

**University of Mostar, Faculty of Medicine**

**Medical Study in English**

**Course in Neurology**

**Course leader: Ass. Prof. Nataša Pejanović-Škobić, MD, PhD**

**Academic Year: 2023/2024**

***October 2 - 24, 2023.***

### **I. COURSE AIMS:**

- To learn the meaningful approach to the case history, neurological status and clinical way of making a decision in neurology
- To encourage the independent gaining of knowledge
- To learn how to present patients verbally
- To prepare concise and clear neurological medical findings
- To learn how to carry out the neurological status and how to differentiate normal findings and neurological disturbances
- To learn how to localise the site of lesion in the central nervous system which could cause the patient's symptoms and signs
- To learn how to formulate the differential diagnosis
- To learn how to perform lumbar puncture
- To learn how to order and interpret findings of usual examinations which are being used in diagnostics of neurological diseases
- To understand the principles of treatment of the most frequent neurological disorders

### **II. LOCATIONS:**

Lectures will take place at the Faculty of Medicine University of Mostar, Bijeli brijeg bb, 88000 Mostar

Seminars will take place at the Faculty of Medicine University of Mostar, Bijeli brijeg bb, 88000 Mostar

Practicals will be held in the divisions or in the laboratories of the Clinic of Neurology, University Clinical Hospital Mostar, Bijeli brijeg bb, 88000 Mostar

### **III. COURSE STRUCTURE:**

Total: 90 hours

lectures (L): 24 hours

seminars (S): 25 hours

practicals (P): 41 hours

#### IV. MEDICAL STUDY IN ENGLISH: NEUROLOGY - COURSE SCHEDULE 2022-2023

Date	Title	Time	Topic	Hrs	Lecturer	Place
<b>Monday 02.10.2023.</b>	L1	09.00-10.30	Introduction	2	Nataša Pejanović-Škobić	MEF
	S1	10.35-11.20	Case history of neurological patient	1	Nataša Pejanović-Škobić	MEF
	S2	11.25-12.10	Examination of neurological patient - Crania nerves	1	Nataša Pejanović-Škobić	MEF
	P1	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology
<b>Tuesday 03.10.2023.</b>	L2	09.00-10.30	Functional neuroanatomy	2	Nikolina Pravdić	MEF
	S3	10.35-11.20	Examination of neurological patient - Motor system	1	Davor Batinić	MEF
	S4	11.25-12.10	Examination of neurological patient - Sensory system	1	Davor Batinić	MEF
	P2	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology
<b>Wednesday 04.10.2023.</b>	L3	09.00-10.30	Demyelinating disorders	2	Inge Klupka-Sarić	MEF
	S5	10.35-11.20	Treatment of multiple sclerosis	1	Inge Klupka-Sarić	MEF
	S6	11.25-12.10	Diagnosis of cerebrospinal fluid	1	Inge Klupka-Sarić	MEF
	P3	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology
<b>Thursday 05.10.2023.</b>	L4	09.00-10.30	Headache and cranial neuralgias	2	Nataša Pejanović-Škobić	MEF
	S7	10.35-11.20	Emergency neurology	1	Marija Bender	MEF
	S8	11.25-12.10	Localisation in clinical neurology	1	Davor Batinić	MEF
	P4	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology
<b>Friday 06.10.2023.</b>	L5	09.00-10.30	Central nervous system tumors	2	Inge Klupka-Sarić	MEF
	S9	10.35-11.20	Paraneoplastic neurologic syndromes	1	Inge Klupka-Sarić	MEF
	S10	11.25-12.10	Brain stem syndromes. Vertigo.	1	Marija Bender	MEF
	P5	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology

<b>Monday 09.10.2023.</b>	L6	09.00-10.30	Intensive care neurology	2	Nataša Pejanović-Škobić	MEF
	S11	10.35-11.20	CNS infections	1	Marija Bender	MEF
	P6	11.30-13.45	<b>Practicals</b>	3	Lecturers and assistants	Clinic of Neurology
<b>Tuesday 10.10.2023.</b>	L7	09.00-10.30	Cerebrovascular disorders	2	Marija Bender	MEF
	S12	10.35-11.20	Cerebrovascular disorders - clinical picture	1	Marija Bender	MEF
	S13	11.25-12.10	Ultrasound of the head and neck blood vessels	1	Marija Bender	MEF
	P11	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology
<b>Wednesday 11.10.2023.</b>	L8	09.00-10.30	Movement disorders	2	Nikolina Pravdić	MEF
	S14	10.35-11.20	Movement disorders - clinical picture	1	Nikolina Pravdić	MEF
	P7	11.30-13.45	<b>Practicals</b>	3	Lecturers and assistants	Clinic of Neurology
<b>Thursday 12.10.2023.</b>	L9	09.00-10.30	Neuromuscular disorders	2	Nataša Pejanović-Škobić	MEF
	S15	10.35-11.20	Electromyoneurography	1	Davor Batinić	MEF
	P12	11.30-13.45	<b>Practicals</b>	3	Lecturers and assistants	Clinic of Neurology
<b>Friday 13.10.2023.</b>	S16	09.00-09.45	Spinal disorders	1	Davor Batinić	MEF
	S17	09.50-10.35	Pain and pain syndromes	1	Nikolina Pravdić	MEF
	P8	11.30-13.45	<b>Practicals</b>	3	Lecturers and assistants	Clinic of Neurology
<b>Monday 16.10.2023.</b>	L10	09.00-10.30	Dementia	2	Anđelko Vrca	MEF
	S18	10.35-11.20	Clinical picture of patient with dementia	1	Anđelko Vrca	MEF
	S19	11.25-12.10	Consciousness and disturbances of consciousness	1	Nataša Pejanović-Škobić	MEF
	P9	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology
<b>Tuesday 17.10.2023.</b>	L11	09.00-10.30	Coma and brain death	2	Nataša Pejanović-Škobić	MEF
	S20	10.35-11.20	Low back pain	1	Nataša Pejanović-Škobić	MEF

	P13	11.30-13.45	<b>Practicals</b>	3	Lecturers and assistants	Clinic of Neurology
<b>Wednesday 18.10.2023.</b>	L12	09.00-10.30	Epilepsy and paroxysmal consciousness disorders	2	Nataša Pejanović-Škobić	MEF
	S21	10.35-11.20	Epilepsy - clinical picture	1	Nataša Pejanović-Škobić	Clinic of Neurology
	S22	11.25-12.10	Electroencephalography	1		Clinic of Neurology
	P10	12.30-14.00	<b>Practicals</b>	2	Lecturers and assistants	Clinic of Neurology
<b>Thursday 19.10.2023.</b>	S23	09.00-09.45	Genetics of neurological diseases	1	Nataša Pejanović-Škobić	Clinic of Neurology
	S24	09.50-10.35	Autonomic nervous system disorders - selected topics	1	Nataša Pejanović-Škobić	Clinic of Neurology
	P14	11.00-13.15	<b>Practicals</b>	3	Nataša Pejanović-Škobić	Clinic of Neurology
<b>Friday 20.10.2023.</b>	S25	09.00-09.45	My hardest clinical case	1	Davor Batinić	Clinic of Neurology
	P15	10.00-11.30	<b>Practicals</b>	2	Lecturers - examiners	Clinic of Neurology
	P16	11.30-12.15	<b>Practicals</b>	1	Lecturers - examiners	Clinic of Neurology
<b>Monday 23.10.2023.</b>	P17	09.00-09.45	<b>Practicals</b>	1	Lecturers and assistants	Clinic of Neurology
	P18	09.45-10.30	<b>Practicals</b>	1	Lecturers - examiners	Clinic of Neurology
<b>Tuesday 24.10.2023.</b>	P19	10.00-11.30	<b>Preliminary examination (practical)</b>	2	Lecturers and assistants	Clinic of Neurology

**Practicals:**

P1: History and examination

P2: Motor system

P3: Sensation

P4: Cranial nerve I: Olfactory nerve

P5: Cranial nerves II, III, IV, VI: Eye

P6: Cranial nerves V and VII: The face

P7: Cranial nerve VIII: Auditory nerve

P8: Cranial nerves IX, X, XII: The mouth

P9: Cranial nerve XI: Accessory nerve

P10: Diagnostic methods in neurology: EEG practicals

P11: Diagnostic methods in neurology: Ultrasound of the head and neck vessels

P12: Diagnostic methods in neurology: EMNG practicals

P13: Gait and coordination

P14: The autonomic nervous system

P15: Speech

P16: Mental state, higher function

P17: Summary of standard neurological examination – 1

P18: Summary of standard neurological examination – 2

P19 Preliminary examination – practical exam

**V. EXAMINATIONS:**

Students need to prepare actively for participating in seminars and practicals.

Testing of knowledge is done by preliminary exam (examination of the neurological patient), written and oral final exam

Presence on the lectures, seminars and practicals is obligatory. Student can miss only 20% of the selected topics (reasonable grounds).

Preliminary exam (examination of the neurological patient) will be held on the last day of the Course.

After finishing the course students have to gather signature of the Course leader / Chair of the Department in Index (before written exam) as prove they have finished the Course and have prerequisite for the final exam.

Written exam consists of multiple choice questions. Passing the written exam is a requirement for approaching the oral exam.

The results of the written exam are acknowledged by the end of the ongoing academic year. After that, students have to take the written exam again.

The whole exam should be finished within 5 days after completion of the written exam.

## **VI. COURSE GRADES:**

Written exam:

45-50 points - excellent (5) - (A)

40-44 points - very good (4) - (B)

34-39 points - good (3) - (C)

28-33 points - satisfactory (2) - (D)

0-27 points - fail (1) - (F)

Oral exam:

excellent (5) - (A); very good (4) - (B); good (3) - (C); satisfactory (2) - (D); fail (1) - (F).

Final course grade is calculated as a mean from final written (30%) and final oral (70%) exam grades.

## **VII. REGULAR DATES OF WRITTEN EXAM:**

Written exam is usually held on Monday morning and oral exams are held through the entire week.

*1st exam term: 25th October 2022*

*2nd exam term: 13th February 2024*

*3rd exam term: 12th July 2024*

*4th exam term: 13th September 2024*

## **VIII. LITERATURE:**

### **Recommended:**

Simon RP, Aminoff MJ, Greenberg DA. Clinical Neurology. 10th Edition. New York: Lange Medical Books/McGraw Hill, 2018.

**Supplementary:**

Mattle H. Mumenthaler M. Fundamentals of Neurology, An illustrated Guide, Second edition. Thieme, 2017.

Adams AC. Mayo Clinic Essential Neurology. Rochester (2nd edition): Mayo Foundation for Medical Education and Research, 2017.

Fuller G. Neurological Examination Made Easy. Sixth Edition. Elsevier, 2019.

**IX. LIST OF LECTURERS AND TEACHING STAFF**

1. Assistant Professor Nataša Pejanović-Škobić, MD, PhD, neurologist – *Course leader*
2. Professor Inge Klupka-Sarić, MD, PhD, neurologist – *Course leader deputy*
3. Assistant Professor Nikolina Pravdić, MD, PhD, neurologist - *Secretary of the Course in Neurology*
4. Assistant Davor Batinić, MD, MSc, neurologist
5. Assistant Marija Bender, MD, PhD, neurologist
6. Professor Silvio Bašić, MD, PhD, neurologist (Zagreb, Croatia)
7. Professor Anđelko Vrca, MD, PhD, neurologist (Zagreb, Croatia)

**X. LIST OF EXAMINERS FOR 2021/2022. ACADEMIC YEAR**

1. Assistant Professor Nataša Pejanović-Škobić, MD, PhD, neurologist
2. Professor Inge Klupka-Sarić, MD, PhD, neurologist
3. Assistant Professor Nikolina Pravdić, MD, PhD, neurologist

**Course leader:**  
**Ass. Prof. Nataša Pejanović-Škobić, MD, PhD**