



DISCIPLINE SHEET

1. Data about the programme

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY
1.2.	FACULTY OF MEDICINE
1.3.	DEPARTMENT: THE 6th CLINICAL DEPARTMENT - CLINICAL NEUROSCIENCES
1.4.	DISCIPLINE : NEUROLOGY
1.5.	DOMAIN OF STUDY: HEALTH – Sectorally regulated within the European Union
1.6.	STUDY CYCLE: LICENCE
1.7.	STUDY PROGRAME: MEDICINE – ENGLISH MODULE

2. Data about discipline

2.1.	Name of the discipline in the educational plan: NEUROLOGY				
2.2.	Discipline code: DS V 5M				
2.3.	Discipline type (FD/SD/CD): SD				
2.4.	Discipline regimen (DOB/MD/OPD/): DOB				
2.5.	The holder of the course activities:				
2.6.	The holder of the seminar activities :				
2.7. Year of study	V	2.8. Semester	IX -X	2.9. Type of evaluation (E/C)	E

3. Total estimated time (hours/semester of didactic activity and self preparation/study)

I. Academic training (teaching, practical application, assessment)						
3.1 Number of hours per week	25	Out of which:	3.2 course	10	3.3 Clinical seminar	15
3.4 Total number of hours from curriculum	105	Out of which:	3.5 course	42	3.6 Clinical seminar	63
Evaluation (nr of hours): 3 h/student (practical exam and written exam)						
II. Self preparation/study						
Time allocation						hours
Study of course materials, textbooks, books, study of the recommended minimal bibliography						46
Additional research in the library, research trough the internet						23
Performing specific activities for preparing projects, laboratories, elaborating reviews or other tasks						11
Specific preparation activities for projects, laboratory work, assignments and reports						23
Tutoring						11
Other activities						11
3.7. Total hours of individual studying						125
3.9 Total hours/semester (3.4 + 3.7)						238

3.10. Number of credits	7
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4. Preconditions (where applicable)

4.1. of curriculum	Not applicable
4.2. of competences	Not applicable

5. Conditions (where applicable)

5.1. to conduct the lecture	A room technically equipped for this purpose (PC, video projector, magnetic board)
5.2. to conduct the seminar / laboratory	A clinical department that allows patient examinations, case presentations, and demonstrations

6. Learning outcomes

Knowledge	Skills	Responsibility and autonomy
Description of concepts, theories and fundamental notions regarding the mechanisms of diseases, the signs and symptoms characteristic for each disease, useful for clinical diagnosis in neurology	The correct diagnosis of neurological syndromes, of neurological diseases with increased incidence and prevalence in the general population and of medical emergencies (due to the risk of death and major disability)	The capacity to identify the main neurological signs and symptoms, especially in case of neurological emergencies.
The description of the mechanisms of action of the main drugs used in neurological conditions, their indications and contraindications, adverse effects and therapeutic resources used in medical practice, as well as the identification of basic life support maneuvers in first aid or emergency conditions in neurology	The correct assessment of the risk of acquiring a disease or the context of the occurrence of an individual/collective illness, followed by the choice and application of appropriate preventive measures	The correct management of neurological emergencies in the pre-hospital phase, including addressing them to the nearest neurology department able to provide competent specialized assistance
Identifying the objectives to be achieved, the available resources, the conditions for their completion, work stages, working times, related deadlines and related risks in various neurological pathologies	Identifying the roles and responsibilities in a multidisciplinary team, applying effective work techniques within a team and in direct relationship with the neurological patient	The efficient use of information resources and communication resources and assisted professional training (internet portals, specialized software applications, databases, online courses, etc.) both in Romanian and in an international language

7. Course objectives (aligned with the learning outcomes)

7.1. General objective	Identifying the state of the disease, the degree of medical emergency, as well as establishing the correct diagnosis of the neurological condition(s). Cultivating the principles of medical ethics in neurology
7.2. Specific objective	Conception and application of a therapeutic plan suitable for the identified neurological condition Establishing solid and effective communication relationships between doctor and patient, developing doctor-patient, doctor-patient's family or relatives relationship

8. Contents

8.1. Lecture	Teaching methods	Observations
	The courses are held in a room technically equipped for this purpose (PC, video projector, magnetic board). The courses have electronic support.	The courses are updated in terms of information, according to textbooks, national and international practice guidelines, specialized journals, books edited by the teaching staff of the discipline as well as new data on specialized websites.
Course 1: Notions of neurobiology and the functional organization of the nervous system. Motility. Upper motor neuron syndrome		2 h
Course 2: Lower motor neuron syndrome		2 h
Course 3: Basal ganglia - anatomy and physiopathology. Parkinsonian syndrome and involuntary movements		2 h
Course 4: Parkinson's disease and parkinsonian syndromes		2 h
Course 5: Choreic syndromes. Wilson's disease, Huntington's disease and dystonias		2 h
Course 6: The cerebellum and coordination		2 h
Course 7: Somesthetic sensitivity. Nociceptive and neuropathic pain		2 h
Course 8: Cranial nerves I-VI – anatomy, clinical syndromes		2 h
Course 9: Cranial nerves: VII-XII – anatomy, clinical syndromes		2 h
Course 10: Consciousness in normal and pathological conditions (sleep, coma, brain death)		2 h
Course 11: Cortical syndromes: aphasia, apraxia, agnosia, memory disorders		2 h
Course 12: Vascular system of the brain. Ischemic stroke		2 h
Course 13: Cerebral and subarachnoid hemorrhage		2 h
Course 14: Cerebral venous thrombosis. Spinal vascular disease		2 h
Course 15: Primary and secondary headaches		2 h
Course 16: Neurocognitive disorders		2 h
Course 17: Epileptic seizures and adult epilepsy		2 h
Course 18: Neuroinfections		2 h

Course 19: Multiple sclerosis and other demyelinating diseases		2 h
Course 20: Peripheral nerve disorders		2 h
Course 21: Muscular and neuromuscular junction diseases		2 h
Recent Bibliography - Harrison's Principles of Internal Medicine (Neurologic Disorders) – any edition starting with the XVIIth - Adam Feather, David Randall, Mona Waterhouse: "Kumar și Clark Clinical Medicine" 10th Edition, Romanian, Hipocrate Publishing House, Bucharest, 2021, 26th chapter Neurology - Geraint Fuller – "Clinical Neurological Examination", Callisto Publishing, 2007		
8.2. Laboratory/ practical lesson	Teaching methods	Observations
	<i>Demonstration and coordination of the acquisition of neurological clinical examination skills.</i>	<i>The teaching methods are aimed at getting familiar with the neurological patient, knowing the ethical principles and communication techniques with the patient and his family, knowing the specific methods of diagnosis and treatment, interpreting the results of imaging and laboratory examinations specific to neurological pathology.</i> <i>Presentations of clinical cases daily, with different degrees of difficulty, in accordance with the study program</i> <i>Encouraging interactive discussions and the active participation of students based on the presented clinical cases, diagnostic algorithms and treatment plans for neurological conditions</i>
1. Anamnesis. Particular clinical attitudes		3h
2. Diagnosis of meningeal syndrome		3h
3. Motor examination		3h
4. Examination of sensibility		3h
5. Cranial Nerves Examination		3h
6. Spinal nerves examination		3h
7. Autonomic nervous system examination		3h
8. Language examination Praxia and gnosia examination		3h
9. Minimal neuropsychological examination		3h

10. Consciousness state examination		3h
11. Examination of patients in status of coma		3h
12. Examination of stroke patients (TIA, ischemic or haemorrhagic stroke, venous)		3h
13. Examination of patients with epilepsy		3h
14. Examination of patients with Parkinson's disease and other parkinsonian syndromes		3h
15. Examination of patients with chorea		3h
16. Examination of patients with ataxia		3h
17. Examination of patients with acute and chronic peripheral neuropathies		3h
18. Examination of patients with muscular disorders		3h
19. Examination of patients with multiple sclerosis		3h
20. Examination of patients with medullary syndromes		3h
21. Examination of patients with brain tumors		3h
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9. Evaluation

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage in the final grade
9.4. Lecture	The level of acquired knowledge of diagnosis and treatment of neurological disorders	Written exam with 15 questions with open answers, from the displayed topic: - 10 from general and adult neurology (68%) - 4 from pediatric neurology (26%) - 1 from neurosurgery (6%)	80%
9.5. Seminary/ practical activity	- Involvement in the daily activity at the bedside - Involvement in case presentations and interactive discussions	Practical exam consisting in - performing neurological diagnostic maneuvers and their interpretation	Clinical/practical examination: 20% Obs.: the practical exam takes place before the written exam and is eliminatory

	- Neurological examination skills - Seminars attendance		
9.5.1. Individual project (if applicable)	-	-	-
9.6. Minimum performance standard			
The pass grade is 5 for each of the assessment methods (written test and practical exam). The final mark is established based on the evaluation criteria taken into account in a weighted manner with the ratio of 20%, (general neurology practical exam), 80% (written exam) and for passing must be at least 5. The general neurology practical exam is graded from 1 to 10 and is an eliminatory test, the minimum passing grade being 5 (a grade below 5 in this test does not allow the student to take the written exam). The grade for the practical exam also takes into account the degree of involvement and participation of the student in the didactic activity throughout the internship. The pediatric neurology practical exam is a graded test (admitted / rejected) and is eliminatory, (the grade rejected in this test does not allow the student to take the written exam) Students who do not meet the UMFCF criteria related to attendance at the internship are not accepted for the practical exam			

Date of completion : **Signature of
the course holder**

**Signature of the
laboratory holder**

**Date of approval by
the Department
Council:**

Signature of the Department Director

