**SYLLABUS**

**Неврология және психикалық денсаулық**

**Неврология и психическое здоровье**

**Neurology and mental health**

| **1.**  | **General information about the discipline** |
| --- | --- |
| 1.1 | Faculty/School:Graduate School of Medicine | 1.6 | Credits (ECTS): a) 6 credits - 180 hours |
| 1.2 | Educational program (EP):  6B10104 DENTISTRY BACHELOR  | 1.7 | **Prerequisites:**1.Ағзалар мен жүйелердің патологиясы/Патология органов и систем/Pathology of organ’s and system**Postrequisites:**Бейіндік пәндер/Профильные дисциплины/Profile disciplines |
| 1.3 | Agency and year of accreditation of the EPIAAR 2021 | 1.8 | SIW/SPM/SRD (qty):30 hours |
| 1.4 | Name of discipline:**Неврология және психикалық денсаулық/Неврология и психическое здоровье/Neurology and mental health** | 1.9 | SRSP/SRMP/SRDP (number): 60 hours |
| 1.5 | Discipline ID: 97287 Discipline code: **NPZ43068** | 1.10 | ***Required - yes***  |
| **2.**  | **Description of the discipline** |
|  | The discipline includes the study of pathogenesis, pathomorphology, clinical presentation of pathology of the nervous system, principles of diagnosis and treatment of the most common diseases of the nervous system. The training involves the development of clinical argumentation, analytical and problem-oriented thinking, a deep understanding of the problem in a clinical context; the formation and development of clinical diagnostic skills and the reasonable formation of a syndromic diagnosis. |
| **3** | **Purpose of the discipline** |
| -The study of pathogenesis, pathomorphology, clinical presentation of problems (clinical syndromes) and clinically oriented pharmacology of the pathology of the nervous system and psyche- Development of clinical reasoning, analytical and problem-oriented thinking, deep understanding of the problem in the clinical context;- Formation and development of skills for clinical diagnosis of pathology and reasonable formation of syndromic diagnosis. |
| **4.**  | **Learning outcomes (LО) by discipline (3-5)** |
|  | LO disciplines | LO according to the educational program,with which the LO is associated by discipline(LO No. from the EP passport) |
| 1. To apply knowledge on the pathogenesis of the pathology of the nervous system and psyche in the process of diagnosis and treatment. Identify clinical symptoms and syndromes. | Proficiency level - 2 | 1. Identifies and interprets clinical symptoms and syndromes, data from a special neurological examination of patients with the most common neurological diseases |
| 2. To be able to select drug therapy, taking into account the characteristics of the pathology of the nervous system and psyche. | Proficiency level - 3 | 2. Demonstrates the use of pharmaceuticals in diseases of the nervous system with an understanding of the mechanism of their action and drug interactions. |
| 3. Determine the tactics of managing patients with pathology of the nervous system and psyche, adhering to an individual approach. | Proficiency level - 2 | 3. Integrates knowledge and skills to ensure an individual approach to the treatment of a particular patient; teach to make professional decisions based on the analysis of the rationality of diagnosis and the principles of evidence-based medicine |
| 4. Knows how to work in a team. Demonstrates communication skills, skills in organizing the treatment process | Proficiency level - 2 | 4. Demonstrates communication skills, teamwork skills, organization and management of the diagnostic and treatment process |
| 5. Demonstrates commitment to professional values such as altruism, compassion, empathy, responsibility, honesty, and respect for the principles of confidentiality  | Proficiency level - 3 | 5. Demonstrates commitment to professional values such as altruism, compassion, empathy, responsibility, honesty and respect for the principles of confidentiality |
| 6. Possesses basic methods of psychotherapeutic assistance in order to prevent or treat conditions that may develop in patients in the practice of a dentist; | Proficiency level - 2 | 6. Demonstrates the skills and abilities of basic methods of psychotherapeutic care in order to prevent or treat conditions that may develop in patients in the practice of a dentist; |
| 7. Possesses the basic skills of a special examination and examination and interaction with a "difficult" patient, including in emergency situations, teamwork skills, organization and management of the diagnostic and treatment process | Proficiency level - 3 | 7. Applies basic skills of special examination and examination and interaction with a "difficult" patient, including in emergency situations, skills of teamwork, organization and management of the diagnostic and treatment process; |
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| **5.** | **Summative assessment methods** (mark (yes – no) / specify your own): |
| 5.1  | MCQ testing for understanding and application  | 5.5  | Portfolio of scientific papers |
| 5.2  | Practical skills – Miniclinical exam (MiniCex) for interns | 5.6  | Patient management, clinical skills |
| 5.3  | SIW (case, video, simulation OR SRWS - thesis, report, article) - assessment of the creative task. | 5.7  | Midterm control:Stage 1 - MCQ testing for understanding and applicationStage 2 – passing practical skills (miniclinical exam (MiniCex) |
| 5.4  | Disease history | 5.8  | Exam: comprehensive for the entire POS-1 module, including "Languages in Medicine"Stage 1 - Testing on MCQ for understanding and applicationStage 2 - OSKE |

| **6.**  | **Detailed information about the discipline** |
| --- | --- |
| 6.1 | Academic year:2023-2024 | 6.3 | Timetable (сабақ күні, уақыт): From 8.00 to14.00 |
| 6.2 | Semester:8 semester | 6.4 | Place(educational building, office, platform and link to the DOT learning meeting):City Clinical Hospital №1, City Clinical Hospital №7 |
| **7.** | **Discipline leader** |
| Position | Full name | Department | Contact information(tel., e-mail) | Consultations before exams |
| Senior lecturer | Nurlanova Z | Clinical discipline | 8 (775) 756-24-24 | Before exam sessions within 60 minutes |
| **8.** | **The content of the discipline** | **The content of the discipline** |
|  | Name of the discipline | Quantity of hours | Conducting form |
|  | Introduction to clinical neurology. The main clinical syndromes in neurology and the concept of topical diagnosis. Sensitivity – concept, types, research methods, symptoms and syndromes of lesion | 8 | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient3. Mini-conference on the topic of SIW |
|  | Violations of motor functions. The main symptoms of damage to the pyramidal and extrapyramidal systems | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | Anatomy and study of СN I-XII, I: temporal epilepsy; II: visual field defect, optic disc edema; III-IV-VI: visual disturbances, diplopia, anisocoria, pupillary reflex pathways, cortical blindness. Symptoms and syndromes of the lesion of the cerebellar angle. | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | Anatomy and study of СN I-XII, V Neuralgia and trigeminal neuropathy. | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | Caudal group of cranial nerves. Anatomy and research of cranial nerves I-XII. Syndromes of defeat of IX, X, XI, XII pairs of cranial nerves. IX-X: glossopharyngeal neuralgia, dysphagia, dysarthria; XI: torticollis; XII: central and peripheral lesions of the hypoglossal nerve. Bulbar and pseudobulbar signs. Torticollis. | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | Myofascial pain syndrome (pain dysfunction syndrome of the temporomandibular joint). Stomalgia, glossalgia, psychalgia. | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | Progressive hemiatrophy and hemihypertrophy of the face. Focal scleroderma. Parry-Romberg syndrome | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | Meningeal signs. Study of CSF, meningitis, causes of changes in the cellular composition of CSF, interpretation of the presence of blood in the CSF. Infectious diseases of the nervous system: secondary purulent meningitis in purulent-inflammatory processes of the maxillofacial region | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | ACVA. Classification of vascular diseases of the brain. | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
|  | Paroxysmal disorders of consciousness - epilepsy. | 8 | Formative assessment:1. Using active CBL learning methods2. Work with the patient |
| **Border control 1**  | Summative evaluation:2 stages:1-stage – MCQ testing for understanding and application - 40%2-stage – mini clinical exam (MiniCex) - 60% |
|  | Introduction to the clinical discipline "Psychiatry". The main clinical and psychopathological symptoms and syndromes in psychiatry.  | 8 | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
|  | The main groups of mental disorders and diseases. Schizophrenia. bipolar affective disorder. | 8 | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
|  | The main groups of mental disorders and diseases. Neurotic, stress-related and somatoform disorders. | 8 | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
|  | The main groups of mental disorders and diseases. | 8 | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
|  | Emotional and behavioral disorders that usually begin in childhood and adolescence. | 8 | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
|  | Narcological semiotics and phenomenology of addictive (narcological) disorders | 8 | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
| **Border control** **2** | Summative evaluation:2 stages:1-stage – MCQ testing for understanding and application - 40%2-stage – mini clinical exam (MiniCex) - 60% |
| **Final control (Exam)** | Summative evaluation:2 stages:1-stage – MCQ testing for understanding and application - 40%2- stage – ОSCE with NP - 60% |
| **Total** | **100** |
| **9.**  | **Methods of teaching in the discipline**(briefly describe the approaches to teaching and learning that will be used in teaching)Using active learning methods: TBL, CBL |
| 1 | **Methods of formative assessment:** TBL – Team Based Learning CBL – Case Based Learning  |
| 2 | **Summative assessment methods (from point 5):** 1. MCQ testing for understanding and application2. Passing practical skills - miniclinical exam (MiniCex)3. SIW - Targeted expertise of the quality of medical care 4. Disease history5. Portfolio of scientific works6. Patient management, clinical skills |
| **10.**  | **Summative assessment**  |
| **№** | **Forms of control** | **General % from total %** |
| 1 | Medical history | 30% (evaluated according to the checklist)  |
| 2 | Border control 1 | 70% (1st stage - testing on MCQ for understanding and application - 40%;2- stage – mini clinical exam (MiniCex) - 60%) |
| **Total for BC-1** | 30 + 70 = 100% |
| 5 | 360 rating  | 10% |
| 6 | Science project | 10% |
| 7 | Medical history | 20 % |
| 8 | Border control 2 | 60% (1st stage - testing on MCQ for understanding and application - 40%;2- stage – mini clinical exam (MiniCex) - 60%) |
| **Total for BC 2** | 10 + 10 +20+ 60 = 100% |
| 9 | **Exam** | **2 этапа:**1st stage - testing on MCQ for understanding and application - 40%2- stage – ОSCE - 60% |
| 10 | **Final grades for  discipline**  | **OAR  60% + Exam 40%** (1st stage - testing on MCQ for understanding and application - 40%; 2- stage – ОSCE - 60%) |
| **10.** | **Score** |
| **Rating by letter system** | **Digital****equivalent** | **Points****(% content)** | **Assessment Description**(changes should be made only at the level of the decision of the Academic Committee on the quality of the faculty) |
| А  | 4,0  | 95-100  | **Excellent.** Exceeds the highest job standards. |
| А-  | 3,67  | 90-94  | **Excellent.** Meets the highest job standards. |
| В+  | 3,33  | 85-89  | **Good.** Very good. Meets high job standards. |
| В  | 3,0  | 80-84  | **Good.** Meets most of the job standards. |
| В-  | 2,67  | 75-79  | **Good.** More than enough. Shows some reasonable ownership of the material. |
| С+  | 2,33  | 70-74  | **Good.** Acceptable. Meets the basic standards of the task. |
| С  | 2,0  | 65-69  | **Satisfactory.** Acceptable. Meets some basic job standards. |
| С-  | 1,67  | 60-64  | **Satisfactory.** Acceptable. Meets some basic job standards. |
| D+  | 1,33  | 55-59  | **Satisfactory.** Minimally acceptable. |
| D  | 1,0  | 50-54  | **Satisfactory.** Minimally acceptable. The lowest level of knowledge and completion of the task. |
| FX  | 0,5  | 25-49  | **Unsatisfactory.** Minimally acceptable. |
| F  | 0  | 0-24  | **Unsatisfactory.** Very low productivity. |
| **11.** | **Educational resources** (use the full link and specify where you can access the texts/materials) |
| Literature  | **Main****Available in the library**

| **Author** | **Name of the book, publisher** | **Year of publication** |
| --- | --- | --- |
| S. M. Karpov, I. N. Dolgova  | Topical Diagnosis of Diseases of the Nervous System | 2018 |
| ed.: P. L. Robert et al  | International Neurology | 2016 |
| Гусев Е.И. | . Неврология және нейрохирургия : екі томдық оқулық. 1-том | 2016 |
| Гусев Е.И | Неврология және нейрохирургия : екі томдық оқулық. 2-том | 2016 |
| Гусев Е.И | Неврология и нейрохирургия : учебник в двух томах. Т. 1 | 2018 |
| Гусев Е.И | Неврология и нейрохирургия : учебник в двух томах. Т. 2 | 2018 |
| Кайшибаев, Смагул К | Неврология: Основы топической и синдромологической диагностики. Ч. 1 | 2018 |
| Кайшибаев, Смагул К | Неврология: Основы топической и синдромологической диагностики. Ч. 2 | 2018 |
| Петрухин, Андрей Сергеевич | Детская неврология, Т1 | 2018 |
| Петрухин, Андрей Сергеевич | Детская неврология, Т2 | 2018 |
| Гайворонский, Иван Васильевич | Анатомия центральной нервной системы и органов чувств | 2020 |
| Гайворонский, Иван Васильевич | Анатомия человека :: Нервная система. Сосудистая система | 2018 |
| Абдрахманова М. Ғ | Балалар неврологиясы | 2018 |
| Төлеусаринов А. М. | Жалпы неврология | 2018 |
| Қайшыбаев, С | Топикалық және синдрологиялық диагностика негіздері | 2018 |
| С. У. Кәменова, Қ. К. Құжыбаева, А. М. Қондыбаева | Практикалық неврология | 2021 |
| Иванец Н.Н., Тюльпин Ю.Г.  | Психиатрия и наркология: учебник. — М., ГЭОТАР-Медиа, | 2006. |
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**Not available in the library**

| **Author** | **Name of the book, publisher** | **Year of publication** |
| --- | --- | --- |
| Harrisson’s Manual of Medicine  | 20th Edition, Section 6, chapter 40, p. 249-253, p. 2209-2220. | 2020 |
| CURRENT\_Diagnosis\_&\_Treatment\_Neurology | Brust\_3\_ed\_ | 2019 |
| Clinical\_Neurovirology | Nath\_2\_ed | 2020 |

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| **Additional****Available in the library**

| **Author** | **Name of the book, publisher** | **Year of publication** |
| --- | --- | --- |
| F. Olzhayev, A. Tsoy, B. Umbay | Experimental Model of a Focal Iscemic Brain Damage By Occlusion of the Middle Cerebral Artery : methodical recommendations / | 2021 |
| Methods of Studying and Evaluating the Physical Development of Children and Adolescents : educational guide / S. A. Yermanova, B. Z. Doltayeva, M. K. Shirinova  | 2022  |
| Parkinson Disease and Other Movement Disorders : Motor Behavioural Disorders and Behavioural Motor Disorders / [ed.: E. Wolters, C. Baumann],  | 2014 |
| Preston, David C. Electromyography and Neuromuscular Disorders : Clinical-Electrophysiologic-Ultrasound Correlations / D. Preston, B. Shapiro,  | 2021 |
| Tussupbekova, Gulmira. Physiology of Development of Schoolchildren : educational manual / G. Tussupbekova,  | 2020 |
| Experimental Model of a Focal Iscemic Brain Damage By Occlusion of the Middle Cerebral Artery : methodical recommendations / F. Olzhayev, A. Tsoy, B. Umbayev  | 2021 |
| Гусев, Евгений Иванович. Эпилепсия и ее лечение : монография / Е. И. Гусев, Г. Н. Авакян, А. С. Никифоров | 2016 |
| Детский церебральный паралич: принципы профилактики, лечения и реабилитации : методические рекомендации / КазНУ им. аль-Фараби | 2019 |
| Киспаева Т. Т. Атлас по неврологии : учеб. пособие / Т. Т. Киспаева,  | 2019 |
| Клиническая электроэнцефалография. Фармакоэлектроэнцефалография / Л. Н. Неробкова, Г. Г. Авакян, Т. А. Воронина, Г. Н. Авакян,  | 2020 |
| Ковальчук, Виталий Владимирович. Реабилитация пациентов, перенесших инсульт : монография / В. В. Ковальчук,  | 2016 |
| Куанова Л. Б. Семинары по детской неврологии : учеб. пособие / Л. Б. Куанова, | 2018 |
| Магнитно-резонансная томография в диагностике и дифференциальной диагностике рассеянного скелероза : руководство для врачей / М. В. Кротенкова, В. В. Брюхов, С. Н. Морозова, И. А. Кротенкова,  | 2020 |
| МРТ. Позвоночник и спинной мозг : руководство для врачей / под ред.: Г. Е. Труфанов, В. А. Фокин,  | 2020 |
| Неонатология: реабилитация при патологии ЦНС : учебное пособие для вузов / под общ. ред. Н. Г. Коновалова, 2020. - 208 с. - Текст : непосредственный. | 2020 |
| Никифоров, Анатолий Сергеевич. Неврологические осложнения остеохондроза позвоночника / А. С. Никифоров, Г. Н. Авакян, О. И. Мендель | 2015 |
| Досжанова, Жанна Темирбековна. Жоғары жүйке жүйесінің физиологиясы мен нейрофизиологиясы : дәріс жинағы / Ж. Т. Досжанова,  | 2021 |

**Available at the department**

| **Author** | **Name of the book, publisher** | **Year of publication** |
| --- | --- | --- |
| Wyllie\_39\_s\_Treatment\_of\_Epilepsy\_Principles\_and\_Practice\_Wyllie\_7\_ed | 2021 |
| Trigeminal\_Nerve\_Pain\_A\_Guide\_to\_Clinical\_Management\_Abd-Elsayed\_1\_ed  | 2021 |
| Traumatic\_Brain\_Injury\_Whitfield\_2\_ed | 2020 |
| Top 100 Diagnoses in Neurology (Kister) 1 ed  | 2021 |
| [Neurological\_Examination\_Made\_Easy\_Fuller 6 ed](https://drive.google.com/open?id=1hqmfl6XGyCsUQAH8IGIpd1lGZ7CAY9Dt&usp=drive_copy) | 2019 |
| Electromyography\_in\_Clinical\_Practice\_A\_Case\_Study\_Approach\_Katirji\_3\_ed | 2018 |

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| Electronic resourcesSimulators in the simulation center | **Internet resources:** 1. Medscape.com - <https://www.medscape.com/familymedicine>
2. Oxfordmedicine.com -<https://oxfordmedicine.com/>
3. Uptodate.com **-** [**https://www.wolterskluwer.com/en/solutions/uptodate**](https://www.wolterskluwer.com/en/solutions/uptodate)
4. **Osmosis -** [**https://www.youtube.com/c/osmosis**](https://www.youtube.com/c/osmosis)
5. **Ninja Nerd -** [**https://www.youtube.com/c/NinjaNerdScience/videos**](https://www.youtube.com/c/NinjaNerdScience/videos)
6. **CorMedicale -** [**https://www.youtube.com/c/CorMedicale**](https://www.youtube.com/c/CorMedicale) **- medical video animations in Russian language.**
7. **Lecturio Medical -** [**https://www.youtube.com/channel/UCbYmF43dpGHz8gi2ugiXr0Q**](https://www.youtube.com/channel/UCbYmF43dpGHz8gi2ugiXr0Q)
8. **SciDrugs -** [**https://www.youtube.com/c/SciDrugs/videos**](https://www.youtube.com/c/SciDrugs/videos) **- video lectures on pharmacology in Russian language.**
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| Special software | 1. Google classroom - available in the public domain.2. Medical calculators: Medscape, Physician's Handbook, MD+Calc - freely available.3. Directory of diagnostic and treatment protocols for medical workers from the RCHD, the Ministry of Health of the Republic of Kazakhstan: Dariger - available in the public domain. |
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| **12.** | **Tutor Requirements and Bonus System** |
| **A student in accordance with an individual plan:****1)** supervises patients in organizations providing pre-medical medical care, emergency medical care, specialized medical care (including high-tech), primary health care, palliative care and medical rehabilitation;2) participates in the appointment and implementation of diagnostic, therapeutic and preventive measures;3) conducts documentation and sanitary and educational work among the population;4) participates in preventive examinations, medical examinations, is present at consultations;5) participates in clinical rounds, clinical reviews;6) participates in duty in medical organizations 7) participates in clinical and clinical-anatomical conferences;8) is present at pathoanatomical autopsies, participates in the research of autopsy, biopsy and surgical materials;9) under the supervision of a scientific supervisor, collects material and analyzes data for a scientific project.**Bonus system:**For extraordinary achievements in the field of future professional activity (clinical, scientific, organizational, etc.), additional points up to 10% of the final assessment can be added to the student (by the decision of the department)**Rules of Professional Conduct:** 1. **Appearance:**
* office style of clothing (shorts, short skirts, open T-shirts are not allowed to attend university, jeans are not allowed in the clinic)
* Clean and ironed coat
* medical mask
* medical cap (or a neat hijab without hanging ends)
* medical gloves
* changeable shoes
* neat hairstyle, long hair should be gathered in a ponytail, or a bun, for both girls and guys. Neatly short cut nails. Bright, dark manicure is prohibited. It is permissible to cover the nails with transparent varnish.
* badge with full name (full name)

2) Mandatory presence of a phonendoscope, tonometer, centimeter tape, (you can also have a pulse oximeter)3) Properly executed sanitary (medical) book (before the start of classes and must be updated on time)**4) \* Possession of a vaccination passport or other document confirming a fully completed course of vaccination against COVID-19 and influenza****5) Mandatory observance of the rules of personal hygiene and safety****6) Systematic preparation for the educational process.****7) Accurate and timely maintenance of reporting documentation.**8) Active participation in medical-diagnostic and public events of the departments.**A student without a medical book and vaccination will not be allowed to see patients.** **A student who does not meet the requirements for appearance and / or from whom a strong / pungent odor emanates, since such a smell can provoke an undesirable reaction in the patient (obstruction, etc.) - is not allowed to the patients!** |
| **13.** | **Discipline policy** *(части, выделенные зеленым, пожалуйста, не изменяйте)* |
|  | Discipline policy is determined by the University's Academic Policy and the University's Academic Integrity Policy. If the links do not open, then you can find the relevant documents in IS Univer.**Study discipline:**1. Being late for classes or the morning conference is not allowed. In case of being late, the decision on admission to the lesson is made by the teacher leading the lesson. If there is a good reason, inform the teacher about the delay and the reason by message or by phone. After the third delay, the student writes an explanatory note addressed to the head of the department indicating the reasons for being late and is sent to the dean's office to obtain admission to the lesson. If you are late without a valid reason, the teacher has the right to deduct points from the current grade (1 point for each minute of delay)
2. Religious events, holidays, etc. are not a valid reason for skipping, being late and distracting the teacher and the group from work during classes.
3. If you are late for a good reason - do not distract the group and the teacher from the lesson and quietly go to your place.
4. Leaving the class ahead of time, being outside the workplace during school hours is regarded as absenteeism.
5. Additional work of students during study hours (during practical classes and shifts) is not allowed.
6. For students who have more than 3 passes without notifying the curator and a good reason, a report is issued with a recommendation for expulsion.
7. Missed classes are not made up.
8. The internal regulations of the clinical bases of the department are fully applicable to students
9. Greet the teacher and any senior by standing up (in class)
10. Smoking (including the use of vapes, electronic cigarettes) is strictly prohibited on the territory of medical facilities (out-doors) and the university. Punishment - up to the annulment of boundary control, in case of repeated violation - the decision on admission to classes is made by the head of the department
11. Respectful attitude towards colleagues regardless of gender, age, nationality, religion, sexual orientation.
12. Have a laptop / laptop / tab / tablet with you for studying and passing MCQ tests for TBL, boundary and final controls.
13. Taking MCQ tests on phones and smartphones is strictly prohibited..

The behavior of the student at the exams is regulated by the "Rules for the final control", "Instructions for the final control of the autumn/spring semester of the current academic year" (the current documents are uploaded to the Univer IS and are updated before the start of the session); "Regulations on checking text documents of students for the presence of borrowings.". |
| **14.** | **Principles of inclusive education (no more than 150 words).** |
|  | 1. **Constantly preparing for classes:**For example, backs up statements with relevant references, makes brief summariesDemonstrates effective teaching skills, assists in teaching others**2. Take responsibility for your learning:**For example, manages their learning plan, actively tries to improve, critically evaluates information resources3. **Actively participate in group learning:**For example, actively participates in discussions, willingly takes tasks**4. Demonstrate effective group skills**For example, takes the initiative, shows respect and correctness towards others, helps to resolve misunderstandings and conflicts.5. **Skillful communication skills with peers**:For example, he listens actively, is receptive to nonverbal and emotional signals Respectful attitude**6. Highly developed professional skills:**Eager to complete tasks, seek opportunities for more learning, confident and skilledCompliance with ethics and deontology in relation to patients and medical staffObservance of subordination.**7. High introspection:**For example, recognizes the limitations of his knowledge or abilities, without becoming defensive or reproaching others**8. Highly developed critical thinking:**For example, accordingly demonstrates skills in performing key tasks, such as generating hypotheses, applying knowledge to cases from practice, critically evaluating information, making conclusions aloud, explaining the process of reflection**9. Fully complies with the rules of academic behavior with understanding, offers improvements in order to increase efficiency.**Observes the ethics of communication – both oral and written (in chats and appeals)**10. Fully follows the rules with full understanding of them, encourages other members of the group to adhere to the rules**Strictly adheres to the principles of medical ethics and PRIMUM NON NOCER |
| **15.** | **Distance/Online Learning – Prohibited in Clinical Discipline**(части, выделенные зеленым, пожалуйста, не изменяйте) |
| 1. According to the order of the Ministry of Education and Science of the Republic of Kazakhstan No. 17513 dated October 9, 2018 "On approval of the List of areas of training with higher and postgraduate education, training in which in the form of external studies and online education is not allowed". According to the above regulatory document, specialties with the discipline code of health care: bachelor's degree (6B101), master's degree (7M101), residency (7R101), doctoral studies, (8D101) - training in the form of external study and online education - is not allowed.Thus, students are prohibited from distance learning in any form. It is only allowed to work out a lesson in a discipline due to the absence of a student for reasons beyond his control and the presence of a timely confirming document (example: a health problem and presenting a confirming document - a medical certificate, a signal sheet of the PHC, an extract from a consultative appointment with a medical specialist - a doctor) |
| **16.** | **Approval and review** |
| Department head |  | prof. Kurmanova G.M. |
| Teaching Quality Committeeand teaching faculty | Protocol № | Confirmation date |
| Chairman of the Academic Committee of the Faculty of Medicine and Public Health | Signature | prof. Kurmanova G.M. |
| Dean | Signature | Dean of faculty  |

**Topic plan and content of classes**

| № | Тopic | Content | Literature | Conduct form |
| --- | --- | --- | --- | --- |
|  | 2 | 3 | 4 | 5 |
| 1 | Introduction to clinical neurology. The main clinical syndromes in neurology and the concept of topical diagnosis. Sensitivity - concept, types, research methods, symptoms and syndromes of damage.понятие, виды, методы исследования, симптомы и синдромы поражения. | **Learning outcomes:****-** is able to identify symptoms of damage to the nervous system when interviewing a patient- is able to technically correctly and systematically conduct a physical examination of a patient with a pathology of the nervous system- is able to isolate the symptoms of sensitivity disorders: hypesthesia, hyperesthesia, paresthesia- able to make a topical diagnosis, taking into account neurological symptoms- can prescribe treatment for a patient with a violation of sensitivity, taking into account the individual characteristics of the patient and the characteristics of the prescribed drugsCPC: Neuropathophysiological, neurochemical and psychological aspects of pain. antinociceptive system. Acute and chronic pain. Central pain. "Reflected" pain. | 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
5. Bähr, M., & Frotscher, M. (2019). Duus' topical diagnosis in neurology: Anatomy, physiology, signs, symptoms.
6. Uddin S., Rashid M. (eds.) Advances in Neuropharmacology-Drugs and Therapeutics. New York: Apple Academic Press, 2019. — 654 p.
7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

 Temperature perception test: <https://www.youtube.com/watch?v=7it5E9OBl2k> Neurological sensory examination: <https://www.youtube.com/watch?v=XVOVpq-41BY> Neurological peripheral vibration test: <https://www.youtube.com/watch?v=iEfyHSm2fCA> Coordination and joint position sense: <https://www.youtube.com/watch?v=Z9yRlJelcTg> | 1. Use of active learning methods: CBL2. Work with the patient - at least 30% of the timeFor 4-5 courses - at least 50%4. Mini-conference of the SRS topicFor topics for which learning outcomes are at level 1-2 |
| 2 | Movement disorders. The main symptoms of damage to the pyramidal and extrapyramidal systems | **Learning outcomes:**- able to identify symptoms of movement disorders- is able to make a topical diagnosis, considering neurological symptoms. Central and peripheral hemiparesis.- Demonstrate communication skills, teamwork skills, organization and management of the diagnostic and treatment process;- Demonstrate commitment to professional values such as altruism, compassion, empathy, responsibility, honesty and confidentiality;- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;- Demonstrate basic research skills. | 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
5. Bähr, M., & Frotscher, M. (2019). Duus' topical diagnosis in neurology: Anatomy, physiology, signs, symptoms.
6. Uddin S., Rashid M. (eds.) Advances in Neuropharmacology-Drugs and Therapeutics. New York: Apple Academic Press, 2019. — 654 p.
7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

Descending tracts of central nervous system (Pyramidal): <https://geekymedics.com/the-descending-tracts-of-the-central-nervous-system/> Upper Motor Neuron vs Lower Motor Neuron Lesion: <https://www.youtube.com/watch?v=lwTeoVZPuJM> Motor Neuron Disease: <https://www.youtube.com/watch?v=rxYSw6Xxgfs&list=PLJIs8ZcKXHUx4C9zjinQ8NY0JetieXFl0&index=43> Muscle power assessment (MRC Scale): <https://geekymedics.com/muscle-power-assessment-mrc-scale/> Muscle power test of the upper limbs: <https://www.youtube.com/watch?v=KZoQ2UkMFTA> Muscle power test of the lower limbs: <https://www.youtube.com/watch?v=Cjt0iFt2hL8> Active movements upper and lower limbs: <https://www.youtube.com/watch?v=JNN1736I5a0> Plantar reflex or Babinski sign: <https://www.youtube.com/watch?v=DkMN6u6Hcts> Gait abnormalities: <https://geekymedics.com/gait-abnormalities/>  Upper Motor Neuron vs Lower Motor Neuron Lesion: <https://www.youtube.com/watch?v=lwTeoVZPuJM> Cremasteric reflex: <https://www.youtube.com/watch?v=eVvInQNyXIU> Abdominal reflex: <https://www.youtube.com/watch?v=v4FyZydgHs0> Clonus: <https://www.youtube.com/watch?v=A67Od2Z_TpQ>The descending tracts of the CNS (extrapiramidal): <https://geekymedics.com/the-descending-tracts-of-the-central-nervous-system/> Anatomy of cerebellum: <https://geekymedics.com/cerebellum/> Parkinsons disease examination OSCE guide: <https://geekymedics.com/parkinsons-disease-examination-osce-guide/> Cerebellar examination OSCE guide: <https://geekymedics.com/cerebellar-examination-osce-guide/> **Rombergs test/sign:** [**https://www.youtube.com/watch?v=H8VbKdRS-hg**](https://www.youtube.com/watch?v=H8VbKdRS-hg) | 1. CBL2. Working with a patient |
| 3 | Anatomy and study of CN I-XII, I: temporal lobe epilepsy; II: visual field defect, papilledema; III-IV-VI: visual disturbances, diplopia, anisocoria, pupillary reflex pathways, cortical blindness. Symptoms and syndromes of damage to the cerebellopontine angle | Learning outcomes:- Identify and interpret clinical symptoms and syndromes, laboratory and imaging data in patients with symptoms of cranial insufficiency- Possess the initial skills of maintaining current accounting and reporting medical records, including information systems;- Integrates knowledge and skills to ensure an individual approach in the treatment of a particular patient;- Demonstrate communication skills, teamwork skills, organization and management of the diagnostic and treatment process;- Apply knowledge of the principles and methods of forming a healthy lifestyle for a person and family;- Demonstrate commitment to professional values such as altruism, compassion, empathy, responsibility, honesty and confidentiality;- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;- Demonstrate basic research skills. | 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
5. Bähr, M., & Frotscher, M. (2019). Duus' topical diagnosis in neurology: Anatomy, physiology, signs, symptoms.
6. Uddin S., Rashid M. (eds.) Advances in Neuropharmacology-Drugs and Therapeutics. New York: Apple Academic Press, 2019. — 654 p.
7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

Olfactory system: <https://www.youtube.com/watch?v=wQJbsOWc344&list=PLJIs8ZcKXHUx4C9zjinQ8NY0JetieXFl0&index=53> Functional anatomy of the optic nerve: <https://geekymedics.com/the-optic-nerve-cn-2/> Anatomy of the oculomotor muscles: <https://geekymedics.com/extraocular-muscles/> Vision research:  <https://geekymedics.com/eye-examination-osce-guide/> Study of color perception: <https://geekymedics.com/colour-vision-assessment-osce-guide/> Fundus examination: <https://geekymedics.com/fundoscopy-ophthalmoscopy-osce-guide/> Visual pathway lesions and visual field loss: <https://geekymedics.com/visual-pathway-and-visual-field-defects/> Olfactory nerve examination: <https://www.youtube.com/watch?v=uF5KXrlSrjs> Optic nerve examination: <https://www.youtube.com/watch?v=VB94tYqsIJI> Examination of III, IV, VI pairs of cranial nerves: <https://www.youtube.com/watch?v=Drpn_E1wmLI>  | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient |
| 4 | Anatomy and study of CCN I-XII, V Neuralgia and neuropathy of the trigeminal nerve. | Learning outcomes:- Identify and interpret clinical symptoms and syndromes, laboratory and imaging data in patients with symptoms of cranial insufficiency- Possess the initial skills of maintaining current accounting and reporting medical records, including information systems;- Integrates knowledge and skills to ensure an individual approach in the treatment of a particular patient;- Demonstrate communication skills, teamwork skills, organization and management of the diagnostic and treatment process;- Apply knowledge of the principles and methods of forming a healthy lifestyle for a person and family;- Demonstrate commitment to professional values such as altruism, compassion, empathy, responsibility, honesty and confidentiality;- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;- Demonstrate basic research skills.Primary delivery of a medical history with correction of errors, followed by delivery by the end of the discipline. | 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
5. Bähr, M., & Frotscher, M. (2019). Duus' topical diagnosis in neurology: Anatomy, physiology, signs, symptoms.
6. Uddin S., Rashid M. (eds.) Advances in Neuropharmacology-Drugs and Therapeutics. New York: Apple Academic Press, 2019. — 654 p.
7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

Examination of the VII pair of CN: <https://www.youtube.com/watch?v=M4kAQ6V6axs> Bell's Palsy: <https://www.youtube.com/watch?v=5KUbnVeMYEo&list=PLJIs8ZcKXHUx4C9zjinQ8NY0JetieXFl0&index=37> Functional anatomy of the vestibulocochlear nerve: <https://geekymedics.com/the-vestibulocochlear-nerve-cn-viii/> Examination of the VIII pair of CN: <https://geekymedics.com/the-head-impulse-nystagmus-test-of-skew-hints-examination/> Examination of the VIII pair of CN: <https://www.youtube.com/watch?v=AU_mZAPNFjQ>Examination of the V pair of CN: <https://www.youtube.com/watch?v=7_REH6ZycUk> | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient  |
| 5 | Caudal group of cranial nerves. Anatomy and research of cranial nerves I-XII. Syndromes of defeat of IX, X, XI, XII pairs of cranial nerves. IX-X: glossopharyngeal neuralgia, dysphagia, dysarthria; XI: torticollis; XII: central and peripheral lesions of the hypoglossal nerve. Bulbar and pseudobulbar signs. Torticollis. | Learning outcomes:- Identify and interpret clinical symptoms and syndromes, laboratory and imaging data in patients with symptoms of cranial insufficiency- Possess the initial skills of maintaining current accounting and reporting medical records, including information systems;- Integrates knowledge and skills to ensure an individual approach in the treatment of a particular patient;- Demonstrate communication skills, teamwork skills, organization and management of the diagnostic and treatment process;- Apply knowledge of the principles and methods of forming a healthy lifestyle for a person and family;- Demonstrate commitment to professional values such as altruism, compassion, empathy, responsibility, honesty and confidentiality;- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;- Demonstrate basic research skills. | 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
5. Bähr, M., & Frotscher, M. (2019). Duus' topical diagnosis in neurology: Anatomy, physiology, signs, symptoms.
6. Uddin S., Rashid M. (eds.) Advances in Neuropharmacology-Drugs and Therapeutics. New York: Apple Academic Press, 2019. — 654 p.
7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

Anatomy of the glossopharyngeal nerve: <https://geekymedics.com/the-glossopharyngeal-nerve-cn-ix/> Swallowing reflex: <https://www.youtube.com/watch?v=YQm5RCz9Pxc&list=PLJIs8ZcKXHUx4C9zjinQ8NY0JetieXFl0&index=34> Dysphagia: <https://www.youtube.com/watch?v=VoSMA2Anq3U> Examination of IX, X, XII pairs of cranial nerves: <https://www.youtube.com/watch?v=sMZbsci3BM4>Examination of XI pair of CN: <https://www.youtube.com/watch?v=K_QqV9HZJnQ>    | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient  |
| 6 | Myofascial pain syndrome (pain dysfunction syndrome of the temporomandibular joint). Stomalgia, glossalgia, psychalgia. | Learning outcomes:- Identify and interpret clinical symptoms and syndromes, laboratory and imaging data in patients with symptoms of temporomandibular joint disease- Able to carry out differential diagnosis between diseases of the temporomandibular joint.- Demonstrate communication skills, teamwork skills, organization and management of the diagnostic and treatment process;- Demonstrate commitment to professional values such as altruism, compassion, empathy, responsibility, honesty and confidentiality;- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity; | 1. 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
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7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.
 | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient  |
| 7 | Progressive hemiatrophy and hemihypertrophy of the face. Focal scleroderma. Parry-Romberg syndrome | Learning outcomes:- Knows and identifies all clinical and syndromal manifestations of progressive hemiatrophy and hemihypertrophy of the face, focal scleroderma;- Able to interpret the results of the examination (OAC, BAC - total protein, albumin, creatinine, urea, glucose, ALT, AST, total bilirubin, direct / indirect bilirubin, rheumatic tests, OAM, Coagulogram, CT / MRI-GM);- Knows the basic principles of treatment of progressive hemiatrophy and hemihypertrophy of the face, focal scleroderma. | 1. 1 Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
5. Bähr, M., & Frotscher, M. (2019). Duus' topical diagnosis in neurology: Anatomy, physiology, signs, symptoms.
6. Uddin S., Rashid M. (eds.) Advances in Neuropharmacology-Drugs and Therapeutics. New York: Apple Academic Press, 2019. — 654 p.
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8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.
 | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient  |
| 8 | Meningeal signs. Study of CSF, meningitis, causes of changes in the cellular composition of CSF, interpretation of the presence of blood in the CSF. Infectious diseases of the nervous system: secondary purulent meningitis in purulent-inflammatory processes of the maxillofacial region. | Learning outcomes:- Identify and interpret clinical symptoms and syndromes, laboratory and imaging data in patients with symptoms of CNS infectious diseases.- Be able to interpret the data of the analysis of cerebrospinal fluid- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;- Improve interpersonal communication and patient counseling skills; | 1. 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
5. Bähr, M., & Frotscher, M. (2019). Duus' topical diagnosis in neurology: Anatomy, physiology, signs, symptoms.
6. Uddin S., Rashid M. (eds.) Advances in Neuropharmacology-Drugs and Therapeutics. New York: Apple Academic Press, 2019. — 654 p.
7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

Interpretation of cerebrospinal fluid: <https://geekymedics.com/cerebrospinal-fluid-csf-interpretation/> Meningitis: <https://geekymedics.com/meningitis/> Meningitis: <https://www.youtube.com/watch?v=gIHUJs2eTHA> Brudzinsky sign: <https://www.youtube.com/watch?v=ke5EsXMXPHo> Kernig's sign: <https://www.youtube.com/watch?v=euNPB3OjrdM>  | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient  |
| 9 | ACVA. Classification of vascular diseases of the brain. | Learning outcomes:- Identify and interpret clinical symptoms and syndromes, data from laboratory and imaging examinations in patients with symptoms of stroke.- Be able to interpret MRI, CT GM data- Be able to identify indications and contraindications for thrombolytic therapy- Be able to provide pre-hospital medical care to people with symptoms of stroke- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;- Improve interpersonal communication and patient counseling skills; | 1. 1 Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
3. In Innes, J. A., In Dover, A. R., In Fairhurst, K., Britton, R., & Danielson, E. (2018). Macleod's clinical examination.
4. Philip B Gorelick, Fernando  B Testai, Graeme J Hankey, Joanna M Wardlaw  (2014). Hankey’s clinical neurology.
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7. Hadi Manji, Seán Connolly, Neil Dorward, Neil Kitchen, Amrish Mehta, Adrian Wills (2007). Oxford handbook of neurology.
8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

Anatomy of the cerebral cortex: <https://www.youtube.com/watch?v=2LzZMWGQe1k>Examination of higher brain functions: <https://www.youtube.com/watch?v=k0cph9PAFGQ>  | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient  |
| 10 | Paroxysmal disorders of consciousness - epilepsy. | Learning outcomes:- Identify and interpret clinical symptoms and syndromes, data from laboratory and visual examination methods in patients with paroxysmal disorders of consciousness.- Be able to interpret MRI, CT GM, EEG data- Be able to select antiepileptic drugs depending on the type of seizures-Be able to provide prehospital medical care to people with paroxysmal disorders of consciousness.- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;- Improve interpersonal communication and patient counseling skills; | 1. 1. Ropper, A. H., Samuels, M. A., & Klein, J. (2014). Adams and Victor’s principles of neurology.
2. In Daroff, R. B., In Jankovic, J., In Mazziotta, J. C., In Pomeroy, S. L., & Bradley, W. G. (2016). Bradley's neurology in clinical practice.
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8. Nicholas J Talley, Brad Frankum, Davis Currow (2015). Essentials of internal medicine.
9. Paul W. Brazis, Joseph C. Masdeu, José Biller (2011). Localization in clinical neurology.

Epilepsy: Types of seizures, Symptoms, Pathophysiology, Causes and Treatments: <https://www.youtube.com/watch?v=RxgZJA625QQ> Transient  loss consciousness history taking: <https://geekymedics.com/transient-loss-consciousness-history-taking/> Explaining a diagnosis of epilepsy: <https://geekymedics.com/explaining-a-diagnosis-of-epilepsy/> GABA and Glutamate: <https://www.youtube.com/watch?v=wP9QD-5FL5U&list=PLJIs8ZcKXHUx4C9zjinQ8NY0JetieXFl0&index=22> GABA Receptors and GABA Drugs: <https://www.youtube.com/watch?v=MRr6Ov2Uyc4&list=PLJIs8ZcKXHUx4C9zjinQ8NY0JetieXFl0&index=23>   | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient3. Medical history |
| 11 | Introduction to the clinical discipline "Psychiatry". | Learning outcomes:- Identify and interpret psychopathological symptoms and syndromes in patients.- Be able to conduct a psychiatric conversation. Collect objective and subjective anamnesis.- Know the classification of mental disorders- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity; | 1. Обухов С.Г. Психиатрия: учебное пособие. /Под ред. Ю.А. Александровского. - М., ГЭОТАР-Медиа., 2007. - 352 с.
2. Иванец Н.Н., Тюльпин Ю.Г. Психиатрия и наркология: учебник. — М., ГЭОТАР-Медиа, 2006. - 832 с.
3. Пропедевтика психиатрии. Учебное пособие. В.Л. Гавенко, Г.А. Самардакова, В.И. Коростий и др. / Под ред.проф. В.Л. Гавенко. - Ростов-на-Дону «Феникс», 2003. -192с.

4. «The Neuroscience of Clinical Psychiatry. The Pathophysiology of Behavior and Mental Illness.5. Allan Tasman Professor and Chair, Jerald Kay Professor and Chair, Robert J. Ursano Professor and Chair. «The Psychiatric Interview. Evaluation and Diagnosis».6.Fadem Barbara. Behavioral Science. Seventh Edition.7. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. Arlington: American Psychiatric Association, 2013. | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
| 12 | General psychopathology. The main clinical and psychopathological symptoms and syndromes. | Learning outcomes:- Identify and interpret psychopathological symptoms and syndromes in patients.- Be able to differentiate the main groups of mental disorders and diseases: schizophrenia, endogenous psychoses, delusional disorders.- Be able to use the criteria for assessing the risk of suicide (Suicide Risk Assessment), the Back scale- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;  | 1.Обухов С.Г. Психиатрия: учебное пособие. /Под ред. Ю.А. Александровского. - М., ГЭОТАР-Медиа., 2007. - 352 с.2.Иванец Н.Н., Тюльпин Ю.Г. Психиатрия и наркология: учебник. — М., ГЭОТАР-Медиа, 2006. - 832 с.3.Пропедевтика психиатрии. Учебное пособие. В.Л. Гавенко, Г.А. Самардакова, В.И. Коростий и др. / Под ред.проф. В.Л. Гавенко. - Ростов-на-Дону «Феникс», 2003. -192с.4. «The Neuroscience of Clinical Psychiatry. The Pathophysiology of Behavior and Mental Illness.5. Allan Tasman Professor and Chair, Jerald Kay Professor and Chair, Robert J. Ursano Professor and Chair. «The Psychiatric Interview. Evaluation and Diagnosis».6.Fadem Barbara. Behavioral Science. Seventh Edition.7. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. Arlington: American Psychiatric Association, 2013. | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play  |
| 13 | The main groups of mental disorders and diseases.Endogenous psychoses.Schizophrenia.Bipolar affective disorder. | Learning outcomes:- Identify and interpret psychopathological symptoms and syndromes in patients.- Be able to differentiate the main groups of mental disorders and diseases: phobias, anxiety disorders, disorders with somatic symptoms- Have the basic concepts of a differentiated approach to the psychotherapy of borderline mental disorders.- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;  | 1.Обухов С.Г. Психиатрия: учебное пособие. /Под ред. Ю.А. Александровского. - М., ГЭОТАР-Медиа., 2007. - 352 с.2.Иванец Н.Н., Тюльпин Ю.Г. Психиатрия и наркология: учебник. — М., ГЭОТАР-Медиа, 2006. - 832 с.3.Пропедевтика психиатрии. Учебное пособие. В.Л. Гавенко, Г.А. Самардакова, В.И. Коростий и др. / Под ред.проф. В.Л. Гавенко. - Ростов-на-Дону «Феникс», 2003. -192с.4. «The Neuroscience of Clinical Psychiatry. The Pathophysiology of Behavior and Mental Illness.5. Allan Tasman Professor and Chair, Jerald Kay Professor and Chair, Robert J. Ursano Professor and Chair. «The Psychiatric Interview. Evaluation and Diagnosis».6.Fadem Barbara. Behavioral Science. Seventh Edition.7. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. Arlington: American Psychiatric Association, 2013. | Formative assessment:1. Use of active learning methods: CBL2. Work with the patient3. Role play |
| 14 | Main groups of mental disorders and diseases.Emotional and behavioral disorders that usually begin in childhood and adolescence. Psychological (mental) disorders | Learning outcomes:- Identify and interpret psychopathological symptoms and syndromes in patients.- Know the age criteria for a predominant neuropsychic response in children and adolescents - Know the features of providing dental care for autism.- Take into account the peculiarities of communication with this category of children and adults when visiting a dentist.- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity;  | 1.Обухов С.Г. Психиатрия: учебное пособие. /Под ред. Ю.А. Александровского. - М., ГЭОТАР-Медиа., 2007. - 352 с.2.Иванец Н.Н., Тюльпин Ю.Г. Психиатрия и наркология: учебник. — М., ГЭОТАР-Медиа, 2006. - 832 с.3.Пропедевтика психиатрии. Учебное пособие. В.Л. Гавенко, Г.А. Самардакова, В.И. Коростий и др. / Под ред.проф. В.Л. Гавенко. - Ростов-на-Дону «Феникс», 2003. -192с.4. «The Neuroscience of Clinical Psychiatry. The Pathophysiology of Behavior and Mental Illness.5. Allan Tasman Professor and Chair, Jerald Kay Professor and Chair, Robert J. Ursano Professor and Chair. «The Psychiatric Interview. Evaluation and Diagnosis».6.Fadem Barbara. Behavioral Science. Seventh Edition.7. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. Arlington: American Psychiatric Association, 2013. | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play |
| 15 | Основные группы психических расстройств и заболеваний.Эпилепсия. Умственная отсталость. Деменция. | Learning outcomes:- Identify and interpret psychopathological symptoms and syndromes in patients.- Take into account the peculiarities of patient behavior and care for patients with mental retardation and dementia at the dentist's office- Know the drug interactions of anticonvulsants and painkillers in the provision of dental care.- Take into account contraindications for the use of drugs containing adrenaline- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity; | 1.Обухов С.Г. Психиатрия: учебное пособие. /Под ред. Ю.А. Александровского. - М., ГЭОТАР-Медиа., 2007. - 352 с.2.Иванец Н.Н., Тюльпин Ю.Г. Психиатрия и наркология: учебник. — М., ГЭОТАР-Медиа, 2006. - 832 с.3.Пропедевтика психиатрии. Учебное пособие. В.Л. Гавенко, Г.А. Самардакова, В.И. Коростий и др. / Под ред.проф. В.Л. Гавенко. - Ростов-на-Дону «Феникс», 2003. -192с.4. «The Neuroscience of Clinical Psychiatry. The Pathophysiology of Behavior and Mental Illness.5. Allan Tasman Professor and Chair, Jerald Kay Professor and Chair, Robert J. Ursano Professor and Chair. «The Psychiatric Interview. Evaluation and Diagnosis».6.Fadem Barbara. Behavioral Science. Seventh Edition.7. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. Arlington: American Psychiatric Association, 2013. | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play  |
| 16 | Наркологическая семиотика и феноменология аддиктивных (наркологических) расстройств. | Learning outcomes:- Identify and interpret psychopathological symptoms and syndromes in patients.- Be able to identify signs of drug and alcohol intoxication - To know the peculiarities of providing dental care in case of abstinence syndrome, in persons using PAS- To be able to select methods of anesthesia in persons who use alcohol and psychoactive substances- Demonstrate the ability and need for continuous professional training and improvement of their knowledge and skills of professional activity; | 1.Обухов С.Г. Психиатрия: учебное пособие. /Под ред. Ю.А. Александровского. - М., ГЭОТАР-Медиа., 2007. - 352 с.2.Иванец Н.Н., Тюльпин Ю.Г. Психиатрия и наркология: учебник. — М., ГЭОТАР-Медиа, 2006. - 832 с.3.Пропедевтика психиатрии. Учебное пособие. В.Л. Гавенко, Г.А. Самардакова, В.И. Коростий и др. / Под ред.проф. В.Л. Гавенко. - Ростов-на-Дону «Феникс», 2003. -192с.4. «The Neuroscience of Clinical Psychiatry. The Pathophysiology of Behavior and Mental Illness.5. Allan Tasman Professor and Chair, Jerald Kay Professor and Chair, Robert J. Ursano Professor and Chair. «The Psychiatric Interview. Evaluation and Diagnosis».6.Fadem Barbara. Behavioral Science. Seventh Edition.7. American Psychiatric Association. Diagnostic and statistical manual of mental disorders, 5th ed. Arlington: American Psychiatric Association, 2013. | Formative assessment:1. Use of active learning methods: CBL2. Work in pairs3. Role play  |

**RUBRICATOR FOR ASSESSING LEARNING OUTCOMES**

**with summative assessment**

**Rating calculation formula**

**For the 4th course as a whole- overall admission rating (OAR)**

| Medical history | 30% |
| --- | --- |
| Border control 1 | 70% |
| **Total for BC-1** | 100% |
| 360 rating | 10% |
| Science project | 10% |
| Medical history | 20% |
| Border control 2 | 60% |
| **Total for BC -2** | 100% |

**Final score:** OAR 60% + exam 40%

**Exam (2 stages)** – MSQ testing (40%) + OSKE (60%)**ем**

**Case-based learning CBL**

|  |  | % |
| --- | --- | --- |
| 1 | **Interpreting survey data** | 10 |
| 2 | **Interpretation of physical examination findings** | 10 |
| 3 | **Preliminary diagnosis, justification, PD, examination plan** | 10 |
| 4 | **Interpretation of lab-instrumental examination data** | 10 |
| 5 | **Clinical diagnosis, problem sheet** | 10 |
| 6 | **Management and treatment plan** | 10 |
| 7 | **The validity of the choice of drugs and treatment regimens** | 10 |
| 8 | **Evaluation of effectiveness, prognosis, prevention** | 10 |
| 9 | **Special problems and questions on the case** | 10 |
| 10 | **Companion rating (bonus)** |  |
|  |  | **100%** |

**360° assessment checklist for student**

**CURATOR and Lecturer**

       FULL NAME of Curator \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_

|  | **Very well** | **Criteria and points** | **Unsatisfactory** |
| --- | --- | --- | --- |
| **1** | **Constantly preparing for classes:**For example, backs up statements with relevant references, makes short summariesDemonstrates effective teaching skills, assists in teaching others | **Preparing for classes****10 8 6 4 2 0** | **Constantly not preparing for class**For example, insufficient reading and study of problematic issues, makes little contribution to the knowledge of the group, does not analyze, does not summarize the material. |
| **2** | **Takes responsibility for their own learning:**For example, manages their learning plan, actively tries to improve, critically evaluates information resources  | **A responsibility****10 8 6 4 2 0** | **Takes no responsibility for their own learning:**For example, depends on others to complete the learning plan, hides mistakes, rarely critically analyzes resources. |
| **3** | **Actively participates in the training of the group:**For example, actively participates in discussions, willingly takes tasks | **Participation****10 8 6 4 2 0** |  **Not active in the group training process:**For example, does not participate in the discussion process, is reluctant to accept assignments |
| **4** | **Demonstrates effective group skills**For example, takes the initiative, shows respect and correctness towards others, helps to resolve misunderstandings and conflicts. | **Group skills****10 8 6 4 2 0** | **Demonstrates ineffective group skills**For example, inappropriately intervening, showing poor discussion skills by interrupting, avoiding or ignoring others, dominating or impatient |
| **5** | **Skilled in communicating with peers:**For example, actively listening, receptive to non-verbal and emotional cuesRespectful attitude | **Communications****10 8 6 4 2 0** | **Difficulty communicating with peers**For example, poor listening skills, unable or disinclined to listen to non-verbal or emotional cuesUse of obscene language |
| **6** | **Highly developed professional skills:**Eager to complete tasks, seek opportunities for more learning, confident and skilledCompliance with ethics and deontology in relation to patients and medical staffObservance of subordination. | **Professionalism****10 8 6 4 2 0** | **Clumsy, fearful, refusing to try even basic procedures**Inferiority in professional behavior - causing harm to the patient, rude disrespectful attitude towards medical staff, colleagues |
| **7** | **High introspection:**For example, recognizes the limitations of their knowledge or abilities without becoming defensive or rebuking others.    | **Reflection****10 8 6 4 2 0** | **Low introspection:**For example, needs more awareness of the limits of understanding or ability and does not take positive steps to correct      |
| **8** | **Highly developed critical thinking:**For example, appropriately demonstrates skill in performing key tasks such as generating hypotheses, applying knowledge to case studies, critically evaluating information, drawing conclusions aloud, explaining the process of thinking | **Critical thinking****10 8 6 4 2 0** | **Critical Thinking Deficiency:**For example, has difficulty completing key tasks. As a rule, does not generate hypotheses, does not apply knowledge in practice either because of their lack or because of inability (lack of induction), does not know how to critically evaluate information |
| **9** | Fully adheres to the rules of academic conduct with understanding, suggests improvements in order to increase efficiency.Complies with the ethics of communication - both oral and written (in chats and appeals) | **Compliance with the rules of academic conduct****10 8 6 4 2 0** | Пренебрегает правилами, мешает другим членам коллективаNeglects the rules, interferes with other members of the team |
| **10** | Fully follows the rules with full understanding of them, encourages other members of the group to adhere to the rulesStrictly adheres to the principles of medical ethics and PRIMUM NON NOCERE | **Compliance with the rules of conduct in the hospital****10 8 6 4 2 0** | Breaks the rules.Encourages and provokes other members of the group to break the rulesCreates a threat to the patient |
|  | Maximum | **100 points** |  |

\* gross violation of professional behavior, rules of conduct in the hospital - or a decrease in the grade for boundary control or cancellation; ethical committee

Such violations are a threat to the health of patients due to action (for example, smoking on the territory of the hospital) or inaction; rudeness and rudeness towards any person (patient, classmate, colleague, teacher, doctor, medical staff)

**Point-rating assessment (check-list) of medical history management (maximum 100 points)**

| **№** | **Criteria** | **10** | **8** | **6** | **4** | **2** |
| --- | --- | --- | --- | --- | --- | --- |
| ***Excellent*** | ***Good*** | ***Satisfactory*** | ***Need correction*** | ***Bad*** |
| 1 | Patient complaints: major and minor | Completely and systematically, with an understanding of important details | Accurate and complete | basic information | Incomplete or inaccurate, some details are missing | Misses important |
| 2 | Collecting an anamnesis of the disease |
| 3 | Anamnesis of life |
| 4 | Objective status - general examination | Completely and systematically, with an understanding of important details | Consistently and correctly | Identification of main data | Incomplete or not quite correct, not attentive to patient comfort | Inappropriate data |
| 5 | **Nervous system** |  | Complete, effective, technically correct application of all examination skills, physical examination with minor errors, or corrected during execution | Revealed basic dataPhysical examination skills learned | Incomplete or InaccuratePhysical examination skills need to be improved | Important data are missing.Inappropriate physical examination skills |
| 6 | Medical history presentation | Maximum full description and presentationUnderstands the problem in a complex, connects with the patient’s features | precise, focused; choice of facts shows understanding | Record is by form, includes all basic information; | Many important omissions, inaccurate or unimportant facts are often included | Lack of control of the situation, many important omissions, many clarifying questions |
|  |  |  |  |  |  |  |

**Point-rating assessment (check-list) of the ISW (independent student’s work) - creative task (maximum 90 points) + bonuses for English and time management**

|  |  | **10** | **8** | **4** | **2** |
| --- | --- | --- | --- | --- | --- |
| **1** | **Problem solving** | The organized concentrated, allocates all questions which are falling into to the main revealed problem with a comprehension of a concrete clinical situation | Organized, the concentrated, allocates all questions which are falling into to the main revealed problem, but there is no comprehension of a concrete clinical situation | Not the concentrated, Derivation on the questions which are not falling into to the main revealed problem | Inaccurate, misses the main thing, disharmonious data. |
| **2** | **Information** | All necessary information on a subject in the free, serial, logical manner is completely conveyed The product form is adequately chosen | All necessary information in a logical manner, but with shallow inaccuracies is conveyed | All necessary information on a subject is explained chaotically, with not gross errors | Important information on a subject, gross errors is not reflected |
| **3** | **Significance** | Material is chosen on the basis of authentically established facts.  Manifestation of a comprehension on the level or quality of proofs | Some conclusions and the conclusions are formulated on the basis of assumptions or the incorrect facts. There is no complete comprehension of level or quality of proofs | Not the sufficient comprehension of a problem, some conclusions and the conclusions are based on the inexact and not proved data – doubtful resources are used | Conclusions and the conclusions are not proved or irregular |
| **4** | **Logic** | logical and well reasoning, has internal unity, provisions in a product follow one of another and are logically interdependent between themselves | Has internal unity, provisions of a product one of another follows, but there are inaccuracies | There is no sequence and logicality in statement, but it is possible to keep track of the main idea | Jumps from one on another, it is difficult to catch the main idea |
| **5** | **Recourses** | Literary data are submitted in logical interrelation, show deep study of the main and padding informational resources | Literary data show study of the main literature | Only ordinary recourses | Inconsistency and randomness in statement of data, an inconsistencyThere is no knowledge of the main textbookUsing of Google |
| **6** | **Practical application** | High | Good | moderate | no |
| **7** | **Patient focusing** | High | Good | moderate | no |
| **8** | **Applicability in future practice** | High | Good | moderate | no |
| **9** | **Presenation** | Correctly, to the place all opportunities of Power Point or other e-softs, the free possession of material, a sure manner of statement are used | It is overloaded or are insufficiently used visual materials, inexact possession of material | Visual materials are not informative  | Does not own material, is not able to explain it |
| **bonus** | **Time management**\* | 10For before deadline | In time | Good quality but a little late Minus 2-4  | After deadline more than 24 hours Minus 10  |
| **bonus** | **Rating**\*\* | 10  points additional | Outstanding work, for example: The best work in groupCreative approachInnovative approach to realization of a taskAccording to the proposal of group |
|  | \* The deadline is determined by the teacher, as a rule - the day of the boundary control\*\* thus, you can get 90 points as much as possible, to get above 90-you need to show a result higher than expected |