

## MEDICAL UNIVERSITY

# "PROF. DR. PARASKEV STOYANOV" - VARNA

# FACULTY OF DENTAL MEDICINE

Approved with a Protocol of Na

Approved:

DEAN of Faculty of Dental Medicine: / Prof. Stefan Peev, MD, PhD, DSc/

"ДЕНТАЛНА МЕДИЦИНА"

## EDUCATIONAL PROGRAMME

OF

## "NEUROLOGY AND PSYCHIATRY"

Specialty "DENTAL MEDICINE"

Educational-qualification degree "MASTER"

Professional qualification "PHYSICIAN IN DENTAL MEDICINE"

	Semester	Horarium weekly	Total horarium
Lectures	IX	2	16
Exercises	IX	2 (1)	14
Total			30
Monitoring and evaluation forms	Current control		Exam – IX semester
Credits (ECTS)		10	2
Extracurricular employment			30

### Lecturers:

Borislav Ivanov, MD, PhD, Associate Professor of Neurology

Varna, 2022

### ANNOTATION

## FOR THE EDUCATIONAL DISCIPLINE OF NEUROLOGY

Neurology studies the normal structure and functions, and the diseases of the nervous system.

Patients with neurological diseases require special dental management considerations. These include pretreatment treatment planning, therapeutic techniques, and posttreatment requirements. Neurologic conditions that dentist often face include abnormalities associated with the cranial nerves, facial sensory loss, facial paralysis, and conditions such as epilepsy, Parkinson's disease, multiple sclerosis, stroke, myasthenia gravis, dementias, etc.

The goals of the neurology education are to develop basic knowledge in the recognition, management and appropriate referral of neurological conditions encountered in dental practice; to demonstrate the ability to conduct initial neurological evaluations, to participate in the subsequent diagnostic process and to help manage patients during the treatment and evolution of their neurological conditions; to demonstrate professional and ethical behavior in the care of their patients and in their interactions with other health care providers.

### MONITORING AND EVALUATION FORMS:

The principal form of control is the semestral exam which includes a test and a theoretical part with written and spoken presentation of the questions.

The test includes questions from general and clinical neurology.

The theoretical exam is conducted on the basis of previously prepared combinations of questions on general and clinical neurology, from the synopsis given to the students in the beginning of the year. The score given by the assistant professor for the performance at the practicals during the semester and the current control are also taken into account when calculating the final mark.

# PLAN OF TOPICS OF LECTURES AND PRACTICAL CLASSES

### Lectures IX semester

$N_{\underline{0}}$	Topic	Hours	
1.	Introduction to Neurology.		
	Control of movement.	2	
	Upper and lower motor neuron.		
	Reflexes.		
	Coordination of movements.		
	Muscle tone.		
2.	Cranial nerves (I-XII).		
	Sensation and pain.	2	
	Meningeal irritation.		
3.	Neuroinflammatory diseases: meningitis, encephalitis, myelitis.		
	Wohoneuritis, polyneuritis.	2	
	Trigeminal neuralgia.		
	Bell's palsy.		
	Brain trauma: concussion and contusion.	2	
	Epilepsy.	2	
	Headaches, migraine.		
	Stroke.		
	Brain tumors.	1	
	Parkinson's disease. Huntington's disease.		
	Amyotrophic lateral sclerosis.		
	Myasthenia gravis.		
	Total	8	

Practical classes IX semester

No	Topic Topic	Hours
1.	History and neurological examination.	2
	Control of movement.	2
	Upper and lower motor neuron.	1
	Reflexes.	
	Coordination of movements.	
	Muscle tone.	
2.	Neurological examination: cranial nerves (I- XII),	
	sensation and pain,	2
	meningeal irritation.	
3.	Neuroinflammatory diseases: meningitis, encephalitis, myelitis.	2
	Mononeuritis, polyneuritis.	2
	Trigeminal neuralgia.	
	Bell's palsy.	
	Brain trauma: concussion and contusion.	1
	Epilepsy.	1
	Headaches, migraine.	
	Stroke.	
	Brain tumors.	
	Parkinson's disease. Huntington's disease.	
	Amyotrophic lateral sclerosis.	
	Myasthenia gravis.	
	Total	7

#### **EXAM SYNOPSIS:**

### General Neurology

- Reflexes. Anatomo- physiology. Normal reflexes. Pathologic changes of normal reflexes. Pathologic (abnormal) reflexes.
- 2. General sensation. Anatomo- physiology. Symptoms and syndromes.
- 3. Special senses. Vision, olfaction, taste, hearing, equilibrium. Anatomo- physiology. Symptoms and syndromes.
- 4. Motor system. Central and peripheral motor neuron. Anatomo- physiology. Symptoms and syndromes.
- 5. Extrapyramidal system. Anatomo- physiology. Symptoms and syndromes.
- 6. Cerebellum. Anatomo- physiology. Symptoms and syndromes.
- 7. Cranial nerves III, IV, and VI. Anatomo- physiology. Symptoms and syndromes.
- 8. Cranial nerve V. Anatomo- physiology. Symptoms and syndromes.
- 9. Cranial nerve VII. Anatomo- physiology. Symptoms and syndromes.
- 10. Cranial nerves IX, X, XI, XII. Anatomo- physiology. Symptoms and syndromes.
- 11. Spinal cord. Anatomo-physiology. Symptoms and syndromes.
- 12. Peripheral nervous system. Roots, ganglia, plexuses, peripheral nerves. Anatomophysiology. Symptoms and syndromes.
- 13. Cognitive functions. Agnosia, apraxia, aphasia.
- 14. Consciousness. Sleep.
- 15. Diagnostic methods in neurology.

#### Special Neurology

- 16. Cervicobrachial and lumbosacral radiculitis and plexitis.
- 17. Polyneurites and polyneuropathies. Guillain- Barre syndrome.
- 18. Facial paralysis.
- 19. Trigeminal neuralgia. Glossopharingeal neuralgia. Occipital neuralgia.
- 20. Inflammatory diseases of central nervous system: meningitis, encephalitis, myelitis.
- 21. Cerebrovascular disease. Ischemic stroke. Hemorrhagic stroke. Subarachnoid hemorrhage.
- 22. Brain tumors. Spinal cord tumors.
- 23. Epilepsy.
- 24. Multiple sclerosis.
- 25. Parkinson's disease. Huntington's disease. Wilson's disease.
- 26. Traumatic brain injury.
- 27. Headache.
- 28. Myasthenia gravis.
- 29. Amyotrophic lateral sclerosis.
- 30. Dementia.

### REFERENCES:

- 1. Bear, M., Connors, B., Paradiso, M. Neuroscience. Exploring the brain. Baltimore: Williams & Wilkins, 1996.
- 2. C. D. Marsden, T. J. Fowler. Clinical Neurology. Oxford University Press, 1998.
- 3. Fix, J. Neuroanatomy. Lippincott Williams & Wilkins, 2008.
- 4. Kaprelyan A, I. Dimitrov. Lecture Notes in Neurology for the English Language Education Programme. Part I General Neurology "Prof. Paraskev Stoyanov" Medical University Department of Neurology Varna 2012.
- Kaprelyan A, I. Dimitrov. Lecture Notes in Neurology for the English Language Education Programme. Part II Special Neurology "Prof. Paraskev Stoyanov" Medical University Department of Neurology Varna 2014.
- Lindsay, K., Bone, I., Callander, R. Neurology and neurosurgery illustrated. Churchill Livingstone, 1997.
- 7. McKeough, D. M. The Coloring review of Neuroscience, 1995, Little, Brown and Company.
- 8. Mumenthaler, M., Mattle, H. Fundamentals of Neurology: An Illustrated Guide. Thieme, 2005.
- Ropper, A., Samuels, M. Adams and Victor's Principles of Neurology, Ninth Edition. McGraw-Hill, 2009.
- 10. Royden Jones, H. Netter's Neurology, Second edition. Icon Learning Systems, 2011.
- 11. Russel, S., Triola, M. The Precise Neurological Exam. New York University School of Medicine, 2006. http://cloud.med.nyu.edu/modules/pub/neurosurgery/index.html
- 12. S.L. Hauser, S.A. Josephson, J.D. English, J.W. Engstrom, eds. Harrison's Neurology in Clinical Medicine, Second Edition. McGraw-Hill, 2006.
- 13. Schwartzman, R. Neurologic examination. Blackwell Publishing, 2006.
- 14. Simon, R., Greenberg, D., Aminoff, M. Clinical Neurology, 7th ed. McGraw-Hill, 2009.
- 15. Specialized information in neurology, accessible in the library of the medical University— Varna and online.

Department's council protocol № 1/18.02.2022

Faculty's council protocol №

PREPARED:

Borislav Ivanov, MD, PhD, Assoc P

HEAD OF DEPARTMENT:

Borislay Ivanov MD, PhD

Borislav Ivanov, MD, PhD, Assoc. P

У ПО КЛИНИЧНИ МЕДИЦИНСКИ НАУКИ ФАКУЛТЕТ

of in Neurology