Attachment No. 3		Course program of the first cycle of studies				
1.	Course title	Neurology				
2.	Code	DMMNR3				
3.	Study program	Dentistry - integrated first and second cycle of studies				
4.	Organizer of the study program (unit, i.e., institute, department, division)	University "Ss. Cyril and Methodius" in Skopje, Faculty of Medicine – Skopje, Department of Neurology				
5.	Degree (first, second, third cycle)	Integrated First and Second Cycle Studies				
6.	Academic year/semester	Year	3	Semester	6	
7	Course workload expressed in ECTS credits	2				
8.	Teacher	Prof. Dr. Natalia Dolnenec-Baneva				
9.	Language in which the curriculum is conducted	English				
10.	Necessary prerequisites for taking and passing the course	Completed all compulsory subjects from the second year and passed all compulsory subjects from the first year				
11.	Course objectives (competences) and learning outcomes:	The student should understand and gain knowledge about the anatomical, biochemical, and physiological processes/mechanisms of neuronal tissue of the central and peripheral nervous system, i.e., about the pathophysiological, structural, and genetic disorders of neurological diseases. The student should understand and gain knowledge about the general principles of clinical neurology (recognition - clinical picture, diagnostic methods, procedures, prevention, and treatment). Expected learning outcomes: basic and advanced (depending on the entity) theoretical knowledge about neurological morbidities and practical skills in the approach and examination of a patient with a neurological disease.				
12.	Detailed course content by chapters and units with learning outcomes for each chapter	Theoretical teaching-lectures 1. Cranial Nerves..... 2 classes - Anatomy, Physiology, Pathology of Cranial Nerves (I, II, III, IV, V, VI, and VII) - Anatomy, Physiology, Pathology of Cranial Nerves (VIII, IX, X, XI, and XII) 2. Cerebrovascular Diseases..... 2 classes - Ischemic Cerebrovascular Stroke: Cerebral Arterial and Venous Thrombosis/Embolism, Transient Ischemic Attack. - Hemorrhagic cerebrovascular stroke: intracerebral hemorrhage, subarachnoid hemorrhage 3. Inflammatory diseases of the brain.....2 classes - Encephalitis: acute viral and bacterial encephalitis - Subacute sclerosing encephalitis 4. Autoimmune diseases of the central and peripheral nervous system..... 2 classes				

		- Multiple sclerosis - Devic's disease - Myasthenia gravis - Polymyositis - Guillain-Barre disease and SIDP 5. Epilepsy ..... 1 class 6. Headaches ..... 1 class - Primary (migraine, cluster headache) - Secondary/symptomatic and facial pain - Pain syndromes 7. Neuropathies 8. Diseases of the extrapyramidal system ..... 1 class - Parkinson's disease (primary/secondary parkinsonism) - Wilson's disease - Chorea minor 9. Myopathies ..... 1 class 10. Expansive diseases of the cerebrum and spinal cord (benign and malignant) ...1 class 11. Diseases and trauma of the peripheral nervous system 1 class - spinal roots, - plexuses - nerves 12. Diseases of the cerebellum ..... 1 class - Expansive disorders - Ataxias - vascular diseases - inflammatory disorders Results from chapters, theoretical teaching – lectures The student should understand and gain knowledge about the anatomical, biochemical and physiological processes/mechanisms of neuronal tissue from the central and peripheral nervous systems; on the pathophysiological, etiological and risk factors, structural and genetic disorders of neurological diseases, i.e. on the general principles of clinical neurology (recognition-clinical picture, diagnostic methods, procedures, prevention and treatment) of: 1. Cranial nerves 2. Cerebrovascular diseases 3. Inflammatory diseases of the cerebrum 4. Autoimmune diseases of the central and peripheral nervous system 5. Epilepsies 6. Headaches 7. Neuropathies 8. Diseases of the extrapyramidal system 9. Myopathies 10. Expansive diseases of the cerebrum and spinal cord 11. Diseases and trauma of the peripheral nervous system 12. Diseases of the cerebellum Total: ..... 15 classes Practical teaching-exercises - From the first chapter ..... 2 classes - From the second chapter .....1 class - From the third chapter .....1 class - From the fourth and fifth chapters .....1 class - From the sixth and seventh chapters ..... 1 class - From the eighth chapter .....1 class - From the ninth and eleventh chapters .....1 class - From the tenth chapter ..... 1 class - From the twelfth chapter .....1 class - Anamnesis (interrogation) of a neurological patient ..... 1 class - Techniques of neurological status (cranial nerves) .....2 classes -Techniques of neurological status (motility, reflexes) .....1 class

		- Techniques of neurological status (sensitivity, meningeal signs, sphincters, vegetative nervous system) .....1 class Total: ..... 15 classes			
13	Interrelation of subjects	With the subjects: psychiatry, neurosurgery, maxillofacial surgery, neuroradiology, internal medicine, physical and rehabilitation medicine, ophthalmology, otorhinolaryngology, oncology			
14.	Detailed description of the teaching and working methods for the subject	Interactive teaching, Presenting cases of patients with various neurological diseases, Exercises (clinical) group and individual performance of the techniques of neurological examination of a patient with a neurological disease. Interpreting findings from laboratory, neurophysiological, and neuroimaging methods. Independent and group approach to a neurological patient.			
15.	Total available time	60 classes			
16.	Forms of teaching activities	16.1.	Lectures - theoretical teaching. classes	15	
		16.2.	Exercises (laboratory, lecture), seminars, teamwork: classes	15	
		16.3.	Practice: classes		
17.	Other forms of activities	17.1.	Project assignments: classes		
		17.2.	Independent assignments: classes		
		17.3.	Home study - assignments	30	
18	Signature requirements	Attendance at lectures (absence of up to 2 lectures) and completed exercises (absence from up to 2 exercises)			
19	Method of assessment				
	19.1.	Tests: points			
	19.2.	Seminar paper/project, written and oral presentation: points	/		
	19.3.	Final exam: points			
20	Grading criteria (points/grade)	from 59 points	5 (five) (F)		
		60 to 68 points	6 (six) (E)		
		69 to 76 points	7 (seven) (D)		
		from 77 to 84 points	8 (eight) (C)		
		from 85 to 92 points	9 (nine) (B)		
		from 93 to 100 points	10 (ten) (A)		
21.	Method of monitoring the quality of teaching	Self-evaluation by students, control of assistants in carrying out practical teaching and assessment of the students' success, as well as the pass rate of students who have passed the course			
22.	Literature				
		Required literature			
		Ord. No.	Author	Title	Publisher	Year
	22.1.	1.	Vera Petrva (editor) and a group of Authors	Basic principles of modern neurology	Skopje: Prosvetno Delo	2002
		2.	Prof. d-r Borivoje Radojičić	Clinical neurology, 15 revised and updated edition	Belgrade, Elit-Medica Translated edition in Macedonian, edited by Prof. Dr. Ilija Djonov, Skopje: Kultura	2003 Published in Macedonian language 2006

		3.	Roger Simon, David Greenberg, Michael Aminoff	Clinical Neurology	McGraw-Hill Professional; 7 Edition Translated edition in Macedonian; project 1000 Books Skopje: Ars Lamina DOO	2009 Published in Macedonian language 2011
	22.2.	Additional literature				
		Ord. No.	Author	Title	Publisher	Year
		1.	Allan Ropper, Martin Samuels	Adams and Victor's Principles of Neurology	McGraw-Hill Professional; 8 Edition Translated edition in Macedonian; project 1000 Books Skopje: Magor	2009 Published in Macedonian language 2013