

Prosthodontics - IV (Removable dentures)

Course title	Code	Semester	Type of course	Course structure and volume (hours)			ECTS
Prosthodontics -IV (Removable dentures)	DEN5007	IX	Mandatory	LECTURE	18	120	4
				Seminar	15		
				Teaching in Stimulatory environment (TSE)	25		
				Teaching in clinical environment (TCE)	12		
				Midterm EX.	1		
				FINAL EX.	2		
				INDEP. WORK	47		
Faculty, the educational program and level of education	School of Dental Medicine, One cycle (5-year duration) Higher Educational Program “Dentistry”						
Staff	<p>Maia Beridze, Assistant Professor Mob.tel: 599 55 54 72 e-mail: Maia.Beridze@bauinternational.edu.ge</p> <p>Rusudan Okropiridze, Invited lecturer Mob.tel: 599 31 31 75 e-mail: Rusudan.Okropiridze@bauinternational.edu.ge</p> <p>Natalia Kurdadze, Invited teacher E.mail: Natalia.kurdadze@bauinternational.edu.ge</p> <p>Nata Ramishvili, invited teacher E.mail: Nata.ramishvili@bauinternational.edu.ge</p> <p>Personal one-to-one consultation can be arranged at an agreed upon date and time</p>						
Duration	17 weeks						
Prerequisite	Prosthodontic III (Fixed prosthodontics) DEN 4004						
Aim	This course aims to provide advanced knowledge about removable dentures, basic concepts for diagnostics and treatment planning of partial and complete removable constructions, necessary steps of mouth preparation for removable partial dentures, clinical and laboratory steps of removable prostheses.						
Methods of Teaching/Learning	Interactive lectures; Seminars; TSE; CBL, TCE.						

**Assessment System
and Criteria**

Attendance – the student is obliged to attend 70% of the total number of course hours.

The knowledge of the student is evaluated by 100 point-based evaluation system out of which 20 points are allocated for the current activity, 20 for each midterm exam and 40 points for the final exam.

1. Current activity -40 points, including the following:

- Verbal quiz (7 sessions, 2 points each)-14 points
- Practical Activity (9sessions , 2 points each)- 18points
- CBL- (2 sessions, 2point each)- 4 points
- Mini-CEX(2 season, 2 point each) 4 points

**Verbal quiz is assessed with the following criteria
(2 points each session , total 14 points)**

2 Points: The student is well prepared, thoroughly proficient in syllabus material. The answers to the questions are correct, justified and reasoned. The student is thoughtful and well versed in the problem area.

1 Points: The student knows only part of the syllabus topic, the answers to the questions are correct but incomplete / unreasonable.

0 Points: The student is completely unprepared. Does not have knowledge about syllabus topic, cannot answer any questions.

Practical Activity (10 sessions , 2 points each)- 2 points

- Performs manipulations perfectly and without errors – 2 points
- Performs manipulations partially and without errors – 1 points
- Student does not participate in manipulation or performs manipulations with errors – 0 points

Clinical Case assessment (CBL) (2 sessions, 2 point each)- 4 points

- The student analyses a specific case, understands and plans the treatment of partially and completely edentulous arches – 2 points
- The student analyses a specific case, understands and plans the treatment of partially and completely edentulous arches with some errors – 1 point
- Student doesn't analyse particular case, understand or plan a treatment of partially and completely edentulous arches - 0 point

Mini- CEX – Mini Clinical Evaluation Exercise (4 points):

Assessment criteria

1. History taking/Consultation/ Examination of edentulous and partially edentulous patients - 1 point;

2. Communication - 1 point;

3. Taking functional impression - 1 point;

4. **Recording Jaw Relationships**, - 1 point;

Poor (0 points)

Fair (0.5 points)

Competent (1 point)

2. Midterm Exams - 20 points;

- Midterm Exam is conducted the middle of the learning course , in a test-based form (Multiple Choice Questions - MCQ). The test includes 35 questions and the value of each is

0. 4 point(s). The highest possible score is 14 .

- Short-Answer Questions (SAQs)- The Test includes 6 questions and value of each is 1 point. The highest possible score is 6 points.

3. Final Exam - 40 points

Final Exam is conducted in a combined way:

- Oral exam includes 4 topics, each topic is assessed by 5 point, highest possible score is 20 points
- OSCE - 4 stations, 5 points each - 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.

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.

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.

2 points - The answer is incomplete. The terminology is incompletely used. The material is partially presented. A few major errors can be detected.

1 point - Student's answer is not complete. The terminology is not used or is used in a wrong way. The answer is mainly erroneous.

- 0 points - The answer does not correspond to the question or it is not presented at all.
- OSCE - The exam will consist of four OSCE stations, value of each station is 5 point. The highest possible score is 20.

OSCE methodology & evaluation

1. Fabrication of custom tray for complete edentulous or partially edentulous arch.
2. Demonstration of functional impression taking with individual tray
3. Fabrication of occlusal rims.
4. Bite registration

Prerequisite for Final Exam are:

- Prerequisite for Final Exam is the situation when at least 50 % of the current assessment level is achieved (Practical activities in the current assessment require a minimum threshold of 50% as a prerequisite for eligibility to sit for the final examination).
- 70% of learning course hours should be attended.

The exam is considered being passed by the student if he /she receives 50% or more out of the highest evaluation for the exam . When the total evaluation of the student (current evaluation + midterm exams' evaluations + 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.

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

	<p>of exam retake; (F) Fail - 40 points or less: the student's conducted work is not sufficient and needs to take the course again. 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. 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>
Teaching resources	IMPRESSION MATERIALS, GYPSUM, IMPRESSION TRAYS, ARMAMENTARIUM USED IN PROSTHETIC DENTISTRY AND DENTAL PHANTOM.
The core literature	<ol style="list-style-type: none"> 1. McCracken's Removable Partial Prosthodontics -Alan B.Carr; David T.Brown 13th edition, 2016. 2. Prosthodontic Treatment for Edentulous Patients- George Zarb John Hobkirk Steven Eckert Rhonda Jacob 13th edition, 2012
The auxiliary literature	Textbook of complete dentures- Arthur O. Rahn, John R. Ivanhoe, Kevin D. Plummer 6th edition, 2009.

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"> ● Describes the basic concepts of diagnosis and treatment planning for partial and complete edentulous arches; ● Lists the classification of partially edentulous arches; ● Lists the classification for edentulous alveolar ridges ● Describes necessary steps for mouth preparation for removable partial dentures; ● Explains steps of abutment teeth preparation; ● knows his\her limitations and act accordingly in ethical and clinical principles, in case of necessity request for support and decides to refer to specialists according to clinical and radiographic evaluation. 	8,1 8,2 9,1 4,1	X	X			X	X	Verbal Presentation of studied materials; Short-Answer Questions (SAQs)- MCQ CBL
SKILL	<ul style="list-style-type: none"> ● Selects an appropriate impression technique and performs all steps for impression making; ● Demonstrates waxing steps for frame of removable partial prosthesis ; ● Demonstrates the fabrication of individual trays and occlusal rims; ● Demonstrates adjustment of occlusion in harmony with natural and artificial 	9,3 9,4			X	X		X	Practical Activity Mini-CEX OSCE

Learning Course Content

weeks No	Topics	Lecture (hrs)	Seminar (hrs)	TSE (hrs)	TCE (hrs)
I	<p>Lecture: Partially edentulous epidemiology, physiology and terminology. Consideration for managing partial tooth loss (Points of View, Tooth-Supported Prosthesis, Tooth and Tissue-Supported Prosthesis, Six Phases of Partial Denture Service, Reasons for Failure of Clasp-Retained Partial Dentures).</p> <p>Practical Activity: Demonstrational explanation on study models and demonstrative materials.</p>	2		2	
II	<p>Lecture: Classification of partially edentulous arches (Requirements of an acceptable method of classification, Kennedy classification, Applegate's rules for applying the Kennedy classification).</p> <p>Seminar: Verbal presentations of studied material.</p>	2	2		
III	<p>Lecture: Biomechanics of removable partial dentures. (Biomechanics and design solutions, biomechanical considerations, possible movements of partial dentures).</p> <p>Seminar: Verbal presentations of studied material.</p>	2	2		
IV	<p>Lecture: Major and minor connectors. Rests and rest seats (Role of major connectors in control of prosthesis movement, location Mandibular major connectors, maxillary major connectors, minor Connectors. Functions, form and location. Tissue stops, finishing Lines).</p> <p>Seminar: Verbal presentations of studied material.</p>	2	2		
V	<p>Lecture: Direct and indirect retainers (Direct retainer's role in control of prosthesis movement, basic principles of clasp design, types of direct retainers, types of clasp assemblies, implants as direct Retainers. Role of indirect retainers in control of prosthesis movement, forms of indirect retainers).</p> <p>Seminar: Verbal presentations of studied material.</p>	2	2		
VI	<p>Lecture: Principles of removable partial denture design, Surveying, description of dental surveyor, purposes of the surveyor.</p> <p>Seminar: Verbal presentations of studied material.</p> <p>Practical Activity: A procedure for recording and reproducing the cast position on a surveyor.</p>	1	1	3	
VII-VIII	Midterm exam	1			
IX	<p>Lecture: Denture base considerations, functions of denture bases in control of prosthesis movement, methods of attaching denture bases, advantages of metal Bases, methods of attaching artificial teeth.</p> <p>Practical Activity: Designing wax basis;</p>	1		3	

X	<p>Lecture: Diagnosis and treatment planning, patient interview, clinical examination, oral examination, diagnostic casts, differential diagnosis: fixed or removable partial dentures.</p> <p>Practical Activity: Fabrication of custom tray, getting functional impression for partially edentulous patients.</p>	1		3	
XI	<p>Lecture: Preparation of the mouth for removable partial dentures, preparation of abutment teeth, impression materials and procedures for removable partial dentures, occlusal relationships for removable partial dentures.</p> <p>Practical activity: Laboratory Procedures (Duplicating a stone cast, waxing the removable partial denture framework, processing the denture, polishing the denture).</p> <p>CBL</p>	1	2	3	
XII	<p>Lecture: Anatomy of the edentulous ridges, classification, History Taking, Treatment Planning and Improving Denture-Bearing Areas for Edentulous Patients</p> <p>Practical activity: Designing wax basis;</p>	1		3	
XIII	<p>Lecture: Clinical protocols for diverse treatment scenarios. recording jaw relations, and their transfer to an Articulator. Preliminary impressions, diagnostic casts and custom (final) impression trays.</p> <p>Seminar: Verbal presentations of studied material.</p> <p>Practical activity: Fixing teeth (upper and lower jaw) for Edentulous Patients.</p>	1	2	3	
XIV	<p>Lecture: The Try-in Appointment, Prosthesis Insertion and Follow-up Appointments</p> <p>Seminar: Verbal presentations of studied material.</p> <p>Practical activity: The Occlusal Surfaces: The Selection and Arrangement of Prosthetic Teeth</p>	1	1	3	
XV	<p>Lecture : Prolonging the useful life of complete dentures: relines and repairs. Speech considerations with complete dentures.</p> <p>Practical activity: Try-in procedures</p> <p>Seminar: Verbal presentations of studied material</p> <p>CBL</p>	1	1	2	
XVI	<p>Getting preliminary and final (functional) impressions for dentures.</p> <p>Mini- CEX</p>				6
XVII	<p>Recording Jaw Relationships, try- in procedures.</p> <p>Mini-CEX</p>				6
XVIII- XXII WEEK	<p>Final exam</p>				2