

<b>HOW THE BRAIN REMEMBERS AND FORGETS?</b>	
<b>GENERAL INFORMATION</b>	
Course coordinator	Professor Silva Butković Soldo, MD, PhD
Assistant/Associate	Assistant Professor Hrvoje Budinčević, MD, PhD Assistant Professor Sanja Tomasović, MD, PhD Anamarija Soldo Koruga, MD Jelena Šarić Jurić, MD
Study Programme	Integrated undergraduate and graduate university study of Medicine
Status of the course	Elective
Year of study, semester	2nd year, 4th semester
ECTS	2
Workload (hours)	Lectures (10); Seminars (10); Exercises (5)
Expected number of students	30
<b>COURSE DESCRIPTION</b>	
<b>Course objectives</b>	
The main goal of this course is to introduce students to the neuroanatomic and neurophysiological bases of memory in healthy individuals, as well as the fundamental pathophysiological mechanisms that lead to memory and learning disorders. Lectures and seminars will cover topics in neuroanatomy and neurophysiology of memory, learning and forgetting by repeating already learned knowledge with acquiring new knowledge in this area. Special teaching units will also focus on recognizing, diagnostics and treating of the most common cognitive disorders in the population, the most common clinical entities and the possibility of diagnosis and treatment of cognitive disorders.	
<b>Enrolment requirements and entry competencies</b>	
Passed all exams of the previous year of study and exams in the course Neuroscience Basics.	
<b>Learning outcomes at the Programme level</b>	
<b>1.1.; 1.2.; 2.1.; 2.2.; 2.3; 3.1.; 3.3.; 3.5.; 4.2</b>	
<b>Learning outcomes (5-10)</b>	
After listening lectures, seminars and practicals, independent learning and passing the exam students will be able to: <ol style="list-style-type: none"> <li>1. Describe responsible anatomical regions of the brain for specific higher cortical functions</li> <li>2. Describe types of cognitive disorders</li> <li>3. Assess the severity of cognitive impairment</li> <li>4. Recommend the necessary diagnostic procedures for people with cognitive disorder</li> <li>5. Confirm the type of dementia based on clinical and diagnostic assessments</li> <li>6. Describe opportunities to improve learning/memory and to describe treatment options for people with dementia</li> </ol>	
<b>Course content</b>	
<b>Lectures</b> Basics of brain anatomy; Cognitive functions of the brain, Neuroanatomic and neurophysiological basics of learning, memory and forgetting, Neurocognitive testing, Imaging methods in the diagnosis of cognitive disorders	
<b>Seminars</b> Developmental and acquired disorders of higher cortical functions, Clinical types of memory disorders, Delirium, amnesia and dementia, Curative dementia, Alzheimer's disease, Vascular	

dementia, Dementia in neurodegenerative diseases, How to improve learning and memory

### Exercises

Neurocognitive testing for a person with cognitive impairments

### Mode of teaching

Lectures; Seminars; Exercises

### Student obligations

Attending all forms of classes is mandatory, and the student must access all knowledge checks. The student can justifiably miss out on 30% of each of the forms of teaching. Missed practical must be colloquiated.

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

Teaching activity	ECTS	Learning outcome	Student activity	Assessment methods	Grade points	
					Min.	Max.
Course attendance	0,5	1-6	Presence on the Course	Log evidence	5	15
Seminars	0,5	1-6	Preparation of seminar work	Presentation/Essay	15	25
Exercises	0,5	1-6	Presence and active participation on exercises	Exercises diary - neurocognitive testing	15	30
Final exam	0,5	1-6	Learning for an oral exam	Oral exam	15	30
<b>Total</b>	<b>2</b>				<b>50</b>	<b>100</b>

#### Evaluation of final exam:

Student answer	Grade points
The answer meets the minimum criteria	15.0
The average answer with noticeable errors	20.0
The very good answer with minor errors	25.0
The exceptional answer	30.0

#### Calculation of final grade:

Students who achieved 15 or more points in the final exam, the points obtained in the final exam are added to the grade points obtained during the class, and this sum constitutes the final grade. Since the study program schedule descriptive assessment of elective courses, the course coordinator awards the grade "passed" to a student who achieves 50 or more grade points in the course.

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

Title	Number of copies in the library	Availability through other media
1. Butković Soldo S. : Neurorehabilitacijska i restauracijska neurologija	10	
2. Judaš M i Kostović I: Temelji neuroznanosti, MD, Zagreb, 1997.	10	

### Additional reading

1. Brinar V. i sur: Neurologija za medicinare 2. Rowland LP i sur: Merrit's Neurology 3. Ropper AH i Brown RH: Adams and Vicor's Principles of Neurology
<b>Course evaluation procedures</b>
Anonymous, quantitative, standardized student survey on predm the work of teachers by the Office for the quality of the Faculty of Medicine Osijek.
<b>Note /Other</b>
E-learning does not fall within the norm of subject hours, but is used in teaching and contains links to different pages, videos and audio materials available on websites.