

<b>NEUROLOGY</b>	
<b>GENERAL INFORMATION</b>	
Course coordinator	Asst. Prof. Stjepan Jurić, MD, PhD
Assistant/Associate	Professor Silva Butković Soldo, MD, PhD Professor Davor Jančuljak, MD, PhD Asst. Prof. Hrvoje Budinčević, MD, PhD Asst. Prof. Antonija Krstačić, MD, PhD Asst. Prof. Sanja Tomasović, MD, PhD Asst. Prof. Svetlana Tomić, MD, PhD Asst. Prof. Ivanka Štenc Bradvica, MD, PhD Asst. Prof. Krunoslav Buljan, MD, PhD Asst. Prof. Mihael Mišir, MD, PhD Anamarija Soldo Koruga, MD Lidija Knežević Poljak, MD Tea Mirošević Zubonja, MD Jelena Šarić Jurić, MD Tihana Gilman Kuric, MD
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Mandatory
Year of study, semester	4 <sup>th</sup> year, 8 <sup>th</sup> semester
ECTS	<b>7</b>
Workload (hours)	Lectures (33); Seminars (47); Exercises (45)
Expected number of students	70
<b>COURSE DESCRIPTION</b>	
<b>Course objectives</b>	
The aim of the course is to ensure that the student acquires the necessary theoretical and practical knowledge in the field of neurological propaedeutics and etiopathogenesis, clinical manifestations, diagnostic procedures and treatment of neurological diseases.	
<b>Enrolment requirements and entry competencies</b>	
Attended and passed all exams from the previous year of study.	
<b>Learning outcomes at the Programme level</b>	
<b>1.1.; 1.2.; 2.1.; 2.2.; 2.3; 3.1.; 3.2; 3.3.; 3.4; 3.5.; 4.2</b>	
<b>Learning outcomes (5-10)</b>	
After attending lectures, completing seminars and exercises, independent study and passing the exam, students will: <ol style="list-style-type: none"> <li>1. Interpret and argue the etiological and epidemiological features of neurological diseases</li> <li>2. Determine and compare pathophysiological mechanisms and clinical manifestations of neurological diseases</li> <li>3. Predict and select the types and methods of diagnostic procedures of patients with neurological diseases</li> <li>4. Assess and recommend treatment methods for neurological diseases</li> <li>5. Evaluate and support neurological disease prevention measures</li> </ol>	

6. To evaluate and recommend neurorehabilitation methods for groups suffering from neurological disease
7. To support a multidisciplinary approach to the treatment, care and rehabilitation of patients with neurological diseases

#### **Course content**

**Lectures:** Introduction to neurology; Cerebrovascular diseases; Vertigo; Headaches; Demyelinating diseases; Pain and pain syndromes; Consciousness and disorder of consciousness; Movement disorders; Dementia; Neuromuscular diseases; Spinal cord disorders; Hereditary and metabolic diseases in neurology; Localization topographic syndromes in neurology; Intensive neurological care; Neurological emergencies; Epilepsy; Multidisciplinary approach to diseases of the nervous system; Neurorehabilitation

**Seminars:** Clinical approach to the neurological patient; Diagnosis, treatment and prevention of cerebrovascular diseases; Vertigo in everyday clinical practice; Evaluation and treatment of headaches in clinical practice; Ultrasound diagnostics in neurology; Multiple sclerosis; Clinical evaluation and treatment of pain syndromes; Access to a patient in a coma; Inflammatory diseases of the central nervous system; Guillain-Barre; Parkinson's disease and parkinsonism; Clinical evaluation of the demented syndrome; Myasthenia gravis; Clinical evaluation of the most common spinal cord disorders; Electromyoneurography in the differential diagnosis of neurological diseases; Clinical evaluation, diagnosis and treatment of hereditary metabolic diseases in neurology; Clinical evaluation of cognitive disorders; Topographic diagnosis of neurological disorders; Sleep and sleep disorders; Recanalization therapy in neurology; Algorithms for the management of intracranial hemorrhages; Electroencephalography; Evoked potentials in neurology; Neuro-oncology meeting; Case reports of neurological patients and repetition

**Clinical exercises:** specifics of anamnesis in neurological diseases, neurological propaedeutics and specificities of the neurological status and clinical picture for each group of neurological diseases.

#### **Mode of teaching**

Lectures; Seminars; Clinical exercises

#### **Student obligations**

Students are expected to attend all class sessions, as well as to take all the examinations. However, they are allowed for excused absences, totalling 30% of all classes. Undone exercise must colloquiate.

#### **Monitoring student work (*alignment of learning outcomes, teaching methods, and grading*)**

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Teaching activity	ECTS	Learning outcome	Student activity	Assessment methods	Grade points	
					Min.	Max.
Class attendance (Lectures/ Seminars)	0,5	1-7	Presence in class and resolution of given clinical cases	Evidence sheet; evaluation	5	15
Class attendance (Clinical exercises)	1,5	1-7	Attendance and active participation in clinical exercises	Evidence sheet; evaluation	5	15
Practical test of knowledge from neurological propaedeutics upon completion of clinical exercises	1	1-7	Learning theoretical and practical knowledge for exams of the practical part of the colloquium	Practical colloquium	10	20
Final exam	4	1-7	Learning for oral exam	Oral exam	30	50
<b>Total</b>	<b>7</b>				<b>50</b>	<b>100</b>

*Evaluation of the final exam:*

Student answer	Grade points
The answer meets the minimum criteria	30.0
The average answer with noticeable errors	37.0
The very good answer with minor errors	44.0
The exceptional answer	50.0

*Calculation of final grade:*

Based on the total sum of the points awarded during the course and the final exam, the final grade is determined according to the following distribution:

A – excellent (5): 90-100 grade points; B – very good (4): 70-79,99 grade points; C – good (3): 60-69,99 grade points; D – sufficient (2): 50-59,99 grade points

#### **Required reading (available in the library and through other media)**

Title	Number of copies in the library	Availability through other media
1.Neurologija za medicinare, drugo, obnovljeno i dopunjeno	12	

izdanje. Vesna Brinar i suradnici. Medicinska naklada, 2019.		
2.Neurološka propedeutika. Vesna Brinar, Zdravko Brzović,Niko Zurak. Zrinski, 1999.	0	
<b>Additional reading</b>		
<ol style="list-style-type: none"> <li>1. Kako živac živi? Odabrane teme iz područja neuromuskularnih bolesti. Silva Soldo Butković. ErvinaBilić. Medicinski fakultet Sveučilišta J.J. Strossmayera u Osijeku; Osijek, Zagreb 2009.</li> <li>2. Neurorehabilitacija i restauracijska neurologija. Silva Butković Soldo. Medicinski fakultetSveučilišta J.J. Strossmayera u Osijeku; Osijek, 2013.</li> <li>3. Epilepsija i ostali poremećaji svijesti, klasifikacija, dijagnostika i liječenje. Silvio Bašić, Silva Butković Soldo i suradnici. Medicinski fakultet Sveučilišta J.J. Strossmayera u Osijeku; Osijek, 2015.</li> <li>4. Neurokardiologija. Goran Krstačić, Silva Butković Soldo. Medicinski fakultet u Osijeku, Fakultet zadentalnu medicinu i zdravstvo, Sveučilišta J.J. Strossmayera u Osijeku, Studio HS internet d.o.o., Osijek, 2018.</li> <li>5. Neurološke posljedice alkoholizma. Silva Butković Soldo, Romana Perković, Krunoslav Buljan. Medicinski fakultet u Osijeku, Fakultet za dentalnu medicinu i zdravstvo, Sveučilišta J. J. Strossmayeru Osijeku Sveučilišta, Studio HS internet d.o.o., Osijek 2020.</li> <li>6. Biljni antioksidansi kao pomoć kod liječenja neuroloških oboljenja. Silva Butković Soldo, Nada Parađiković, Anamarija Soldo Koruga. Medicinski fakultet u Osijeku, Fakultet za dentalnu medicinu i zdravstvo, Sveučilišta J. J. Strossmayer u Osijeku Sveučilišta, Studio HS internet d.o.o., Osijek, 2022.</li> <li>7. Merrit's Neurology. Rowland LP i suradnici</li> <li>8. Adams and Vicor's Principles of Neurology. Ropper AH i Brown RH</li> </ol>		
<b>Course evaluation procedures</b>		
Anonymous, quantitative, standardized student survey providing feedback on the course as well as on the work of course coordinators and their assistants/associates is being conducted by the QA Office of the Faculty of medicine Osijek.		
<b>Note /Other</b>		
E-learning does not count towards course contact hours, but is being used in teaching and comprises links to various web pages, as well as video and audio materials available on web pages.		