

GENERAL INFORMATION		
Course name	Neurology	
Course director	Prof. Davor Jančuljak, MD, PhD	
Assistants	Prof. Silva Butković Soldo, MD, PhD Anamarija Soldo Koruga, MD	
Study program	Integrated undergraduate and graduate university study program Medical Studies in German	
Course status	Mandatory	
Year of study, semester	4 th year, 8 th semester	
Credits allocated and form of instruction	ECTS student workload	9
	Number of teaching hours (L+S+E)	135 (55+45+35)
COURSE DESCRIPTION		
Course objectives		
Basic elements of general clinical neurology, basic neurological symptoms and syndromes. Basics of special clinical neurology, general principles of recognition, process and treatment of certain neurological disorders. Algorithms of diagnostic process. Specific diagnostic methods of treatment.		
Course requirements		
There are no specific requirements for this course except those defined in the study program curriculum.		
Learning outcomes relevant to the study program		
1.1, 1.2, 2.1, 2.2, 2.3, 3.1, 3.2, 3.3, 3.4, 3.5, 4.2		
Expected learning outcomes (5-10 learning outcomes)		
Knowledge		
<ol style="list-style-type: none"> 1. Classify, define, describe and differentiate certain neurological diseases 2. Describe leading symptoms and signs of diseases of the nervous system and connect them to specific clinical pictures and syndromes, recognize the localization of the process and interpret the basic pathophysiological mechanisms of the development of the most important clinical entities 3. List and explain neurological disorders in diseases of other organs and organ systems 4. Present differential-diagnostic possibilities based on clinical symptoms and signs patients have 5. Plan and select the proper diagnostic procedures in certain conditions, syndromes and diseases of the nervous system and critically evaluate the results of diagnostic tests 6. Integrate the knowledge from the clinical picture and the diagnostic procedure and critically evaluate the correct diagnosis of the disease 7. Differentiate and critically evaluate the key principles of treatment, plan the optimal type and sequence of therapeutic procedures and present them substantially to the patient 8. Predict the appropriate prognosis of the disease and analyze the course, effects and outcomes of treatment and assess the ethical and psychosocial issues of care for neurological patients 9. Recognize diagnostic and treatment methods in accordance with the principles of "evidence-based medicine" 		
Skills		
<ol style="list-style-type: none"> 1. Demonstrate the ability to independently take a neurological history, perform a neurological examination and determine a working diagnosis 		

2. Identify the leading symptoms of nervous system diseases, recognize the localization of the process and the correlation between these symptoms and certain clinical entities
3. Recognize the symptoms in a critically ill patient that require an urgent consultation with a specialist
4. Recognize the symptoms of basic neurological disorders – including disorders of consciousness, cognitive functions, speech, vision, hearing, balance, motor functions, body sensation and autonomic functions
5. Develop the skill of discussing the clinical picture and interpreting the differential diagnosis as well as the results of the patient's diagnostic process
6. Participate in team, interdisciplinary and multidisciplinary clinical work and demonstrate good communication skills with the patients, their companions and staff

Course content

Groups of patients with cerebrovascular diseases, patients with neuromuscular diseases, patients after cerebral, spinal or peripheral trauma, patients suffering from other neurological diseases. Observation of the main problems, signs of a neurological disease and consequent neurologic deficit. A complete neurological examination and assessment by reviewing the medical documentation as well as creating a rehabilitation plan. Assessment of the patient's current state regarding the established diagnosis, with a previous check of the medical history, neurological examination and knowledge of the logarithm of diagnostic process. Therapeutic approach to acute patients in intensive and semi-intensive care units, from drug therapy to rehabilitation treatment. The first stage of rehabilitation, so-called early rehabilitation in the acute phase of the disease (mainly passive rehabilitation, with diagnostic process, and determination of the logarithm of diagnostic process). Importance of speech therapy treatment and planning its dynamics. Planning of certain types of the second stage of rehabilitation, upon completion of a diagnostic process, after the first phase of treatment in a neurological, neurosurgical or similar institution. Planning of a further rehabilitation treatment with its monitoring using certain indexes relevant for the monitoring of a patient recovery (Barthel Index, McGill Pain Questionnaire, Coop/Wonca charts), and planning of further dynamics of the rehabilitation treatment, inpatient or outpatient type. Types and possibilities of the contemporary neurological rehabilitation and neurorestoration: planning and comprehensive monitoring and providing rehabilitation, along with the creation of a plan for the formation of subgroups and the inclusion of teams; rehabilitation at home with the involvement of a family doctor and home care as well as preparation for a return to the social environment by implementing a rehabilitation scheme in the community; monitoring the dynamics of outpatient rehabilitation and planning of a treatment to prevent the development of complications and to reduce disability, with a mandatory inclusion in the work environment for the purpose of professional rehabilitation, with a prior familiarization of these environments with our patients' problems.

Form of instruction	<input checked="" type="checkbox"/> lectures	<input type="checkbox"/> individual assignments
	<input checked="" type="checkbox"/> seminars and workshops	<input type="checkbox"/> multimedia and Internet
	<input checked="" type="checkbox"/> exercises	<input type="checkbox"/> laboratory
	<input type="checkbox"/> distance learning	<input type="checkbox"/> mentoring activities
	<input type="checkbox"/> field course	<input type="checkbox"/> other

Student obligations

Come to class prepared by studying the recommended literature for each unit and actively participate in all forms of instruction. The student must participate in at least 70% of classes to pass the course.

Monitoring student learning

Attendance	x	Active participation	x	Seminar paper		Experimental work	
Written exam	x	Oral exam	x	Essay		Research	

Project		Continuous assessment		Paper		Practical work	
Portfolio							
Assessment and evaluation of students during class and on the final exam							
Students' performance will be evaluated during class and on the final exam. Students are evaluated numerically and descriptively (insufficient (1), sufficient (2), good (3), very good (4), excellent (5)). During classes, a student can earn a maximum of 100 points. Students can earn a maximum of 20 points during classes through different types of activities. On the final exam, students can earn a maximum of 80 points. The final grade represents the sum of the points earned during classes and on the final exam.							
Mandatory reading							
1. Sitzer M, Steinmetz H. Lehrbuch Neurologie. Elsevier,Urban&FischerVerlag; 2011 2. Schnorpfeil F, Reuter W. Neurologische Untersuchung. Elsevier,Urban&FischerVerlag; 2010							
Additional reading							
The number of copies of mandatory reading in proportion to the number of students currently taking this course							
<i>Title</i>		<i>Number of copies</i>				<i>Number of students</i>	
1. Sitzer M, Steinmetz H. Lehrbuch Neurologie. Elsevier,Urban&FischerVerlag; 2011 2. Schnorpfeil F, Reuter W. Neurologische Untersuchung. Elsevier,Urban&FischerVerlag; 2010		A purchased license for online textbooks shall be used https://bfdproxy48.bfd-online.de/login.htm?back=http%3a%2f%2fpartner.bfd-online.info.bfdproxy48.bfd-online.de%2fameos%2fbfdAboGateway%3fabold%3d264117 Access will be granted to all students enrolled in the study program					
Quality monitoring methods ensuring the acquisition of knowledge upon completion, skills and competences							
The quality of course performance is monitored through an anonymous student survey on the quality of the organization and conduction of classes, the course content and the work of professors. The usefulness of the lectures from the students' perspective, the curriculum content, the professor preparedness, the clarity of the presentation, the amount of new content and the quality of the presentation are evaluated. The curriculum and its execution are administratively compared. The participation of students in lectures and exercises, as well as the excuses for missing classes, are controlled and analyzed.							