# UNIVERSITY OF NOVI SAD FACULTY OF MEDICINE



Study program: Integrated Academic Studies in Dental Medicine

Course title: Neurology

**Teacher:** Mirjana N. Jovićević, Marija G. Žarkov, Marija D. Semnic, Ksenija E. Gebauer Bukurov, Aleksandar Š. Kopitović, Svetlana S. Simić, Aleksandra L. Lučić Prokin, Aleksandar I. Jovanović, Željko D. Živanović

Course status: compulsory

**ECTS Credits: 2** 

Condition: Pathophysiology (for exam)

#### Course aim

The aim of this course is to provide medical students with knowledge on pathogenetic basis and clinical symptoms of common neurological disorders and their current neurological diagnostic procedures, treatment, and prognosis.

#### **Expected outcome of the course:**

The course provides students with a general understanding of symptoms and signs of disorders of different structures of the central nervous system, evaluation of the patient with neurological symptoms, how and when to suspect a neurological entity, perform an adequate diagnostic procedure and if necessary initiate a treatment.

After completing the course the student should:

- be able to carry out history-taking and a complete neurological examination of the patient and based on it
- formulate a working (probable) diagnosis and indicate basic laboratory investigations;
- be familiar with basic principles of the management of urgent neurological conditions;
- have an understanding of conditions that require referral to a neurology specialist (i.e. whether a condition requires in-patient investigation and treatment)

#### **Course description**

#### Theoretical education

- 1. Episodic disturbance of consciousness, coma, delirium. Sleep disorders
- 2. Epilepsy and epileptic syndromes
- 3. Headache, neuralgia, vertigo
- 4. Ischemic cerebrovascular disease
- 5. Hemorrhagic cerebrovascular disease and brain edema
- 6. Infectious disease of the CNS and neurological complications of systemic disorders
- 7. Dementias
- 8. Leucodystrophies and metabolic disorders
- 9. Neurological aspects of CNS trauma and CNS tumors
- 10. Demyelinating diseases
- 11. Movement disorders and cerebellar disorders
- 12. Developmental neurology
- 13. Motor neuron disorders and polyneuropathies
- 14. Brainstem and spinal cord disorders
- 15. Neuromuscular junction disorders and muscular disease

### Practical education

- 1. Neurological history taking
- 2. Examination of cranial nerves I-VI
- 3. Examination of cranial nerves VII-XII
- 4. Examination of the neck, upper and lower limbs (nutrition, tonus, movement, muscular reflexes, strength, stretching tests)
- 5. Examination of sensibility
- 6. Extrapyramidal symptoms and signs
- 7. Examination of cerebellar functions
- 8. Examination of higher cerebral functions
- 9. Diagnostic procedures in neurology (EEG, video EEG, EMNG, EP, LP, CSF isoelectric focusing, ultrasonography, CT, MRI, PET, SPECT)
- 10. Examination of a comatose patient
- 11. Examination of a patient with myasthenia gravis
- 12. Neurological examination of a paediatric patient

- 13. Gait disorders (differential diagnosis)
- 14. Headaches
- 15. Complete neurological examination of different neurological diseases, differential diagnosis

## Literature

## Compulsory:

- 1. Mumenthaler M, Mattle H. Fundamentals of neurology. Thieme, 2006.
- 2. Gilman S. at al. Oxford american handbook of neurology. Oxford University Press, Inc. 2010.
- 3. Westover MB. Pocket neurology. Lippincott Williams and Wilkins, 2016

## Additional:

1. Adams RD, Victor M, Ropper AH. I	Principles of neurology. Mc G	raw-Hill New York 1997	(2005,2009,2014)		
Number of active classes	Theoretica	al classes: 15	Practical classes: 15	Practical classes: 15	
Teaching methods: lectures, practice					
	Student activity assessr	nent (maximally 100 po	ints)		
Pre-exam activities	Points	Final exam		points	
Lectures	10	Written		70	
Practices	10	Oral			
Colloquium	10	Practical			
Essay					