

DEN3004 Therapeutic Dentistry III

(Propaedeutics of Endodontics)

Course title	Code	Semester	Type of course	Course structure and volume (hours)			ECTS
Therapeutic Dentistry III (Propaedeutics of Endodontics)	DEN3004	VI	Mandatory	LECTURE	26	150	5
				SEMINAR	32		
				Teaching in Stimulatory Environment (TSE)			
				Teaching in Clinical Environment (TCE)	12		
				Midterm EX.	1		
				FINAL EX.	2		
				INDEP. WORK	77		
Faculty, the educational program and level of education	School of Dental Medicine One cycle (5-year duration) Higher Educational Program "Dentistry"						
Staff	<p>Tamar Dgebuadze – Invited Lecturer, DD mob:557 06 01 05 e-mail : tamar.dgebuadze@bauinternational.edu.ge</p> <p>Tamar Jibuti invited lecturer , DD Mob: 579 262525 e-mail: Tamar.jibuti@bauinternational.edu.ge</p> <p>Tamar Maglakelidze invited lecturer , DD Mob: 514 147070 e-mail: tamar.maglakelidze@bauinternational.edu.ge</p> <p>Ana Chkhenkeli, invited lecturer, DD Mob: 555 01 09 09 Email:ana.chkhenkeli@bauinternational.edu.ge</p> <p>Personal one-to-one consultation can be arranged at an agreed date and time</p>						
Duration	15 weeks						
Prerequisite	DEN3003						
Aim	<p>This course aims to provide advanced knowledge about the pulpal structure and its diseases-pulpitis, etiology, pathogenesis, classification, clinical manifestations, age peculiarities, methods of examination, differential diagnosis; pain control; case selection and treatment planning.</p> <p>Also, structure and functions of periodontal ligament; etiology, pathogenesis, classification, differential diagnostics, pain control ;case selection and treatment planning.</p>						

Methods of Teaching/Learning	Interactive lectures; Seminars; TCE
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Assessment System and Criteria	<p>The knowledge of the student is evaluated by 100 score-based evaluation system out of which 40 scores considered for the current assessment, 20 for midterm exam and 40 scores for the final exam.</p> <p>1. Current Assessment (activity) - 40 points, including the following:</p> <ul style="list-style-type: none"> ● Verbal quiz (5X2) =10 points; ● CBL-(3X5) =15 points; ● TCE-Mini- CEX -(2X5) =10 points; ● Presentation PPT -5 points. <p>Verbal quiz- method Description: Demonstration of knowledge of theoretical topics, discussion over specific issues in the form of narration or answering questions.</p> <p>Assessment criteria</p> <p>2 Points: The student is well prepared, thoroughly proficient in represented factual material. The answers to the questions are correct, justified and reasoned. The student is thoughtful and well versed in the problem area.</p> <p>1 Points: The student knows only part of the represented factual material, the answers to the questions are correct but incomplete / unreasonable.</p> <p>0 Points: The student is completely unprepared. Does not have knowledge/prepared a represented factual material, cannot answer any questions.</p> <p>Clinical Case assessment (CBL) criteria:</p> <ol style="list-style-type: none"> 1. Ability of case interpretation - 1 point; 2. Ability of using additional sources - 1 point; 3. Ability of applying theoretical knowledge - 1 point; 4. Ability of correlating normal and pathological conditions - 1 point; 5. Ability of drawing conclusions – 1 points <p>Mini- CEX – Mini Clinical Evaluation Exercise:</p> <ol style="list-style-type: none"> 1. History tacking/Consultation/Clinical Examination - 1 point; 2. Communication - 1 point; 3. Clinical reasoning - 1 points; 4. Organization and efficiency - 1 points; 5. Professional Conduct - 1 points;
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Poor (0 points)	Fair (0.5 points)	Competent (1 point)
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Presentation assessment criteria (5 points):

Presentation in groups of 2-3 students

1. Demonstrations of theoretical knowledge - 3 points:
 - 3 point – material is demonstrated fully
 - 2 points – material is not full enough
 - 1 point - material is demonstrated partially
2. Academic level and design - 1 point;
 - Visual and technical quality of the material - 0,5 point;
 - Review of the available modern material related to the topic - 0,5 point;
3. Presentation and communication skills - 1 point;
 - group working and listening culture - 0,5 point;
 - Correct language and style - 0,5 point;

2. Midterm Exam - 20 points

Midterm Exam is conducted the middle of the learning course.

The exam is conducted in the test-based form (Multiple Choice Questions - MCQs)-20 points

The test includes 50 questions each of 0,4 scores. The highest score equals to 20 points.

3. Final Exam - 40 points;

Final Exam is conducted in a combined way:

- Test-based form (MCQ -50 tests with 0.4 point) for each question-20 points; ●
- Oral form (4 issues / clinical cases, each scored at maximum 5 points)-20 points.

Oral Exam Assessment Criteria

5 points - The answer is comprehensive. Student’s thinking ability is clearly visible. The topic is precisely and fully presented. The terminology is duly used. The student masters the material regarded by the course on a proper level. He/she has fully and profoundly learnt main literature.

4 points - The student answers all questions, but independent thinking ability is not clearly visible. The terminology is correctly used. No major errors can be found. The student masters the material regarded by the course on a proper level. He/she has learnt the main literature.

3 points - The answer is incomplete. The topic is presented on satisfactory level but it lacks the thinking ability and is rather based on memorizing. The terminology is scarcely used. The student masters the material regarded by the course but a few errors can be detected.

2 points - The answer is incomplete. The terminology is incompletely used. The material is partially presented. The student masters the main literature on insufficient level. A few major errors can be detected.

1 points - Student’s answer is not complete. The terminology is not used or is used in a wrong way. The answer is mainly erroneous. The topic is presented in a fragmented fashion.

0 points - The answer does not correspond to the question or it is not presented at all.

The exam is considered being passed by the student if he /she receives 50% or more out of the highest evaluation for the exam (40x50/100=20 points). When the total evaluation of the student (current evaluation + midterm exam evaluation + final exam evaluation) is more than 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.

If the final evaluation for the Learning Course, after taking the additional exam, (current evaluation + midterm exams evaluation + final exam evaluation) is less than 51%, the learning course is not considered covered and it must be taken again.

In summary, the student is awarded the credit in case he/she accumulates minimum 51% out of 100%.

Positive scores:

- (A) Excellent- 91 or more points;
- (B) Very Good- 81-90 points;
- (C) Good- 71-80 points;
- (D) Satisfactory- 61-70 points; ● (E) Enough- 51-60 points;

Negative scores:

- (FX) Failure - 41-50 points: the student needs more independent work and is granted a single attempt of exam retake;

- (F) Fail - 40 points or less: the student's conducted work is not sufficient and needs to take the course again.

	<p>Maximum course assessment score is 100 points.</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>
The core literature	Textbook of Endodontics – Nisha Garg , Amit Garg, 4th edition, 2019
The auxiliary literature	<p>Cohen’s Pathways of the Pulp - Kenneth M. Hargreaves, Louis H. Berman, 11th edition 2016</p> <p>Textbook of Endodontology - Lars Bjørndal , Lise-Lotte Kirkevang , John Whitworth ; 3rd Edition 2018</p>

Learning Outcomes

NQF*	COURSE LEARNING OUTCOMES	PROG. LO	Lecture	Seminar	Teaching in simulation environment	Teaching in clinical environment	Midterm ex.	Final exam	ASSES. METH.
KNOWLEDGE AND AWARENESS	<ul style="list-style-type: none"> Knows Tooth pulp – structure; development; innervation; blood supply; regeneration; age-related changes in pulp. Knows Periodontal ligament-Structure and functions of periodontal ligament. Defines pulpitis & periodontitis – etiology, pathogenesis; Classifies pulpitis & periodontitis; Describes and determines clinical signs and symptoms of pulpitis & periodontitis; Aware a differential diagnosis; Knows analgesics which should be used for pain control Knows aseptic rules in endodontics Knows treatment methods of pulpitis & periodontitis 	6.1.	X	X		X	X	X	MCQ; ORAL QUIZ; CBL; PPT; ORAL EXAM.
SKILL	<ul style="list-style-type: none"> Takes anamnesis; Uses appropriately and selectively diagnostic procedures Provides intraoral and extra oral examination with efficient and logical sequence; Demonstrates good clinical judgement, is able to synthesize information; Formulates relevant differential diagnoses and creates an appropriate diagnostic and therapeutic plan; 	8.1. 8.2. 9.2. 1.1. 4.1.		X		X		X	Mini-CEX CBL

	<ul style="list-style-type: none"> Shows respect, commitment, empathy, and generates confidence; Responds adequately to discomforted and embarrassed patient; Shows respect, commitment, empathy, and generates confidence; Responds adequately to discomforted and embarrassed patient; 								
RESPONSIBILITY AND AUTONOMY	<ul style="list-style-type: none"> has ability to manage, analyze and synthesis given information critical thinks and makes decision 	11.1 11.2 11.2				X			Mini-CEX

Supplement 1

Learning Course Content

Week No	Topics	Lecture (hrs)	Seminar (hrs)	TSE (hrs)	TCE (hrs)
I-II	Introduction Pulp and Periradicular tissue: structure; development; histology; systemic factors effecting pulp; supportive elements; innervation; anatomy; functions; age-related changes in pulp; pulpal classifications/pulp stones/denticles; Periradicular Tissue	2			
II-III	Pathologies of pulp and Periapex: Etiology of pulpal diseases; progression of pulpal pathologies; diagnosis of pulpal pathology; Classification of pulpal pathology; Clinical manifestation of the pulpitis; reversible pulpitis/hyperemia/hyperactive pulpalgia; irreversible pulpitis; Verbal quiz	2	3		
IV	Pathologies of pulp and Periapex: Forms and clinical manifestation of the chronic pulpitis. chronic hyperplastic pulpitis; pulp degeneration; pulp necrosis; CBL	2	4		
V	Pathologies of pulp and Periapex: Pathologies of Periradicular Tissue-classification of periradicular pathologies; Acute apical periodontitis; Acute apical abscess; CBL	2	4		
VI	Pathologies of pulp and Periapex: Asymptomatic apical periodontitis/chronic apical periodontitis; chronic alveolar abscess; periapical granuloma; radicular cyst; persistent apical periodontitis; Diseases of Periradicular Tissue of Nonendodontic Origin Verbal quiz	2	3		
VII-VIII	Midterm exam	1			
IX-X	Endodontic microbiology Verbal quiz	2	3		
XI	Biofilm and smear layer in endodontics Verbal quiz	2	3		

XII	Rationale of endodontic treatment	2			
XIII	Diagnostic Procedures Case history; pulp vitality test; recent advances in pulp vitality test; role of	2	4		
	radiographs in endodontics CBL				
XIV	Differential diagnosis of orofacial pain-diagnosis; orofacial pain; sources of odontogenic pain; pulpal pain; periodontal pain TCE	2			6
XV	Case selection and treatment planning-indications of endodontic treatment; contraindications of endodontic therapy; treatment planning; factors effecting treatment planning; TCE	2			6
XVI	Asepsis in endodontics; Pharmacology in endodontics Verbal quiz	2	3		
XVII	Summary PPT	2	5		
	Final Exam	2			