

Medicinski fakultet u Rijeci

## IZVEDBENI NASTAVNI PLAN 2023/2024

Za kolegij

# Neurology

Studij:	<b>Medical Studies in English (R)</b> Sveučilišni integrirani prijediplomski i diplomski studij
Katedra:	<b>Katedra za neurologiju</b>
Nositelj kolegija:	<b>izv.prof. prim. dr. sc. Vuletić Vladimira, dr. med.</b>
Godina studija:	<b>4</b>
ECTS:	<b>4.50</b>
Stimulativni ECTS:	<b>0.00 (0.00%)</b>
Strani jezik:	<b>Mogućnost izvođenja na stranom jeziku</b>

## **Podaci o kolegiju:**

The course "Neurology" is a compulsory course in the 4th year of the Integrated Undergraduate and Graduate Study of Medicine and consists of 20 hours of lectures, 35 hours of seminars and 30 hours of exercises (4.5 ECTS). Most of the course is conducted at the Clinic of Neurology of the Clinical Hospital Center Rijeka, except for lectures that are held in the central lecture room of Rijeka locality of the Clinical Hospital Center Rijeka.

**Course objective:** Acquisition of basic knowledge and clinical skills in the field of neurology. The aim is to acquaint students with new knowledge about the functioning of the brain, the current possibilities of the neurological profession and to enable easier understanding and access to neurological patients. Students will be introduced to the specifics of neurological propaedeutics and the basics of clinical neurological examination. The aim of the course is also to acquaint students with neurological diseases, diagnostics, differential diagnosis and treatment. The seminars will cover the anatomical and physiological examination of the relevant neurological area, the functions of the cerebral nerves, sensory, motor, vegetative and higher nervous functions, and topical diagnostics. Students will be introduced to the methods of examination and pathological changes of certain neurological functions and their correct interpretation during practicals.

**Course content:** Cerebrovascular diseases; Tumors of the central nervous system; Epilepsy and other paroxysmal conditions; Demyelinating diseases; Extrapyramidal diseases; Dementia; Headaches and other painful conditions; Neuromuscular diseases; Diseases and injuries of the spinal cord and nerve roots; Emergencies in neurology.

**Class organization:** The estimated duration of classes is 8 weeks in total. Active participation is expected and monitored during the seminars, along with short (approx. 10 min.) independent Powerpoint presentations on a given topic of the seminar, the teacher will discuss the topic with students and at the end of each seminar students will receive 5 questions from the given topic, either orally or in writing. During practicals, the teacher will demonstrate the neurological exam and evaluate the active participation of students in performing the neurological exam. There will be a mandatory oral colloquium held at the end of Seminars and Practicals. A final exam will be held at the end of the course, in both written and oral form, during which the student will demonstrate practical knowledge of neurological propaedeutics according to the Skills Catalog Booklet. By completing all teaching activities, the student can achieve a maximum of 50 points (up to 50% of the grade) and at the final exam 50 points. The student will gain 4,5 ECTS by fulfilling all the above obligations.

## **Popis obvezne ispitne literature:**

1. Roger Simon, David Greenberg, Michael Aminoff et al. Lange Clinical Neurology, McGraw-Hill Education, 10th ed, 2017.
2. William W. Campbell et al. DeJong's The Neurologic Examination. LWW, 8th ed, 2019.

## **Popis dopunske literature:**

## **Nastavni plan:**

### **Predavanja popis (s naslovima i pojašnjenjem):**

#### **L1, L2 Cerebrovascular diseases**

Learning outcomes: Know the definition of cerebrovascular disease (CVD). Know the division and subtypes of CVD. Familiarize with the etiology of stroke. Understand the pathophysiology of cerebral ischemia and cerebral hemorrhage. Get acquainted with the diagnosis and treatment of acute stroke. Know how to apply primary and secondary stroke prevention measures.

#### **L3, L4 Tumors of the central nervous system**

Learning outcomes: Know the types of brain and spinal cord tumors. Know the pathophysiological mechanisms of CNS tumors. Recognize the clinical status of such patients. Know how to choose diagnostic procedures and get acquainted with treatment methods.

#### **L5, L6 Epilepsy and other paroxysmal disorders**

Learning outcomes: Know how to classify epileptic seizures. Identify certain types of epileptic seizures. Know the etiology of epileptic seizures. Apply specific treatment with antiepileptics.

#### **L7, L8 Demyelinating in inflammatory diseases of the central nervous system**

Learning outcomes: Get acquainted with various demyelinating diseases. Understand the pathogenesis of multiple sclerosis. Interpret the clinical picture and clinical course. Get acquainted with the modalities of diagnosis and treatment of multiple sclerosis.

#### **L9, L10 Extrapiramidal diseases**

Learning outcomes: Understand the pathogenesis and etiology of movement disorders. Be able to recognize the main features of Parkinson's disease. Be able to use diagnostic methods and treatments for Parkinson's disease. Be able to recognize forms of atypical parkinsonism.

#### **L11 Dementia**

Learning outcomes: Know how to distinguish cognitive disorders. Learn the definition and classification of dementias. Know the most common causes of confusion states in patients. Understand the pathogenesis of Alzheimer's disease. Distinguish dementia from pseudodementia.

#### **L12 Vertigo**

Learning outcomes: Define vertigo. Understand the differences between vertigo and imbalance disorders. Know how to distinguish the central cause of vertigo from the peripheral. Explain the most common causes of central vertigo.

#### **L13,L14 Headaches**

Learning outcomes: Define acute and chronic pain. Classify pain. Understand the pathophysiological features of nociceptive pain. Understand neuropathic pain. Classify headaches. Distinguish individual types of headache. Explain the pathogenesis of migraine. Be able to apply criteria for the purpose of diagnosing migraine. Be able to apply the treatment of acute migraine attack and prophylactic treatment of migraine. Be able to describe other primary headaches

#### **L15, L16, Neuromuscular diseases**

Learning outcomes: Identify the main groups of neuromuscular diseases according to location of the disease process. Describe the clinical picture of motor neuron disease (upper, lower ). Know the diagnostic criteria for amyotrophic lateral sclerosis. Identify peripheral neuropathy and myopathy. Describe the clinical picture of metabolic, hereditary and other forms of neuropathy. Be able to recognize acute inflammatory polyradiculoneuropathy. Explain the function of the neuromuscular junction and the pathogenesis of myasthenia gravis. Know the methods of diagnosis and specific treatment of myasthenia gravis

#### **L17, L18 Neuromuscular diseases**

Learning outcomes: Identify the main groups of neuromuscular diseases according to location of the disease process. Describe the clinical picture of motor neuron disease (upper, lower ). Know the diagnostic criteria for amyotrophic lateral sclerosis. Identify peripheral neuropathy and myopathy. Describe the clinical picture of metabolic, hereditary

and other forms of neuropathy. Be able to recognize acute inflammatory polyradiculoneuropathy. Explain the function of the neuromuscular junction and the pathogenesis of myasthenia gravis. Know the methods of diagnosis and specific treatment of myasthenia gravis

### **L19, L20 Emergencies in neurology**

#### **Seminari popis (s naslovima i pojašnjenjem):**

##### **S1, S2, S3 Consciousness and disorders of consciousness**

Learning outcomes: Explain the concept of consciousness. Know the causes of wakefulness disorders. Be able to assess the degree of consciousness disorder. Get acquainted with clinical indicators of the depth of consciousness disorders

##### **S4, S5, S6 Cranial nerves**

Learning outcomes: Know all 12 cerebral nerves and their function. Be able to recognize and explain the clinical characteristics of individual cranial nerve lesions.

##### **S7, S8, S9 Pyramidal system**

Learning outcomes: Explain the corticospinal and corticonuclear pathways. Explain the function of the upper motor neuron. Explain the clinical characteristics of upper motor neuron damage,

##### **S10, S11, S12 Extrapyramidal system**

Learning outcomes: Explain the basic function of the extrapyramidal motor system. Know the main extrapyramidal motor pathways. Know the symptoms of extrapyramidal nervous system damage.

##### **S13, S14, S15 Peripheral nervous system**

Learning outcomes: Know the dissemination of motor information in the peripheral nervous system (spinomuscular level of motor skills). Explain the system of the lower motor neuron. Know the segmental and peripheral innervation of the most important muscles of the arm and leg.

##### **S16, S17, S18 Sensory nervous system**

Learning outcomes: Explain the sensory system in general. Know the types of sensations and their transmission from the periphery to the central nervous system. Explain cortical sensory functions - integrative sensory functions

##### **S19, S20, S21 Balance and coordination**

Learning outcomes: Explain the anatomical position of the cerebellum, the main motor and sensory connections of the cerebellum. Know the functions of the cerebellum. Identify disorders of body balance - causes and types

##### **S22, S23, S24 Diagnosis and treatment of demyelinating diseases**

Learning outcomes: Explain the characteristics of demyelinating diseases and the differential diagnosis. Understand diagnostic workup and interpret the finding correctly. Know the paraclinical criteria for the diagnosis of multiple sclerosis. Understand the modalities of multiple sclerosis treatment.

##### **S25, S26, S27 Painful syndromes of upper and lower extremities**

Learning outcomes: Recognize the clinical picture of compressive radiculopathy. Explain the clinical picture of cervical disc prolapse. Recognize symptoms of brachial and lumbal plexopathy, carpal tunnel syndrome, radial nerve palsy as well as ulnar, axillar, sciatic, femoral and peroneal nerve damage

##### **S28, S29, S30 Unconsciousness and dizziness**

Learning outcomes: Be able to distinguish syncope from other paroxysmal disorders of consciousness. Understand the etiology of syncope. Know the types of syncope according to etiology. Explain the definition of vertigo and its causes

##### **S31, S32, S33 Diagnosis of stroke**

Learning outcomes: Recognize the signs of a stroke. Understand and explain the importance of emergency neurological treatment in acute stroke. Know neuroradiological diagnostic methods and correctly interpret findings. Explain the peculiarities of cerebral circulation and the principles of ultrasound examinations of blood vessels with a brain

destination.

### **S34, S35 Stroke treatment**

#### **Vježbe popis (s naslovima i pojašnjenjem):**

##### **P1, P2, P3 History**

Learning outcomes: Explain the specifics of taking medical history in neurological patients. Know the necessary anamnestic data that should always be examined in a neurological patient.

##### **P4, P5, P6, P7 Examination of the state of consciousness and function of the cranial nerves**

Learning outcomes: Be able to analyze clinical indicators of the depth of disturbances of consciousness. Be able to identify the clinical features in comatose patients. Be able to identify the types of respiratory disorders, examine the appearance of the pupils, get to know the methods of examining the oculocephalic and oculovestibular reflex as well as motor functions under teacher supervision. Be able to examine the function of each individual cranial nerve

##### **P8, P9, P10, P11 Testing of motor functions**

Learning outcomes: Be able to examine the motor functions of the upper and lower motor neurons and be able to interpret them correctly. Know the differences between upper and lower motor neuron lesions. Be able to recognize the symptoms of damage to the lower motor neuron and be able to examine the innervation area of a particular nerve or spinal nerve. Know how to perform tests of balance and coordination. Be able to recognize damage to the extrapyramidal system.

##### **P12, P13, P14, P15 Sensory system test**

Learning outcomes: Be able to examine sensory functions - superficial and deep sensation. Be able to examine integrative sensory functions.

##### **P16, P17, P18, P19 Reflex test**

Learning outcomes: Explain reflex motor activity. Be able to examine and correctly interpret myotatic reflexes, surface reflexes. Explain pathological reflex responses and pathological reflexes.

##### **P20, P21, P22 Coordination and balance test**

Learning outcomes: Be able to perform experiments to test coordination; balance in walking and standing. Be able to interpret limb coordination disorder and body balance disorder

##### **P23, P24, P25, P26 Examination of higher brain functions + neuropsychological tests**

Learning outcomes: Explain cognition and cognitive functions. Know the ways of examining speech functions, know how to recognize phonation and articulation disorders and aphasia. Know ways to test speech comprehension, reading, arithmetic, writing skills. Be able to examine gnostic functions and perform practice tests. Know how to examine memory and know how to use the Mini mental test and interpret it correctly.

##### **P27, P28, P29, P30 Topographic diagnostics and important syndromes: hemispherical, brainstem, cerebellar syndromes**

Learning outcomes: Explain the function of individual parts of the CNS and understand neurological symptoms with regard to topographic or localization diagnostics.

##### **P27, P28, P29, P30 Topographic diagnostics and important syndromes: hemispherical, brainstem, cerebellar syndromes**

Learning outcomes: Explain the function of individual parts of the CNS and understand neurological symptoms with regard to topographic or localization diagnostics.

#### **Obveze studenata:**

Students are required to attend regularly and actively participate in all forms of the classes

## **Ispit (način polaganja ispita, opis pisanog/usmenog/praktičnog dijela ispita, način bodovanja, kriterij ocjenjivanja):**

Knowledge assessment (method of taking the exam, description of the written / oral part of the exam, method of scoring during classes, grading criteria)

Student assessment is carried out according to the current Ordinance on studies at the University of Rijeka, and according to the Ordinance on student assessment at the Medical Faculty in Rijeka (adopted by the Faculty Council of the Medical Faculty in Rijeka)

Student work will be evaluated and graded during classes and at the final exam. Out of a total of 100 points, a student can achieve a maximum of 70 points during classes, and 30 points at the final exam. A total of 4.5 ECTS.

I During classes, the following is evaluated:

1. acquired knowledge - up to 30 points
2. activity and knowledge during classes - up to 20 points

### 1. Acquired knowledge (up to 30 points)

During the classes, the acquired knowledge will be assessed with one colloquium (oral) after the completion of all seminars and practicals in terms of agreement (depending on the number of students) on working days with the possibility of inclusion of Saturday. The colloquium has to take place before the final exam. The maximum number of points is 60. Examiners are teachers of both seminars and practicals.

Colloquium: Neurological status + Clinical topical diagnostics

Grades from the colloquium will be converted into points as shown in the table:

- I. Excellent 30
- II. Very good 25
- III. Good 20
- IV. Sufficient 15

### 2. Activity and knowledge in teaching (up to 20 points)

Students' knowledge and activity are assessed in all exercises (except P1) orally with a practical part in each exercise leader. In the end, the total average grade obtained is converted into points:

- I. 4,8-5 20 points
- II. 4,4-4,7 18 points
- III. 3,7-4,2 16 points
- IV. 3,0-3,6 14 points
- V. 2,4-2,9 12 points
- VI. 2,0-2,3 10 points

A student can take the Final Exam when he / she passes the Colloquium, i.e. when he / she achieves a minimum number of points of 15 and a passing grade in the final practicals (a total of at least 25 points). A student who did not collect 15 points from the Colloquium or who for justified reasons could not take the Colloquium in the given term, can take one remedial colloquium because otherwise he / she will not be able to take the final exam. The term of the "corrective" colloquium will be determined between the 1st and 2nd term of the final exam. The examiner at the remedial colloquium will be a teacher. A student who passed the colloquium but wants a higher grade and thus more points according to the final exam will be allowed a corrective colloquium, but the previous result is deleted and the one that is achieved in the correctional.

## **Ostale napomene (vezane uz kolegij) važne za studente:**

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# SATNICA IZVOĐENJA NASTAVE 2023/2024

## Neurology

<b>Predavanja</b> (mjesto i vrijeme / grupa)	<b>Vježbe</b> (mjesto i vrijeme / grupa)	<b>Seminari</b> (mjesto i vrijeme / grupa)
<b>18.10.2023</b>		
L1, L2 Cerebrovascular diseases: <ul style="list-style-type: none"><li>• Klinika za neurologiju (08:30 - 10:00) [156]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>		S1, S2, S3 Consciousness and disorders of consciousness: <ul style="list-style-type: none"><li>• Klinika za neurologiju (10:15 - 12:30) [269]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>
nasl. doc. dr. sc. Bralić Marina, dr. med. [269] · izv.prof. prim. dr. sc. Vuletić Vladimira, dr. med. [156]		
<b>19.10.2023</b>		
L15, L16, Neuromuscular diseases: <ul style="list-style-type: none"><li>• Klinika za neurologiju (10:30 - 12:00) [266]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>		S4, S5, S6 Cranial nerves: <ul style="list-style-type: none"><li>• Klinika za neurologiju (12:30 - 15:00) [1884]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>
naslovna asistentica Babić Anja, dr. med. [1884] · doc. dr. sc. Bonifačić David, dr. med. [266]		
<b>25.10.2023</b>		
L5, L6 Epilepsy and other paroxysmal disorders: <ul style="list-style-type: none"><li>• Klinika za infektivne bolesti (08:30 - 10:00) [264]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>		
izv. prof. dr. sc. Perković Olivio, dr. med. [264]		
<b>26.10.2023</b>		
L7, L8 Demyelinating in inflammatory diseases of the central nervous system: <ul style="list-style-type: none"><li>• Klinika za infektivne bolesti (08:30 - 10:00) [265]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>		S7, S8, S9 Pyramidal system: <ul style="list-style-type: none"><li>• Klinika za infektivne bolesti (10:15 - 12:30) [269]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>
nasl. doc. dr. sc. Bralić Marina, dr. med. [269] · izv. prof. dr. sc. Škarpa-Prpić Ingrid, dr. med. [265]		
<b>02.11.2023</b>		
L9, L10 Extrapyramidal diseases: <ul style="list-style-type: none"><li>• KBC Rijeka (10:00 - 12:00) [156] [264]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>		
izv. prof. dr. sc. Perković Olivio, dr. med. [264] · izv.prof. prim. dr. sc. Vuletić Vladimira, dr. med. [156]		
<b>03.11.2023</b>		
L11 Dementia: <ul style="list-style-type: none"><li>• KBC Rijeka (08:00 - 09:00) [156] [263]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul> L12 Vertigo: <ul style="list-style-type: none"><li>• KBC Rijeka (09:00 - 10:00) [263]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>		S13, S14, S15 Peripheral nervous system: <ul style="list-style-type: none"><li>• KBC Rijeka (12:00 - 15:00) [267]<ul style="list-style-type: none"><li>◦ N_361</li></ul></li></ul>
Rački Valentino, dr. med. [267] · doc. dr. sc. Strenja Ines, dr. med. [263] · izv.prof. prim. dr. sc. Vuletić Vladimira, dr. med. [156]		

<b>08.11.2023</b>		
L13, L14 Headaches: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (08:30 - 10:00) [156] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>		S16, S17, S18 Sensory nervous system: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (10:15 - 12:30) [269] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>
nasl. doc. dr. sc. Bralić Marina, dr. med. [269] · izv.prof. prim. dr. sc. Vuletić Vladimira, dr. med. [156]		
<b>09.11.2023</b>		
L3, L4 Tumors of the central nervous system: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (08:30 - 10:00) [263] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>		S19, S20, S21 Balance and coordination: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (10:15 - 12:30) [1884] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul> S10, S11, S12 Extrapiramidal system: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (10:45 - 13:00) [156] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>
naslovna asistentica Babić Anja, dr. med. [1884] · doc. dr. sc. Strenja Ines, dr. med. [263] · izv.prof. prim. dr. sc. Vuletić Vladimira, dr. med. [156]		
<b>10.11.2023</b>		
L17, L18 Neuromuscular diseases: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (08:30 - 10:00) [266] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>		S22, S23, S24 Diagnosis and treatment of demyelinating diseases: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (10:00 - 12:15) [267] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>
doc. dr. sc. Bonifačić David, dr. med. [266] · Rački Valentino, dr. med. [267]		
<b>13.11.2023</b>		
L19, L20 Emergencies in neurology: <ul style="list-style-type: none"> <li>• Klinika za infektivne bolesti (11:00 - 12:30) [268] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>		S25, S26, S27 Painful syndromes of upper and lower extremities: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (08:30 - 10:45) [267] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>
doc. dr. sc. Dunatov Siniša, dr. med. [268] · Rački Valentino, dr. med. [267]		
<b>14.11.2023</b>		
		S28, S29, S30 Unconsciousness and dizziness: <ul style="list-style-type: none"> <li>• KBC Rijeka (12:00 - 15:00) [267] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>
Rački Valentino, dr. med. [267]		
<b>15.11.2023</b>		
		S31, S32, S33 Diagnosis of stroke: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (08:30 - 10:00) [266] <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>
doc. dr. sc. Bonifačić David, dr. med. [266]		



16.11.2023		
		S34, S35 Stroke treatment: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (08:30 - 10:45) [266]               <ul style="list-style-type: none"> <li>◦ N_361</li> </ul> </li> </ul>
doc. dr. sc. Bonifačić David, dr. med. [266]		
20.11.2023		
	P1, P2, P3 History: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 11:15) [1884] [264] [266] [267] [269] [2206] [2207]               <ul style="list-style-type: none"> <li>◦ NY1</li> <li>◦ NY2</li> <li>◦ NY3</li> <li>◦ NY4</li> <li>◦ NY5</li> <li>◦ NY6</li> <li>◦ NY7</li> </ul> </li> </ul>	
naslovna asistentica Babić Anja, dr. med. [1884] · doc. dr. sc. Bonifačić David, dr. med. [266] · nasl. doc. dr. sc. Bralić Marina, dr. med. [269] · naslovni asistent Hero Mario, dr. med. [2206] · naslovni asistent Papić Eliša, dr. med. [2207] · izv. prof. dr. sc. Perković Olivio, dr. med. [264] · Rački Valentino, dr. med. [267]		
23.11.2023		
	P4, P5, P6, P7 Examination of the state of consciousness and function of the cranial nerves: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 12:00) [1884] [264] [266] [267] [269] [2206] [2207]               <ul style="list-style-type: none"> <li>◦ NY1</li> <li>◦ NY2</li> <li>◦ NY3</li> <li>◦ NY4</li> <li>◦ NY5</li> <li>◦ NY6</li> <li>◦ NY7</li> </ul> </li> </ul>	
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27.11.2023		
	P8, P9, P10, P11 Testing of motor functions: <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 12:00) [1884] [264] [266] [267] [269] [2206] [2207]               <ul style="list-style-type: none"> <li>◦ NY1</li> <li>◦ NY2</li> <li>◦ NY3</li> <li>◦ NY4</li> <li>◦ NY5</li> <li>◦ NY6</li> <li>◦ NY7</li> </ul> </li> </ul>	
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30.11.2023		

	<p>P12, P13, P14, P15 Sensory system test:</p> <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 12:00) [1884] [264] [266] [267] [269] [2206] [2207]</li> <li>◦ NY1</li> <li>◦ NY2</li> <li>◦ NY3</li> <li>◦ NY4</li> <li>◦ NY5</li> <li>◦ NY6</li> <li>◦ NY7</li> </ul>	
<p>naslovna asistentica Babić Anja, dr. med. [1884] · doc. dr. sc. Bonifačić David, dr. med. [266] · nasl. doc. dr. sc. Bralić Marina, dr. med. [269] · naslovni asistent Hero Mario, dr. med. [2206] · naslovni asistent Papić Eliša, dr. med. [2207] · izv. prof. dr. sc. Perković Olivio, dr. med. [264] · Rački Valentino, dr. med. [267]</p>		
<p><b>04.12.2023</b></p>		
	<p>P16, P17, P18, P19 Reflex test:</p> <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 12:00) [1884] [264] [266] [267] [269] [2206] [2207]</li> <li>◦ NY1</li> <li>◦ NY2</li> <li>◦ NY3</li> <li>◦ NY4</li> <li>◦ NY5</li> <li>◦ NY6</li> <li>◦ NY7</li> </ul>	
<p>naslovna asistentica Babić Anja, dr. med. [1884] · doc. dr. sc. Bonifačić David, dr. med. [266] · nasl. doc. dr. sc. Bralić Marina, dr. med. [269] · naslovni asistent Hero Mario, dr. med. [2206] · naslovni asistent Papić Eliša, dr. med. [2207] · izv. prof. dr. sc. Perković Olivio, dr. med. [264] · Rački Valentino, dr. med. [267]</p>		
<p><b>07.12.2023</b></p>		
	<p>P20, P21, P22 Coordination and balance test:</p> <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 11:15) [1884] [264] [266] [267] [269] [2206] [2207]</li> <li>◦ NY1</li> <li>◦ NY2</li> <li>◦ NY3</li> <li>◦ NY4</li> <li>◦ NY5</li> <li>◦ NY6</li> <li>◦ NY7</li> </ul>	
<p>naslovna asistentica Babić Anja, dr. med. [1884] · doc. dr. sc. Bonifačić David, dr. med. [266] · nasl. doc. dr. sc. Bralić Marina, dr. med. [269] · naslovni asistent Hero Mario, dr. med. [2206] · naslovni asistent Papić Eliša, dr. med. [2207] · izv. prof. dr. sc. Perković Olivio, dr. med. [264] · Rački Valentino, dr. med. [267]</p>		
<p><b>11.12.2023</b></p>		
	<p>P23, P24, P25, P26 Examination of higher brain functions + neuropsychological tests:</p> <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 12:00) [1884] [264] [266] [267] [269] [2206] [2207]</li> <li>◦ NY1</li> <li>◦ NY2</li> <li>◦ NY3</li> <li>◦ NY4</li> <li>◦ NY5</li> <li>◦ NY6</li> <li>◦ NY7</li> </ul>	

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#### 14.12.2023

	<p>P27, P28, P29, P30 Topographic diagnostics and important syndromes: hemispherical, brainstem, cerebellar syndromes:</p> <ul style="list-style-type: none"> <li>• Klinika za neurologiju (09:00 - 12:00) [1884] [264] [266] [267] [269] [2206] [2207]</li> <li>○ NY1</li> <li>○ NY2</li> <li>○ NY3</li> <li>○ NY4</li> <li>○ NY5</li> <li>○ NY6</li> <li>○ NY7</li> </ul>	
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### Popis predavanja, seminara i vježbi:

PREDAVANJA (TEMA)	Broj sati	Mjesto održavanja
L1, L2 Cerebrovascular diseases	2	Klinika za neurologiju
L3, L4 Tumors of the central nervous system	2	Klinika za neurologiju
L5, L6 Epilepsy and other paroxysmal disorders	2	Klinika za infektivne bolesti
L7, L8 Demyelinating in inflammatory diseases of the central nervous system	2	Klinika za infektivne bolesti
L9, L10 Extrapiramidal diseases	2	KBC Rijeka
L11 Dementia	1	KBC Rijeka
L12 Vertigo	1	KBC Rijeka
L13,L14 Headaches	2	Klinika za neurologiju
L15, L16, Neuromuscular diseases	2	Klinika za neurologiju
L17, L18 Neuromuscular diseases	2	Klinika za neurologiju
L19, L20 Emergencies in neurology	2	Klinika za infektivne bolesti

VJEŽBE (TEMA)	Broj sati	Mjesto održavanja
P1, P2, P3 History	3	Klinika za neurologiju
P4, P5, P6, P7 Examination of the state of consciousness and function of the cranial nerves	4	Klinika za neurologiju
P8, P9, P10, P11 Testing of motor functions	4	Klinika za neurologiju
P12, P13, P14, P15 Sensory system test	4	Klinika za neurologiju
P16, P17, P18, P19 Reflex test	4	Klinika za neurologiju
P20, P21, P22 Coordination and balance test	3	Klinika za neurologiju
P23, P24, P25, P26 Examination of higher brain functions + neuropsychological tests	4	Klinika za neurologiju
P27, P28, P29, P30 Topographic diagnostics and important syndromes: hemispherical, brainstem, cerebellar syndromes	4	

P27, P28, P29, P30 Topographic diagnostics and important syndromes: hemispherical, brainstem, cerebellar syndromes	4	Klinika za neurologiju
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<b>SEMINARI (TEMA)</b>	<b>Broj sati</b>	<b>Mjesto održavanja</b>
S1, S2, S3 Consciousness and disorders of consciousness	3	Klinika za neurologiju
S4, S5, S6 Cranial nerves	3	Klinika za neurologiju
S7, S8, S9 Pyramidal system	3	Klinika za infektivne bolesti
S10, S11, S12 Extrapyramidal system	3	Klinika za neurologiju
S13, S14, S15 Peripheral nervous system	3	KBC Rijeka
S16, S17, S18 Sensory nervous system	3	Klinika za neurologiju
S19, S20, S21 Balance and coordination	3	Klinika za neurologiju
S22, S23, S24 Diagnosis and treatment of demyelinating diseases	3	Klinika za neurologiju
S25, S26, S27 Painful syndromes of upper and lower extremities	3	Klinika za neurologiju
S28, S29, S30 Unconsciousness and dizziness	3	KBC Rijeka
S31, S32, S33 Diagnosis of stroke	3	Klinika za neurologiju
S34, S35 Stroke treatment	2	Klinika za neurologiju

**ISPITNI TERMINI (završni ispit):**

1.	16.02.2024.
2.	30.04.2024.
3.	11.06.2024.
4.	01.07.2024.
5.	05.09.2024.
6.	19.09.2024.