- compulsory attendance of lectures and seminars according to the schedule;
- not be late for classes;
- do not miss classes, in case of illness, provide a certificate;
- work missed classes for a good reason at the time specified by the teacher;
- for each missed lecture, the penalty point is 1 point from the result of the RC for each lecture;
- for each pass of the SIW, the penalty point is 2 points from the result of passing the SIW;
- fulfill the SIW according to the schedule;
- visiting the SIWT according to the schedule is obligatory !;
- each student is responsible for the sanitary condition of his workplace, for the observance of personal hygiene;
- the student should actively participate in the discussion of the topic of the lesson; be able to work in a team; must comply with medical ethics and deontology when working with patients and colleagues;
- the student must comply with the internal regulations of SKMA and the clinical base and safety rules; take good care of the property and equipment of the department and the clinical base.

**If the sections of work are not completed, penalties are applied to students:**



- if you miss lectures without a valid reason, the assessment of midterm control decreases - 1 point for each missed lecture;
- if an SIW is missed without a valid reason, the SIW score decreases - 2 points for each missed lesson;
- in case of untimely delivery of the SIW without a valid reason (later than the specified week), the SIW is not accepted;
- in case of a single violation of the discipline policy, the student is give a warning;
- in case of a systematic violation of the discipline policy, information about the student's behavior is transferred to the dean's office of the faculty;
- a student who has received an unsatisfactory mark for one of the types of control (midterm control 1, midterm control 2, average grade of current control) is not allowed to take the exam in the discipline

<b>13.</b>	<b>Academic policy based on the moral and ethical values of the academy</b>
	Academic policy. P. 4 Code of Honor Student
	Policy issuing evaluations on discipline



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14.	Approval and revision
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Date of approval with the library and information center	Protocol № 7 25.06.25	Head of the Business Information Centre Darbicheva R.Y	Signature 
Date of approval by the department	Protocol № 11 26.06.25	Head of Department, candidate of medical sciences, professor Zharkinbekova N.A	Signature 
Date of approval at AC EP	Protocol № 6 27.06.25	Charman of AC EP Auezkhankyzy D	Signature 