



## DISCIPLINE SHEET

### 1. Study programme

1.1.	"CAROL DAVILA" UNIVERSITY OF MEDICINE AND PHARMACY BUCHAREST				
1.2.	FACULTY OF DENTISTRY				
1.3.	DEPARTMENT III				
1.3.	DISCIPLINE : ORAL AND DENTAL CONDITIONS IN PATIENTS WITH NEUROLOGICAL DISEASES				
1.4.	STUDY DOMAIN: Health, sectoral regulated within the European Union				
1.5.	STUDY LEVEL: I (Bachelor's degree) and II (Master's degree)				
1.6.	STUDY PROGRAMME: DENTAL MEDICINE IN ENGLISH				

### 2. Discipline

2.1.	Discipline name according to the study curriculum: ORAL AND DENTAL CONDITIONS IN PATIENTS WITH NEUROLOGICAL DISEASES				
2.2.	Discipline code:: MD04OP18E				
2.3.	Discipline type (DF/DS/DC):NU ESTE CAZUL				
2.4.	Discipline optionality (DOB/DOP/DFA): DOP				
2.5.	Lectures tenure : PROF DR OCTAVIANA ADRIANA DULAMEA				
2.6.	Practical classes / seminar tenure: dr. Daniela Anghel				
2.7. Year of study	IV	2.8. Semestrul	VIII	2.9. Tipul de evaluare (E/C/V)	C

### 3. Estimated total time (hours/ semester of teaching and training activity /individual study)

I. University training						
3.1. Number of hours per week	2	from which:	3.2. lecture	1	3.3. practical class/ seminar	1
3.4. Total hours in the study curriculum	28	from which:	3.5. lecture	14	3.6. practical class/ seminar	14
II. Preparation/ individual study						
Time distribution						hours
Study of lecture materials, textbooks, books, study of the minimum recommended bibliography						8
Additional documentation activity in the library, on online platforms						6
Specific preparation activities for projects, practical classes, preparation of assignments, reports						2
Preparation for presentations or evaluations, preparation for the final examination						4
Tutoring activity						4
Other activities						4
3.7. Total hours of individual study						32

<b>3.8. Total hours per semester (3.4.+3.7.)</b>	<b>60</b>
<b>3.9. Number of credits</b>	<b>2</b>

#### 4. Prerequisites (where appropriate)

<b>4.1. curriculum</b>	
<b>4.2. proficiencies</b>	

#### 5. Conditions (where appropriate)

<b>5.1. for lecture activity</b>	Classroom equipped with video projector, projection screen, and PC.
<b>5.2. for practical class/ seminar activity</b>	Practical work room equipped with television, laptop, and wards from the Neurology Clinic IC Fundeni with 1–6 beds.

#### 6. Learning outcomes\*

<b>Knowledge</b>	<b>Skills</b>	<b>Responsibility and autonomy</b>
The student describes, analyzes, and evaluates the etiopathogenic mechanisms, risk factors, clinical and paraclinical manifestations, as well as the principles of diagnosis and treatment specific to neurological disorders, with particularities relevant to dentistry/dental medicine.	The student demonstrates, interprets, and correctly uses clinical and paraclinical methods and techniques for the diagnosis and assessment of neurological and mental health disorders.	The student plans, integrates, and coordinates, under appropriate supervision, specific interventions for patients with neurological disorders.

#### 7. Discipline objectives (correlated with learning outcomes)

<b>7.1. General objective</b>	The acquisition of knowledge related to oral and dental manifestations of neurological diseases
<b>7.2. Specific objectives</b>	Management of patients with neurological diseases from the point of view of dental medicine

#### 8. Contents

<b>8.1. Lecture</b>	<b>Teaching methods</b>	<b>Observations</b>
<b>Course 1.</b> Factors and medications that influence salivary flow. Dental and oral cavity conditions in patients	PowerPoint presentation that includes videos or images of patients with the pathology described in the lecture, as well	The cases presented are either from the pathology of the Neurology Clinic IC Fundeni with the patients' consent, or

<p>with epilepsy, adverse effects of antiepileptic treatment with consequences in dental practice, dental management of the epileptic patient.</p>	<p>as imaging neurophysiological investigations and neurocognitive assessment</p>	<p>or and from the specialized bibliography.</p>
<p><b>Course 2.</b> Alterations of the oral microbiome in patients with neurological diseases. The relationship between periodontal disease and stroke; dental management of the patient with stroke.</p>		<p>The cases presented are either from the pathology of the Neurology Clinic IC Fundeni with the patients' consent, or from the specialized bibliography.</p>
<p><b>Course 3.</b> Oral and dental manifestations in Parkinson's disease (PD); adverse effects of antiparkinsonian medication; dental management of the patient with advanced PD; oral rehabilitation. Orofacial involuntary movements – diagnosis, treatment, dental management.</p>		<p>The cases presented are either from the pathology of the Neurology Clinic IC Fundeni with the patients' consent, or from the specialized bibliography.</p>
<p><b>Course 4.</b> Oro-dental conditions in patients with myasthenia gravis (MG); adverse effects of MG-specific therapy with impact on dental management. Systemic autoimmune diseases with neurological and orofacial manifestations – clinical signs, diagnosis, therapy, dental management before and after initiation of treatment..</p>		<p>The cases presented are either from the pathology of the Neurology Clinic IC Fundeni with the patients' consent, or from the specialized bibliography.</p>
<p><b>Course 5.</b> Orofacial clinical manifestations in multiple sclerosis (MS); immunomodulatory and symptomatic treatment in MS with impact on dental management, recommendations. Orofacial neoplasms with neurological manifestations – diagnosis, therapy, and patient management.</p>		<p>The cases presented are either from the pathology of the Neurology Clinic IC Fundeni with the patients' consent, or from the specialized bibliography.</p>
<p><b>Course 6.</b> The impact of cranial nerve palsies on dental management. Craniofacial pain – diagnosis, etiology, therapeutic recommendations, and impact on dental management.</p>		<p>The cases presented are either from the pathology of the Neurology Clinic IC Fundeni with the patients' consent, or from the specialized bibliography.</p>

<b>Course 7.</b> Dementia – clinical signs, therapy, and recommendations for dental management of the patient with dementia. Dental management of patients with metabolic diseases affecting the brain.		The cases presented are either from the pathology of the Neurology Clinic IC Fundeni with the patients' consent, or from the specialized bibliography.
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**Recent bibliography:**

- 1. Neurological diseases. Implications in medical and dental practices.** First Edition Armin Ariana. Ed.Thieme. 2019
- 2. Neuroscience for dentistry.** Laura Barritt. Ed Thieme. 2022
- 3. Fundamentals of neurology,** M. Mumenthaler, H. Mattle, E. Taub, Thieme, 2nd Edition, 2017
- 4. Adam's and Victor's Principles of neurology,** A.H. Ropper, R.H. Brown., McGraw-Hill Professional; 12th Edition, 2023.
- 5. Continuum. Lifelong learning in neurology**

<b>8.2. Practical classes/ seminar</b>	<b>Teaching methods</b>	<b>Observations</b>
Practical class 1: Oral and Dental Adverse Effects of Antiepileptic Treatment and Dental Management of Patients with Epilepsy	Presentation of methods for examining the cranial nerves and diagnosing cranial nerve pathologies, along with illustrative clinical case presentations at the patient's bedside, interactive discussions, and PowerPoint presentations illustrating neurological examination methods and clinical cases.	The cases presented are either from the pathology of the Neurology Clinic at IC Fundeni with patient consent, or from specialized bibliography.
Practical class 2: Dental Management of Patients with Cerebrovascular Disease		The cases presented are either from the pathology of the Neurology Clinic at IC Fundeni with patient consent, or from specialized bibliography.
Practical class 3: Dental Management of Patients with Parkinson's Disease and Other Movement Disorders		The cases presented are either from the pathology of the Neurology Clinic at IC Fundeni with patient consent, or from specialized bibliography.
Practical class 4: Dental Management of Patients with Myasthenia Gravis and Peripheral Nervous System Disorders		The cases presented are either from the pathology of the Neurology Clinic at IC Fundeni with patient consent, or from specialized bibliography.
Practical class 5: Dental Management of Patients with Multiple Sclerosis and Other Demyelinating Diseases		The cases presented are either from the pathology of the Neurology Clinic at IC Fundeni with patient consent, or from specialized bibliography.
Practical class 6: The Impact of Cranial Nerve Palsies on Dental Management		The cases presented are either from the pathology of the Neurology Clinic at IC Fundeni with patient consent, or from specialized bibliography.

Practical class 7: Dental Management of Patients with Dementia and Metabolic Diseases Affecting the Nervous System		The cases presented are either from the pathology of the Neurology Clinic at IC Fundeni with patient consent, or from specialized bibliography.
<b>Recent bibliography:</b>		
<ol style="list-style-type: none"> <li>1. <b>Neurological diseases. Implications in medical and dental practices.</b> First Edition Armin Ariana. Ed.Thieme. 2019</li> <li>2. <b>Neuroscience for dentistry.</b> Laura Barritt. Ed Thieme. 2022</li> <li>3. <b>Fundamentals of neurology,</b> M. Mumenthaler, H. Mattle, E. Taub, Thieme, 2nd Edition, 2017</li> <li>4. <b>Adam's and Victor's Principles of neurology,</b> A.H. Ropper, R.H. Brown., McGraw-Hill Professional; 12th Edition, 2023.</li> <li>5. <b>Continuum. Lifelong learning in neurology</b></li> </ol>		

## 9. Assessment

Activity type	9.1. Evaluation criteria	9.2. Evaluation methods	9.3. Percentage of final grade
<b>9.4. Lecture</b>	Assessment of Knowledge Acquired Regarding the Dental Management of Patients with Neurological Conditions and the Oral-Dental Adverse Effects of Neurological Therapies	Colloquium	75%
<b>9.5. Practical classes/seminar</b>	Assessment of knowledge related to neurological examination with implications in dental practice	Practical Oral Exam Assessing Knowledge of Clinical Examination of Neurological Patients	25%
<b>9.5.1. Individual project (if any)</b>			
<b>Minimum performance standard</b>			
<b>To pass the exam, a minimum final grade of 5 (five) is required in both the final theoretical exam and the final practical exam, which corresponds to basic knowledge of the dental management of patients with central and peripheral nervous system disorders.</b>			