

**DEN4003 Clinical Medical Sciences in Dentistry-IV**
**(Neurology, Psychiatry, Otorhinolaryngology, Ophthalmology)**

Course title	Code	Semester	Type of course	Course structure and volume (hours)			ECTS
Clinical Medical Sciences in Dentistry IV (Neurology, psychiatry, otorhinolaryngology, ophthalmology)	DEN4003	VII	Mandatory	LECTURE	35	120	4
				Seminar	12		
				Teaching in Stimulatory environment (TSE)			
				Teaching in Clinical Environment (TCE)	12		
				Midterm EX.	1		
				FINAL EX.	2		
				INDEP. WORK	58		
Faculty, the educational program and level of education	School of Dental Medicine One cycle (5-years duration) Higher Educational program “Dentistry”						
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Duration	14 weeks						
Prerequisite	MED1006						
Aim	The aim of the course is to give comprehensive knowledge of clinical neurologic, psychiatric, otorhinolaryngologic, and ophthalmologic diseases, and teach diagnostic and treatment methods. In addition to teaching the students main and dental approach to the patients with psychiatric, neurologic, otorhinolaryngologic, and ophthalmologic diseases.						
Methods of Teaching/Learning	Interactive lectures, Seminars, TSE, TCE						

<b>Assessment System and Criteria</b>	<p><b>Attendance - student is obliged to attend 70% of the total number of the learning course</b></p> <p>The knowledge of the student is evaluated by 100 point-based evaluation system out of which 40 points is allocated for the current activity assessment, 20 for each midterm exam and 40 points for the final exam.</p> <p><b>1. Current activity assessment - 40 points, including the following:</b></p> <ul style="list-style-type: none"> <li>• CBD - 2x10=20 points;</li> <li>• Mini-CEX 2x5= 10 points;</li> <li>• DOPS – 2X5=10 points;</li> </ul> <p><b>Case Based Discussion (CBD) – 10 points</b></p> <p>Students will discuss cases in front of the lecturer. Each case will be evaluated with a maximum 10 points. There is 5 assessment components for each case:</p> <p><b>1. Defines the problem- 2 points</b>  What are the issues raised in this case?  What are the pathological processes?  What problems are you trying to resolve?</p> <p><b>2. Integrates information - 2 points</b>  What relevant information you have?  How will the data/information/evidence you have will help you to make your decision?  How did you use the data/information/evidence available to you in this case?  What other information could have been useful?</p> <p><b>3. Prioritizes options of diagnostic methods - 2 points</b>  What are your options? Which did you choose?  Why did you choose this particular one?  What are the advantages/disadvantages of your decision?  How do you balance them?</p> <p><b>4. Justifies decision of treatment - 2 points</b>  How do you justify your decision?  What are the implications of your decision?  What evidence/information have you to support your choice?  Can you give an example? Can you apply it to this case?</p> <p><b>5. Upholds duties of a doctor - 2 points</b>  What ethical framework did you refer to in this case? How did you apply it?  How did you establish the patient's point of view?  What are your responsibilities/duties? How do they apply to this case?  How did you make sure you observed them? Why are they important?</p> <p><b>Evaluation criteria for each five components:</b>  2 points – in full compliance  1 point – partially compliant  0 points – non compliant</p>
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### Directly Observed Procedural Skills (DOPS) assessment criteria - 5 points

Student will perform following practical assignments on the manikin:

Assessed Competencies	Poor (0 points)	Fair (0.5 points)	Competent (1 point)
Preparation/aftercare/safety	?	?	?
Technical expertise	?	?	?
Clinical Reasoning/Judgement	?	?	?
Organization and efficiency/time management	?	?	?
Professional conduct	?	?	?
<b>Total score:</b>			
	Low	Medium	High

### Mini clinical evaluation exercise (Mini-CEXs) 5 points

Exercise will be performed in a clinical environment (simulation or bed side) in the process of a student's individual work with a patient. Each exercise will be evaluated with 5 criteria, maximum 1 point for each.

Good - 1 point,  
Satisfactory - 0.5 Points,  
Unsatisfactory - 0 points,

#### 1. Medical Interviewing Skills (score 1)

- Encourages the patient to communicate about his medical history;
- Sets appropriate questions to obtain information;
- Responds appropriately to emotion and non-verbal signals.

#### 2. Physical Examination Skills (score 1)

- Maintains a logical and efficient sequence;
- Maintains a balance between general and hypothetical focused research;
- Informs the patient;
- Shows sensitivity to the patient's comfort and modesty.

#### 3. Professional Qualities (score 1)

- Shows respect, commitment, empathy, and generates confidence;
- Responds adequately to discomfort and embarrassment;
- Responds appropriately to the need for privacy and information.

#### 4. Problem analysis, clinical reasoning (score1)

- Uses appropriately and selectively diagnostic procedures;
- Considers properly risks and profit.

#### 5. Communication with the patient (score 1)

- Explains in understandable terms for the patient indications for examination and treatment;
- Asks for informed consent where necessary;
- Discusses the policy;
- Provides information in accordance with the law on patients' rights.
- Informs patient regarding disease prevention and healthy lifestyle.

### 2. Midterm Exams - 20 points;

The exam is conducted in test form (MCQ. Max score 0.5) form. Number of questions are 80. The highest possible score is 20.

#### Prerequisites for Final Exam are:

- Prerequisite for Final Exam is the situation when at least 50 % of the Mini-CEXs and DOPS scores are achieved.
- 70% of learning course hours should be attended.

### 3. Final Exam - 40 points

Final Exam is conducted in a combined form:

MCQ- 50 questions (One question- max score 0.4), totally 20 points.

Written form -5 Clinical Cases each scored at maximum 4 points. Totally 20 points.

#### Final Exam Case analysis (written assignment) (4 points)

Students will discuss/analyze clinical case according to study materials individually in written manner.

Points Grading Scale

- 4 interpretation of examination results are correct, diagnosis is defined correctly, is evidence based, knows etiology, pathogenesis, clinical flow, treatment plan is defined correctly;
- 3 interpretation of examination results are correct, diagnosis is defined correctly, is evidence based, knows etiology, pathogenesis, clinical flow, treatment plan is not correct;
- 2 interpretation of examination results are correct, diagnosis is defined correctly, is evidence based, does not know etiology, pathogenesis, clinical flow, treatment plan is not correct;
- 1 interpretation of examination results are correct, diagnosis is incorrect, treatment plan is not correct;
- 0 Interpretation of examination results are incorrect, diagnosis is incorrect, and treatment plan is incorrect.

The exam is considered being passed by the student if he/she receives **50% or more** out of the highest evaluation for the exam ( $55 \times 50 / 100 = 22$  points). When the total evaluation of the student (current evaluation + midterm exam evaluation + final exam evaluation) is more that 40 but less than 51 points, even though the exam grade threshold is passed, the learning course is considered not being covered and the student is given the right to exam retake during the additional examination period.

	<p>If the final evaluation for the Learning Course, after taking the additional exam, (current evaluation + midterm exam evaluation + final exam evaluation) is less than 51%, the learning course is not considered covered and it must be taken again.</p> <p>In summary, the student is awarded the credit in case he/she accumulates minimum 51% out of 100%. Within the educational component of the educational program, in case of FX assessment, a makeup exam is appointed no later than 5 days after announcement of the examination results.</p> <p><b>Positive scores:</b></p> <ul style="list-style-type: none"> <li>• (A) Excellent- 91 or more points;</li> <li>• (B) Very Good- 81-90 points;</li> <li>• (C) Good- 71-80 points;</li> <li>• (D) Satisfactory- 61-70 points;</li> <li>• (E) Enough- 51-60 points;</li> </ul> <p><b>Negative scores:</b></p> <ul style="list-style-type: none"> <li>• (FX) Failure - 41-50 points: the student needs more independent work and is granted a single attempt of exam retake;</li> <li>• (F) Fail - 40 points or less: the student's conducted work is not sufficient and needs to take the course again.</li> </ul> <p>The student can take the additional exam during the same semester.</p> <p>After the results of final exams are available, students with FX assessment have a right to retake an exam during an additional exam week in the same semester.</p> <p>An interval between a final and a corresponding additional exam must be at least 5 days after the results of a final exam become available.</p>
<b>The core literature</b>	<ul style="list-style-type: none"> <li>• <b>Harrison's Principles of Internal Medicine</b> vol--2 Dennis L.Kasper;Stephan L.Hauser; McGraw Hill Education; 19th ed; 2015;</li> <li>• <b>Harrison's Principles of Internal Medicine vol-1-</b> Dennis L.Kasper;Stephan L.Hauser; McGraw Hill Education; 18th ed; 2015;</li> </ul>
<b>The auxiliary literature</b>	<ul style="list-style-type: none"> <li>• Psychiatry / edited by Allan Tasman [four others]. Wiley Blackwell, 2015</li> <li>• Neurology. Burneo, Jorge G. 2012.</li> <li>• Ophthalmology. Lang, Gerhard K. Stuttgart; New York: Georg Thieme Verlag, 2007.</li> <li>• <b>Basic Otorhinolaryngology: a step-by-step learning guide / Rudolf Probst, Gerhard Grevers, Heinrich Iro ; with contributions by Frank Rosanowski, Ulrich Eysholdt, Frank Waldfahrer. Stuttgart ; New York : Thieme, [2018]</b></li> <li>• <b>Scully, Crispian. Scully's medical problems in dentistry. 7th ed. Edinburgh. Elsevier, 2014</b></li> </ul>

**Learning Outcomes**

<b>NQF *</b>	<b>COURSE LEARNING OUTCOMES</b>	<b>PROG. LO</b>	<b>Lecture</b>	<b>Seminar</b>	<b>Teaching in simulation environment</b>	<b>Teaching in clinical environment</b>	<b>Mid term ex.</b>	<b>Final exam</b>	<b>ASSES. METH.</b>
<b>KNOWLEDGE AND AWARENESS</b>	<p>The student:</p> <ul style="list-style-type: none"> <li>Comprehends clinical aspects of neurologic, psychiatric, otorhinolaryngologic and ophthalmologic disorders;</li> <li>Understands main treatment methods in it;</li> <li>Defines the disorders of mental health, neurologic disorders, eye and ear diseases and approach to dental patients with above mentioned disorders.</li> <li>Discusses the differential diagnoses for different types of peripheral nervous system disorders;</li> <li>Properly analyzes and perceives patient complaints, genetic and social history . Can complete patient history.</li> <li>Acknowledges own limits and demonstrates critical self-assessment skills and as a result understands when to seek help or advice. Correctly sets the limits of one's own capabilities.</li> </ul>	<b>8.1</b> <b>9.1</b> <b>4.1</b>	X	X		X	X	X	MCQs, CBD. Clinical Case Mini-Cex
<b>SKILL</b>	<ul style="list-style-type: none"> <li>Interprets results of instrumental and laboratory diagnostic methods used in above mentioned diseases;</li> <li>Applies laboratory tests and instrumental investigation to determine the eye and ear disorders;</li> <li>Evaluates and uses the results of appropriate diagnostic methods to diagnose ophthalmologic and otorhinolaryngologic diseases;</li> <li>Evaluates and uses the results of appropriate diagnostic methods to diagnose neurologic, psychiatric, otorhinolaryngologic and ophthalmologic diseases;</li> </ul>	<b>6.3</b> <b>1.1</b>			X	X		X	Clinical Case DOPS, Mini - Cex

	<ul style="list-style-type: none"> <li>• Provides a prediagnosis for psychological disorders and refers to a specialist;</li> <li>• Handles an emergent psychiatric patient;</li> <li>• Manages personality disorders;</li> <li>• Applies basic neurological tests, provides a prediagnosis and refers to a specialist</li> <li>• Applies basic otorhinolaryngologic and ophthalmologic examination, provides a prediagnosis of otorhinolaryngologic and ophthalmologic diseases and refers to a specialist;</li> </ul>								
<b>RESP ONSI BILIT Y AND AUT ONO MY</b>	<ul style="list-style-type: none"> <li>• Has the ability of critical thinking, analysis and synthesis;</li> <li>• Has the capacity to adapt to new situations and renew learning.</li> <li>• has the ability to manage information</li> </ul>	<b>11.1</b> <b>11.2</b> <b>11.3</b> <b>11.6</b>		<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>CBD. Clinical Case Mini-Cex</b>

**Learning Course Content**

Week №	Topics	Lecture (hrs)	Seminar (hrs)	TSE (hrs)	TCE (hrs)
I	<b>Psychiatry</b> Psychiatric Interview; Mental status examination Anxiety and Stress Personality Disorders Childhood Disorders	3	2		
II	Phobic Disorders; Obsessive- Compulsive Disorder; Somatization Disorders Self-Harm Psychiatric Disorders Systemic Disease Causing Mental Disorders	2	2		
III	<b>Neurology</b> Neurological Disease Neurological Evaluation Headaches and Orofacial Pain Cranial Nerve Lesions <b>CBD</b>	3	2		
IV	Disorders of Taste Cerebrovascular Accidents, Strokes and Transient Ischaemic Attacks Locked-In Syndrome Movement Disorders Botulinum Toxin Mini-CEX	3			2
V	Demyelinating and Degenerative Diseases Patients with Respiratory Paralysis Organic Brain Disorders	3	2		
VI	Peripheral Neuropathies Disorders of Neuromuscular Transmission Sleep Repetitive Motion Disorders (Overuse Syndrome)	3	2		
VII	<b>MIDTERM</b>		1		
VIII	<b>Otorhinolaryngology</b>	3			2



	Ear Anatomy and Hearing Physiology Evaluation of Hearing External Ear Diseases Middle Ear Diseases Hearing Disorders Tinnitus Dizziness / Balance Disorders DOPS				
IX	Sore throat; Diseases of the oral cavity and pharynx ; Oral Lesions; Diseases of nasopharynx; Adenoid Hypertrophy. Snoring and Sleep Apnea Allergic Rhinitis Nasal Congestion Viral and Bacterial Infections of the Upper Respiratory Tract Rhinosinusitis Nonallergic Rhinitis Mini-CEX	3			2
X	Thyroid Gland Diseases Salivary Gland Diseases Facial Nerve Paralysis	2			
XI	Benign Neck Masses Sound Hoarseness Throat ache Malignant Head and Neck Masses	2			2
XII	<b>Ophthalmology</b> Examination Methods in Ophthalmology and Refraction Defects Strabismus Glaucoma DOPS	3			2
XIII	Eyelid diseases, lacrimal system and oculoplasty Retinal and vitreous diseases Lens diseases	2			2
XIV	Orbital diseases Eye trauma Optic nerve diseases and pupilla Conjunctival, corneal and sclera diseases Uveitis and endophthalmitis Pediatric ophthalmology <b>CBD</b>	3	2		
XIX- XXIII	<b>Final Exam</b>	2			

