Appendix number 1.5 to The Rector UR Resolution No. 12/2019

SYLLABUS

**concerning the cycle of education 2024-2030**

(date range)

* 1. BASIC INFORMATION CONCERNING THIS SUBJECT / MODULE

|  |  |
| --- | --- |
| Subject / Module | Neurology |
| Course code / module \* | N/W |
| Faculty of (name of the leading direction) | Medical College of Rzeszów University |
| Department Name | Medical College of Rzeszów University |
| Field of study | medical direction |
| Level of education | uniform master's studies |
| Profile | practical |
| Form of study | stationary / extramural |
| Year and semester | year IV, semester VIII |
| Type of course | obligatory |
| Coordinator | dr n. med. Marcin Wiącek |
| First and Last Name of the Teacher |  |

\* - According to the resolutions of the Faculty of Medicine

1.2. Forms of classes, number of hours and ECTS

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Lecture | Exercise | Conversation | Laboratory | Seminar | ZP | Practical | Self-learning | **Number of points ECTS** |
| 15 | 30 | - | - | - | - | - | - | **2** |

1.3. The form of class activities

☒classes are in the traditional form

☐classes are implemented using methods and techniques of distance learning

1.4. Examination Forms / module (exam, credit with grade or credit without grade)

2. REQUIREMENTS

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| Knowledge of the anatomy of the nervous system.  Knowledge of the physiology of the nervous system. |

**3. OBJECTIVES, OUTCOMES, AND PROGRAM CONTENT USED IN TEACHING METHODS**

* 1. Objectives of this course/module

|  |  |
| --- | --- |
| C1 | Mastering theoretical knowledge and practical skills regarding the location and symptomatology of diseases of the central and peripheral nervous system. |
| C2 | Familiarization with the specificity of diagnosis and treatment of the most common neurological diseases of children and adults (management of vascular, neoplastic diseases, inflammatory, degenerative spine, craniocerebral injuries and spinal cord and congenital malformations. |
| C3 | Shaping the ability to carry out subjective and objective examination of a patient with a neurological disease. |

3.2 OUTCOMES FOR THE COURSE / MODULE (TO BE COMPLETED BY THE COORDINATOR)

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| --- | --- | --- |
| EK (the effect of education) | The content of the learning effect defined for the subject (module) | Reference to directional effects (KEK) |
| EK­\_01 | He knows and can distinguish between the basic sets of neurological symptoms | E.W13. |
| EK\_02 | Knows and understands the causes, symptoms, principles of diagnosis and therapeutic treatment in the most common diseases of the nervous system, including:  a) headaches: migraines, tension headaches and headache syndromes, as well as neuralgia of the nerve V,  b) cerebrovascular diseases, in particular cerebral infarction,  c) epilepsy,  d) infections of the nervous system, in particular meningitis, Lyme disease,  herpetic encephalitis, neurotransmission diseases,  e) dementia, in particular Alzheimer's disease, frontal dementia, vascular dementia and other  dementia syndromes,  f) diseases of the basal ganglia, in particular Parkinson's disease,  g) demyelinating diseases, in particular multiple sclerosis,  h) diseases of the neuromuscular system, in particular amyotrophic lateral sclerosis and sciatica,  i) cranial-cerebral injuries, in particular concussion. | E.W.14 |
| EK\_03 | Performs a full and targeted physical examination of an adult patient. | E.U3. |
| EK\_04 | Carries out an indicative examination of hearing and visual field as well as an otoscopic examination. | E.U6. |
| EK\_05 | Evaluates the general condition, the state of consciousness and awareness of the patient. | E.U7. |
| EK\_06 | He is able to establish and maintain a deep and respectful contact with the patient | K.01 |

**3.3 CONTENT CURRICULUM (filled by the coordinator)**

**A. Lectures**

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| **Course contents** |
| Spinal cord injuries. Mechanisms, types. Core shock. Symptoms and the level of damage. |
| Core tumors. Core syretism. Lateral amyotrophic lateral sclerosis. Etiology and symptoms. KT, MR. |
| Discopathy and back pain. Causes, symptoms. Stages of disc degeneration. KT, MR, RTG. Thigh, sciatic. Brachialgia. |
| Damage to peripheral nerves. Damage to the more important plexuses and peripheral nerves. Polyneuropathy. |
| Cerebral palsy - Etiology. Division. Symptoms. Comprehensive assessment of a child with CS. |
| A meningeal spinal hernia. Etiology. Symptoms. |
| Hydrocele, Arnold-Chiari's band. Etiology. Symptoms. |
| Muscular dystrophies. Etiology. Symptoms. |

**B**. **Exercises**

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| **Course contents** |
| Dystonic focuses, Hereditary degenerative diseases with cerebellar ataxia |
| Lateral amyotrophic lateral sclerosis (Charcot's disease) |
| Hereditary spastic paraplegia |
| Spinal muscular atrophy |
| Genetically conditioned metabolic diseases of the nervous system |
| Alzheimer's disease |
| Dementia with Lewy bodies, and fronto-temporal dementia |
| Pick's disease |
| Multiple sclerosis, optic neuritis, other demyelinating diseases |
| Epilepsy, International classification of epileptic seizures. Emergency treatment of epileptic seizures with first aid episodes during a major epileptic seizure |
| Non-epileptic consciousness, Fainting, Carotid sinus syndrome, Morgagnium-Adams-Stokes Syndrome (MAS), Psychogenic attacks |
| Spontaneous (primary) and symptomatic (secondary) headaches, migraine, mixed headache, cranial neuralgia |
| Dizziness, Méni`ere disease, Inflammation of the vestibular nerve (neuron), Mild paroxysmal positional dizziness, Mild recurrent dizziness, Mild paroxysmal dizziness in children, Cervical vertigo |
| Spinal cord diseases, Transverse spinal cord injuries, spinal cavity, cord degeneration, Other spinal diseases |
| Diseases of the peripheral nervous system, Cranial nerve injuries and diseases, Damage to peripheral nerves and nerve plexuses, Root syndromes, Polineuropathies |
| Muscle diseases, Progressive muscular dystrophies, Polymyositis and dermatomyositis (idiopathic inflammatory myopathy), Incendiary myositis, Urinary |
| Diseases of the autonomic system. The functions of the sympathetic (sympathetic) and parasympathetic system. Locating the lesions responsible for the disorders of perspiration. Testing the autonomic nervous system |
| Neurological complications in systemic and organ diseases. Discussing interesting neurological cases. |

**3.4 TEACHING METHODS**

Lecture: multimedia presentation.

Exercises: practical exercises, demonstration, lecture form.

Seminars: group work, case study, problem solving, discussion.

Student's own work: working with a book, preparing for classes and preparing for the test and exam

4 METHODS AND EVALUATION CRITERIA

4.1 Methods of verification of learning outcomes

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| --- | --- | --- |
| Symbol of effect | Methods of assessment of learning outcomes (Eg.: tests, oral exams, written exams, project reports, observations during classes) | Form of classes |
| EK\_ 01, EK\_02 | Written test | Lecture |
| EK\_03, EK\_04, EK\_05, EK\_06 | Practical pass | Exercises |

4.2 Conditions for completing the course (evaluation criteria)

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| --- |
| **Lectures (EK\_01, EK\_02):**  1. test pass and open questions:  A: Questions in the field of messages to remember;  B: Questions in the field of speech to understand;  C: Solving a typical written task;  D: Solving an atypical writing task;  - for insufficient solution of tasks only from areas A and B = grade 2.0  - for solving tasks only from areas A and B, the possibility of obtaining max. rating 3.0  - for solving tasks from the area A + B + C, the possibility of obtaining max. evaluation 4.0  - for the solution of tasks in the area A + B + C + D, the possibility of obtaining a rating of 5.0  **Knowledge assessment:**  Written test  5.0 - has knowledge of each of the contents of education at the level of 90% -100%  4.5 - has knowledge of each of the content of education at the level of 84% -89%  4.0 - has knowledge of each of the content of education at the level of 77% -83%  3.5 - has knowledge of each of the content of education at the level of 70% -76%  3.0 - has knowledge of each of the content of education at the level of 60% -69%  2.0 - has knowledge of each of the contents of education below 60%  **Classes, seminars (EK\_03, EK\_04, EK\_05):**  1. full participation and activity in the exercises  2. written partial credits  Range of ratings: 2.0 - 5.0  **Skill assessment**  5.0 - the student actively participates in the classes, is well prepared, has a very good knowledge of theoretical knowledge and practical skills regarding the location and symptomatology of diseases of the central and peripheral nervous system, properly performs neurological examination and makes appropriate conclusions  4.5 - the student actively participates in the classes, has a good knowledge of theoretical knowledge and practical skills regarding the location and symptomatology of diseases of the central and peripheral nervous system, properly performs neurological examination and makes appropriate conclusions  4.0 - the student actively participates in the classes, is improved, has a good degree of theoretical knowledge and practical skills regarding the location and symptomatology of diseases of the central and peripheral nervous system, properly conducts neurological examination and makes appropriate conclusions  3.5 - the student participates in classes, his scope of preparation does not allow for a comprehensive presentation of the discussed problem, is corrected, has sufficiently acquired theoretical knowledge and practical skills regarding the location and symptomatology of diseases of the central and peripheral nervous system, performs neurological examination and makes appropriate conclusions,  3.0 - the student participates in the classes, has sufficiently acquired theoretical knowledge and practical skills regarding the location and symptomatology of diseases of the central and peripheral nervous system, performs neurological examination, but often makes mistakes and makes incorrect conclusions, often corrects  2.0 - the student passively participates in the classes, the statements are incorrectly substantive, did not sufficiently acquire theoretical knowledge and practical skills regarding the location and symptomatology of diseases of the central and peripheral nervous system, improperly performs neurological examination and makes inadequate conclusions |

5. Total student workload required to achieve the desired result in hours and ECTS credits

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| --- | --- |
| Activity | Hours / student work |
| Hours of classes according to plan with the teacher | 45 |
| Preparation for classes | 10 |
| Participation in the consultations | 2 |
| The time to write a paper / essay |  |
| Preparation for tests | 5 |
| Participation in colloquia | **1** |
| Other (e-learning) | **-** |
| SUM OF HOURS | **63** |
| TOTAL NUMBER OF ECTS | **2** |

6. TRAINING PRACTICES IN THE SUBJECT / MODUL

|  |  |
| --- | --- |
| Number of hours | - |
| Rules and forms of apprenticeship | - |

1. LITERATURE

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| **READING:**   1. Timothy A.Pedley, Rowland L.P, wyd. Pol. H. Kwieciński, Neurologia Merritta, tom 1-3. Wrocław 2012, 2. [NEUROLOGIA Podręcznik dla studentów medycyny](http://www.medbook.com.pl/ksiazka/pokaz/id/5988/tytul/neurologia-podrecznik-dla-studentow-medycyny-kozubski-liberski-wydawnictwo-lekarskie-pzwl) Wojciech Kozubski, Paweł P. Liberski Wydawnictwo Lekarskie PZWL, 2011 3. [Neurologia praktyczna](http://www.medbook.com.pl/ksiazka/pokaz/id/4681/tytul/neurologia-praktyczna-prusinski-wydawnictwo-lekarskie-pzwl) Antoni Prusiński. Wydawnictwo Lekarskie PZWL, 2011, 4. [Anatomia czynnościowa ośrodkowego układu nerwowego](http://www.medbook.com.pl/ksiazka/pokaz/id/3468/tytul/anatomia-czynnosciowa-osrodkowego-ukladu-nerwowego-golab-wydawnictwo-lekarskie-pzwl) Bogusław K. Gołąb Wydawnictwo Lekarskie PZWL, 2004 5. [Atlas neurologii klinicznej](http://www.medbook.com.pl/ksiazka/pokaz/id/11210/tytul/atlas-neurologii-klinicznej-perkin-miller-lane-elsevier-urban-partner) G. David Perkin, Douglas C. Miller, Russell Lane, red. wyd. pol. Danuta Ryglewicz, Elsevier Urban & Partner, 2012 |
| Additional literature:   1. Kwolek A. „Rehabilitacja medyczna”, Urban & Partner Wrocław 2003 2. Losy J. Stwardnienie rozsiane. Czelej. 2011. 3. Kwolek A. „Rehabilitacja w udarze mózgu”, Wydawnictwo Uniwersytetu Rzeszowskiego 2009 4. Prusiński A.., Podstawy neurologii klinicznej, PZWL, Warszawa 1989 5. Prusiński A.., Neurologia praktyczna, PZWL, Warszawa 2007 6. Follereau A. R., Usprawnianie po udarze mózgu – poradnik dla terapeutów i pracowników podstawowej opieki zdrowotnej, Wydawnictwo Elipsa – Jaim, Kraków 2004 7. pod red. Michałowicz R., Neurologia dziecięca w praktyce, PZWL, Warszawa 2000 8. pod. red. Michałowicz R., Mózgowe porażenie dziecięce, PZWL, Warszawa 2002 9. [Stany nagłe w neurologii - od objawu do rozpoznania](http://www.medbook.com.pl/ksiazka/pokaz/id/6112/tytul/stany-nagle-w-neurologii-od-objawu-do-rozpoznania-henry-little-jagofa-pellegrino-kozubski-wydawnictwo-lekarskie-pzwl). Gregory L. Henry, Neal Little, Andy Jagofa, Thomas R. Pellegrino, red. wyd. pol. Wojciech Kozubski Wydawnictwo Lekarskie PZWL, 2007 10. [Aspekty diagnostyczne i terapeutyczne neurozwyrodnienia w chorobie Alzheimera, otępieniu, starzeniu](http://www.medbook.com.pl/ksiazka/pokaz/id/6183/tytul/aspekty-diagnostyczne-i-terapeutyczne-neurozwyrodnienia-w-chorobie-alzheimera-otepieniu-starzeniu-dobryszycka-leszek-continuo). Wanda Dobryszycka, Jerzy Leszek. Continuo, 2007 11. [Atlas EEG i semiologii napadów padaczkowych](http://www.medbook.com.pl/ksiazka/pokaz/id/9336/tytul/atlas-eeg-i-semiologii-napadow-padaczkowych-abou-khalil-misulis-jedrzejczak-elsevier-urban-&-partner). Bassel Abou-Khalil, Karl E. Misulis, red. wyd. pol. Joanna Jędrzejczak. Elsevier Urban & Partner, 2010 |

Acceptance Unit Manager or authorized person