



Neurology

1. IMPRINT	
Academic Year	2026/2027
Department	Faculty of Medicine
Field of study	Medicine
Main scientific discipline <i>(in accord with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)</i>	Medical science
Study Profile <i>(general academic / practical)</i>	General academic
Level of studies <i>(1st level / 2nd level / uniform MSc)</i>	Uniform MSc
Form of studies	full-time studies
Type of module / course <i>(obligatory / non-compulsory)</i>	obligatory
Form of verification of learning outcomes <i>(exam / completion)</i>	exam
Educational Unit / Educational Units <i>(and address / addresses of unit / units)</i>	1. Department of Neurology, UCKWUM; Banacha 1a, 02-097 Warszawa 2. Department of Neurology, Szpital Bielański, Cegłowska 80, 01-809 Warszawa, 3. Department of Neurology, Mazowiecki Szpital Bródnowski, Kondratowicza 8

Załącznik nr 4C do Procedury opracowywania i okresowego przeglądu programów studiów
(stanowiącej załącznik do Zarządzenia nr .../2024 Rektora WUM z dnia2024 r.)

Head of Educational Unit / Heads of Educational Units	1. Prof. dr hab. n.med. Anna Kostera-Pruszczyk (UCK WUM, Banacha 1a) 2. Prof. dr hab. n.med. Izabela Domitrz (Szpital Bielański, Ceglowska 80) 3. Prof. dr hab. n.med. Dariusz Koziorowski (Mazowiecki Szpital Bródnowski, Kondratowicza 8)
Course coordinator (title, First Name, Last Name, contact)	1. Dr n.med. Aleksandra Podlecka-Piętowska apodlecka@wum.edu.pl (UCK WUM, Banacha 1a) 1. Dr n.med. Marta Lipowska marta.lipowska@wum.edu.pl (UCKWUM, Banacha 1a) 2. Dr n. med. Joanna Cegielska jcegielska@wum.edu.pl (Szpital Bielański, Ceglowska 80) 3. Dr hab. n. med. Piotr Alster palster@wum.edu.pl (Mazowiecki Szpital Bródnowski, Kondratowicza 8) 3. Dr hab. n. med. Natalia Madetko-Alster natalia.madetko@wum.edu.pl (Mazowiecki Szpital Bródnowski, Kondratowicza 8)
Person responsible for syllabus (First name, Last Name and contact for the person to whom any objections concerning syllabus should be reported)	Prof. dr hab. n.med. Anna Kostera-Pruszczyk anna.kostera-pruszczyk@wum.edu.pl Dr n.med. Aleksandra Podlecka-Piętowska apodlecka@wum.edu.pl
Teachers	Department of Neurology, UCKWUM; Banacha 1a Prof. dr hab. n.med. Anna Kostera-Pruszczyk Prof. dr hab. n.med. Beata Zakrzewska-Pniewska Prof. dr hab. n.med. Piotr Janik Prof. dr hab. n.med. Magdalena Kuźma-Kozakiewicz Prof. dr hab. n.med. Anna Potulska-Chromik Dr hab. n.med. Monika Nojszewska Dr n.med. Antoni Ferens Dr n.med. Biruta Kierdaszuk Dr n.med. Marta Lipowska Dr n.med. Anna Łusakowska Dr n.med. Andrzej Opuchlik Dr n.med. Anna Macias Dr n.med. Aleksandra Podlecka-Piętowska Dr n.med. Ewa Sobieszczuk Dr n.med. Piotr Szczudlik Dr n.med. Justyna Kaczyńska Lek. Judyta Barańska Lek. Krzysztof Nieporęcki Lek. Anna Frączek-Kozłowska Department of Neurology, Szpital Bielański, Ceglowska 80 Prof. dr hab. n.med. Izabela Domitrz Prof. dr hab. n.med. Jan Kochanowski Dr n.med. Joanna Cegielska Dr n.med. Katarzyna Kępczyńska Dr n.med. i n. o zdr. Anna Kocwa-Karnaś Dr n. med. Daniel Malczewski Dr n. med. Beata Mielańczuk-Lubecka Dr n.med. Jakub Stolarski Dr n.med. Agata Wierzchowska-Ciok Dr n.med. Martyna Wypych Dr n. med. Anna Zduńska Lek. Michał Białobrzewski Lek. Piotr Chądzyński Lek. Olga Grodzka Lek. Lidia Kiriła Lek. Agnieszka Korzeluch Lek. Viktor Lipko

	Lek. Anna Łapaj Lek. Ewa Post Lek. Anna Puczyńska Lek. Patryk Sochań Lek. Katarzyna Stopińska Lek. Justyna Wołos Mgr Małgorzata Polit Department of Neurology, Mazowiecki Szpital Bródnowski, Kondratowicza 8 Prof. dr hab. n. med. Dariusz Koziorowski Prof. dr hab. n. med. Andrzej Friedman Dr hab. n. med. Piotr Alster Dr hab. n. med. Natalia Madetko-Alster Dr med. Justyna Dutkiewicz Dr n. med. Ewa Krzyżanowska Dr n. med. Jolanta Kwiatek-Majkusiak Dr n. med. Łukasz Milanowski Dr n. med. Joanna Samborska-Ćwik Dr n. med. Stanisław Szlufik lek. Piotr Dybcio
--	--

2. BASIC INFORMATION			
Year and semester of studies	5 year, first (winter) semester	Number of ECTS credits	5.00
FORMS OF CLASSES		Number of hours	ECTS credits calculation
Contacting hours with academic teacher			
Lecture (L)			
Seminar (S)		30	1,5
Classes (C)		70	3
e-learning (e-L)			
Practical classes (PC)			
Work placement (WP)			
Unassisted student's work			
Preparation for classes and completions		15	0.5

3. COURSE OBJECTIVES	
O1	etiology and symptoms of neurologic diseases which they can deal with during their work as general practitioner (family doctor)

O2	diagnostic procedures and tests used in neurology and interpretation of their results
O3	management of the most common neurological diseases

4. STANDARDS OF LEARNING – DETAILED DESCRIPTION OF EFFECTS OF LEARNING (concerns fields of study regulated by the Regulation of Minister of Science and Higher Education from 26 of July 2019; does not apply to other fields of study)

Code and number of effect of learning in accordance with standards of learning (in accordance with appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019)	Effects in time
--	-----------------

Knowledge – Graduate* knows and understands:

G.K1/ E.W1	environmental and epidemiological conditions of the most common diseases
G.K2/ E.W13	basic syndromes of neurological symptoms
G.K3/ E.W14	causes, symptoms, principles of diagnosis and therapeutic management in the most common diseases of the nervous system, including: 1) headaches: migraine, tension headache, headache syndromes and V nerve neuralgia, 2) cerebral vascular diseases, especially stroke, 3) epilepsy, 4) infections of the nervous system, in particular meningitis, Lyme disease, herpetic encephalitis, neurotransmission diseases, 5) dementia, in particular Alzheimer's disease, frontal dementia, vascular dementia and other dementia syndromes, 6) diseases of the basal ganglia , in particular Parkinson's disease, 7) demyelinating diseases, in particular multiple sclerosis, 8) diseases of the neuromuscular system, in particular amyotrophic lateral sclerosis and sciatica, 9) craniocerebral injuries, in particular concussion;
G.K4/ E.W42	indications for the implementation of monitored therapy

Skills– Graduate* is able to:

G.S1/ E.U1	conduct a medical interview with an adult patient;
G.S2/ E.U3	conduct a complete and targeted physical examination of an adult patient;
G.S3/E.U7	assess the general condition, state of consciousness and awareness of the patient;
G.S4/ E.U12	carry out differential diagnosis of the most common diseases of adults and children;
G.S5/ E.U14	recognize life-threatening states;
G.S6/ E.U15	recognize the condition after consuming alcohol, drugs and other stimulants;
G.S1/ E.U16	plan diagnostic, therapeutic and prophylactic procedures;
G.S7/ E.U20	qualify the patient for home and hospital treatment;

Załącznik nr 4C do Procedury opracowywania i okresowego przeglądu programów studiów
(stanowiącej załącznik do Zarządzenia nr .../2024 Rektora WUM z dnia2024 r.)

G.S8/ E.U21	identify conditions in which the life expectancy, functional state or patient preferences limit the management of the guidelines defined for the given disease
G.S9/ E.U24	interpret the results of laboratory tests and identify the causes of deviations from the norm
G.S10/ E.U30, 5	assist in the following medical procedures and procedures: a lumbar puncture

* In appendix to the Regulation of Minister of Science and Higher education from 26th of July 2019 „graduate”, not student is mentioned.

5. ADDITIONAL EFFECTS OF LEARNING (non-compulsory)	
Number of effect of learning	Effects of learning i time
Knowledge – Graduate knows and understands:	
K1	
K2	
Skills– Graduate is able to:	
S1	
S2	
Social Competencies – Graduate is ready for:	
SC1	
SC2	

6. CLASSES		
Form of class	Class contents	Effects of Learning
SEMINARS	They discuss the symptoms, diagnosis and treatment of the most common neurological diseases and syndromes. The topics of the seminars include: 1. Anatomy and physiology of the Central and Peripheral Nervous System- repetition 2. Hemorrhagic stroke and subarachnoid hemorrhage 3. Ischemic stroke 4. Management of ischemic stroke 5. Motor neuron disease and other spinal cord diseases 6. Skeletal muscle diseases 7. Myasthenia and disorders of the neuromuscular junction 8. Peripheral neuropathies 9. Demyelinating diseases 10. Back pain - diagnosis and management 11. Vertigo- diagnosis and management 12. Headache - diagnosis and management 13. Neoplastic tumors of the nervous system	G.K1, G.K2., G.K3, G.K4

	14. Epilepsy 15. Traumatic lesion of the nervous system 16. Movement disorders 17. Dementias 18. Neurological signs and symptoms in systemic diseases and general medicine 19. Brain death and neurocritical care	
Practical training	1. teaching physical neurological examination, 2. interpretation of diagnostic tests and algorithms of diagnostic procedure, 3. demonstration of patients with selected neurological diseases 4. demonstration of basic additional tests used in neurological diagnostics: Doppler ultrasound examination, neuroimages, EMG, EEG	G.S1, G.S2, G.S3, G.S4, G.S5, G.S6, G.S7, G.S8, G.S9, G.S10,

7. LITERATURE

Obligatory

“Lange Clinical Neurology”, Greenberg D, Aminoff M, Simon R. edition 11, Mc Graw Hill Education 2020

The manual has not been updated since 2020. In the event of discrepancies, the information from the annually updated seminars shall apply (e-learning platform).

Supplementary

1. “Neurology and Neurosurgery Illustrated” K.W.Lindsay, I.Bone. Churchill Livingstone 2010
2. “Clinical neuroanatomy” R.S Snell, 8 edition. Lippincott Williams & Wilkins, a Wolters-Kluwer.2022
3. “Mosby’s Color Atlas and Text of Neurology”. Perkin DG; Times Mirrors Int. Publishers Ltd 1998

8. VERIFYING THE EFFECT OF LEARNING

Code of the course effect of learning	Ways of verifying the effect of learning	Completion criterion
G.S2	Practical skills examination	Positive evaluation of the teaching assistant
G.K1, G.K2., G.K3, G.K4	Final colloquium (20 MCQ and/or open questions).	threshold number of points – more than 60% good answers
G.K1, G.K2., G.K3, G.K4 G.S1, G.S3, G.S4, G.S5, G.S6, G.S7, G.S8, G.S9, G.S10,	Final exam in winter exam session (100 MCQ)	exam threshold = 56 good answers thresholds for individual grades: • grade 3.0 = 56-64 good answers • grade 3.5 = 65-73 • grade 4.0 = 74-82 • grade 4.5 = 83-91 • grade 5.0 = 92-100

9. ADDITIONAL INFORMATION *(information essential for the course instructor that are not included in the other part of the course syllabus e.g. if the course is related to scientific research, detailed description of, information about the Science Club)*

- Duration of the neurology course: 3 weeks (from Monday to Friday)
- During the course it is possible to be absent only once (excused absence). The student makes up for this absence in the form determined by the assistant (presence on duty, writing a paper etc.)
- If a student has 2-3 absences, he/she must make up for them with another group or in the form determined by the assistant. Only then, the student can take the colloquium, which he/she passes with another group.
- More than 3 absences result in failure to complete a block of classes.
- 3 latenesses of more than 15 minutes constitute an unexcused absence.

SEMINARS

The seminars are conducted live by assistants. Seminar outlines and additional self-study materials are available on the e-learning platform.

PRACTICAL TRAINING

The first week of classes is devoted to teaching neurological examination and demonstrations of clinical cases. In the following weeks, students are divided into subgroups and examine patients under the supervision of designated assistants. In the last week of classes, a practical test of neurological examination skills is carried out.

PRELIMINARY TEST

The preliminary test takes place on the first day of the course. The test consists of 5 questions and covers the basic knowledge of the anatomy and physiology of the nervous system. The test questions are on e-learning platform.

In the event of a negative result of the test, the student must take it again at the end of the first week of classes.

PRACTICAL SKILLS EXAMINATION

In the last week of the classes, students are checked for their practical skills in neurological examination

FINAL COLLOQUIUM

On the last day of the course students take the final colloquium consisting of 20 open and/or multiple choice questions. More than 60% correct answers are required to pass the test. The colloquium can be re-passed only twice. If the results of the repetitive tests are negative, the student must repeat the entire course of neurology.

To credit the neurology course, the student must be present at all classes (with the exception of 1 allowed absence) and have at least a satisfactory (3.0) grade with:

- preliminary test
- practical skills examination
- final colloquium

FINAL EXAMINATION

The final examination is held during the winter examination session. The examination takes the form of a single-choice test consisting of 100 questions. The passing threshold is fixed at 56 correct answers out of 100. The score ranges for individual grades are also fixed and increase in 9-point intervals:

Grade 3.0: 56–64 points

Grade 3.5: 65–73 points

Grade 4.0: 74–82 points

Grade 4.5: 83–91 points

Grade 5.0: 92–100 points

If the number of examination questions is reduced, the thresholds are lowered by a number of points equal to the number of cancelled questions.

If a student fails the examination, they retake it during the resit examination session in the form of a test. If the result is again negative, the student takes an examination before an examination board.

In the event of an excused absence from the examination on the first scheduled date, the student takes the first attempt during the resit examination session.