COURSE DESCRIPTION

Academic year: 2025/2026	
University: Comenius University Bratislava	
Faculty: Jessenius Faculty of Medicine in Martin	
Course ID: JLF.NlK/J-S-VL-545/25	**Course title:** Neurology
Educational activities: **Type of activities:** practicals / lecture **Number of hours:** **per week:** 4 / 2 **per level/semester:** 56 / 28 **Form of the course:** on-site learning	
Number of credits: 4	
Recommended semester: 10.	
Educational level: I.II.	
Prerequisites: JLF.IKG/J-S-VL-538/17 - Internal Medicine Propedeutics (2) and JLF.ÚFa/J-S-VL-530/21 - Pharmacology (2) and JLF.PK/J-S-VL-549/24 - Psychiatry (2)	
Course requirements: Successful completion of the course is conditional upon active participation in practical classes and passing the final examination. Final Examination Requirements for General Medicine (VL): - Participation in the examination requires active attendance at practical classes – at least 10 out of 12 days of the block. An excused absence is tolerated for up to 2 out of 12 days. Each additional absence must be compensated – substitute teaching will always be arranged individually. - The final examination in Neurology is oral, consisting of two questions. - Students must register for the examination no later than one day prior to the scheduled date. - Students may withdraw from the examination no later than one day prior to the scheduled date. - If a student is unable to attend the examination, they may be excused only for serious reasons, submitted within five days after the examination date. - Students are required to present their ISIC student card at the examination.	
Learning outcomes: By completing the course Neurology, the student will: - Acquire fundamental knowledge of the content and structure of the subject, the principles and methods of neurological examination, and the clinical approaches to patients with neurological disorders. - Apply knowledge of neuroanatomy and neurophysiology of the peripheral and central nervous system in clinical patient assessment. - Become familiar with the function of individual neurological systems and the methods of their clinical evaluation. - Gain an overview of the indications and use of auxiliary diagnostic methods in neurology (imaging, electrophysiological, and laboratory techniques). - Develop practical skills – will be able to perform an independent neurological examination, analyse pathological findings, determine syndromes, and localise lesions of the nervous system.	

- Deepen theoretical knowledge of the epidemiology, aetiology, pathophysiology, clinical presentation, diagnosis, differential diagnosis, and treatment of the most common neurological diseases.
- Master the principles of management of acute neurological conditions (e.g. stroke, epileptic seizure, acute polyneuropathies).
- Enhance clinical reasoning through solving model scenarios and case studies.

Class syllabus:

1. Regulation of motor functions at the spinal and supraspinal levels. Central and peripheral paralysis. Quantitative and qualitative disorders of consciousness. Cranial nerves. Sensory and somatosensory systems.
2. Syndromes of the cerebral lobes. Meningeal syndrome. Spinal cord syndromes. Limbic system and memory. Autonomic (vegetative) nervous system.
3. Ischaemic stroke and cerebral venous sinus thrombosis. Interventional neuroradiology in the diagnosis and treatment of stroke. Haemorrhagic stroke and subarachnoid haemorrhage.
4. Tumours of the brain, meninges, spinal cord and peripheral nervous system. Intracranial hypertension and hypotension. Hydrocephalus. Injuries of the nervous system.
5. Acute neurology: differential diagnosis of comatose states.
6. Generalised and focal epilepsies. Sleep disorders and polysomnography. Migraine and other headaches.
7. Guillain–Barré syndrome, CIDP, MMN and other polyneuropathies. Myasthenia gravis and Lambert–Eaton syndrome. Motor neurone disease (MND). Muscular dystrophies, polymyositis and other myopathies.
8. Multiple sclerosis (MS) and its variants. Neuromyelitis optica spectrum disorders (NMOSD). Disorders associated with anti–MOG antibodies. Other demyelinating conditions. Infectious diseases of the nervous system.
9. Parkinson's disease (PD). Essential and other tremors. Dystonias. Other neurodegenerative and neurometabolic disorders: PSP, MSA, Wilson's disease, and Huntington's disease.
10. Panic disorder. Tetanic and hyperventilation syndrome. Anxiety–depressive disorder. Obsessive–compulsive disorder. New trends in the pharmacotherapy of neurological diseases.
11. Vertebrogenic pain syndromes (cervical, thoracic, and lumbosacral). Pain and algology. Minimally invasive algological procedures and neuromodulation techniques.
12. Alzheimer's disease and other dementias. Human prion diseases. Functional neurological disorders. Vestibular neurology.

Recommended literature:

Mayer, S.A., Marshall, R.S.On Call Neurology E-Book. 4th ed. Elsevier, 2020. 579 s. eISBN 9780323611008
https://ebookcentral.proquest.comúlibúuniba-ebooksúdetail.action?docID=6039439
Drobný, M. et al.Neurology Textbook. Reference Text and Study Guide. Martin: Profa-J. 2015. 656 s.
ISBN 978-80-972153-09
Daroff, R.B.et al.Bradleys and Daroffs Neurology in Clinical Practice, Elsevier, 8th ed., 2021. 2400 s. ISBN 9780323642613
Biller, J. Practical Neurology, LWW, 5th ed. 2017. 962 s. ISBN 9781496326959
Mumenthaler, M. et al. Neurology. Stuttgart: Thieme, 2003. 1008 s. ISBN 3135239047

Languages necessary to complete the course:

English language

Notes:

Past grade distribution
Total number of evaluated students: 0

A	ABS0	B	C	D	E	FX
0,0	0,0	0,0	0,0	0,0	0,0	0,0

Lecturers: prof. MUDr. Egon Kurča, PhD., FESO, doc. MUDr. Ema Kantorová, PhD., doc. MUDr. Vladimír Nosáľ, PhD., FESO, prof. MUDr. Štefan Sivák, PhD., MUDr. Monika Turčanová Koprušáková, PhD., MUDr. Jana Dluhá, PhD., MUDr. Babeta Hofericová, MUDr. Róbert Ružinák, PhD., doc. MUDr. Milan Grofik, PhD., MUDr. Pavol Skáčik, PhD., MUDr. Kristián Šveda, MUDr. Jana Olekšáková, MUDr. Lucia Babálová, PhD., MUDr. Daniela Feďáková, MUDr. Jaroslav Petrišin

Last change: 26.08.2025

Approved by: prof. MUDr. Anton Dzian, PhD., prof. MUDr. Marián Mokáň, DrSc.,FRCP Edin, prof. MUDr. Andrea Čalkovská, DrSc.