



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Applied Dental Sciences



First Semester 2016-2017

Course Information	
Course Title	Applied Fixed Prosthodontics I
Course Code	TDEN431
Prerequisites	TDEN334
Course Website	
Course Coordinator	Alina Al Twal , BSc, MDSc
Course Instructors	Dr. Abd Al Raheem Baibars, Alina Al Twal, Maha Al Omari
Office Location	building of Faculty of Applied Medical Sciences/ 2 nd floor
Office Phone #	7201000 ext 26951
Office Hours	Monday 1:15-2:15, Thursday 12:15-1:15
E-mail	eqaltwal@just.edu.jo
Teaching Assistant(s)	Supervisors at Dental Education Teaching Center
Course Description	
This course is designed to the undergraduate students at the fourth year and it is five practical credit hours. It is a totally practical course where the students gain more training and experience in constructing fixed prostheses. The students work in a real work environment and are encouraged to apply their previous knowledge to fabricate the different fixed prostheses.	

Textbook No Theory

Useful References	
Title	Dental laboratory Procedure for Fixed Prosthodontics
Author(s)	John E. Rhoads, Kenneth D. Rudd, Robert M. Morro
Publisher	Mosby,
Year	1985
Edition	2nd
Book Website	
Other references	Fundamentals of Fixed Prosthodontics, H.T. Shillingburg Quintessence,1997, 3rd edition

Assessment		
Assessment	Expected Due Date	Percentage
Continuous laboratory assessment (Practical)	Throughout the semester	(total) 70%
	1 post & core	10%
	1 crown	15%
	2 bridges	45%
Case Presentation/exam	To Be Announced	10%
	To Be Announced	20%
Final Exam (Practical)		

Course Objectives	Percentage
1. To produce dental technicians who can integrate and further develop technical knowledge and skills gained through the last three years of fixed prosthodontics training.	100%

Teaching & Learning Methods
<p>There will be three lab secessions for 10 hours every week in Educational Dental Health Center.</p> <p>The students are required to finish two bridges, one post & core, one crown. The steps required to complete each prosthesis are presented in the assessment forms. Each step will be evaluated and all the steps are calculated at the end of the case. A number of criteria (as follow) should be considered while evaluating each step.</p> <p>Evaluation criteria:</p> <ol style="list-style-type: none"> 1. The quality of the product. 2. The time needed to finish the work compared to other students. 3. Technician help needed and the student inability to make his/her own decisions regarding his work 4. Any student fails to deliver the required work/prosthesis in the appointed date will be given (0) mark for that step.

Learning Outcomes: Upon successful completion of this course, students will be able to		
1	Construct commonly used fixed prostheses (i.e. metal-ceramic crowns & bridges, post & cores)	No theory
2	Demonstrate ability to interpret dental laboratory prescriptions produced by the dental practitioner	No theory
3	Communicate with the dental	No theory

	practitioner and discuss any technical changes	
4	Integrate and work with the dental team, especially fellow dental technicians and dental practitioners.	No theory
5	Demonstrate an awareness and understanding of safety in the dental laboratory.	No theory

Course Content (Practical Requirements)	
No Theory but each student is expected to submit a high quality:	
2 Bridges	
1 Post and Core	
1 Single Crown	

Laboratory continuous assessment sheet	
Requirements	marks
Post & core	Total out of 13%
1.Working cast and die prep	
1- Air bubble free	/1
3-margins of dies	/2
2.Waxing	
1-waxing of post	/2
2- waxing of core	/2
3- fitting (finish line)	/1
3.Post finishing	
1-fitting	/2
2-loosness	/1
3- core part (contour + clearance)	/2
Crown	Total out of 30%
1.Working cast and die prep	
1- Air bubble free	/1
2-die preparation (smooth, parallel & easily removed)	/1
3-pins not separated from the die	/1
4- finish line	/1
6-spacer	/1
2.Waxing	
1-margins (open, short or overextended ...etc)	/2
2- finish line (chamfer) in the veneering area	/1
3- reduction of contour (labial, lingual & proximals)	/2
4- occlusal reduction	/1
5-colar & butt joint (ceramometal junction)	/1
3. Metal framework finishing	
1-fitting (margins & looseness)	/2
2- metal finish line (chamfer)	/1
3- contour, occlusal & thickness of metal	/2
4- no sharp edges – same direction preparation	/2

5- colar & butt joint (ceramometal junction)	/1
4.Porcelain build-up	
1- contour & morphology	/2
2- occlusion	/1
3- contact points	/2
4- margins	/1
5- shade * layers (enamel & dentine) * metal coverage by opaque * matching with shade guide	/2
6- fitting, sandblasting of fitting surface & colar polishing	/1
7- errors , cracks & pits	/1
Bridge	Total out of 50%
1.Working cast and die prep	
1- Air bubble free	/1
2-die preparation (smooth, parallel & easily removed)	/3
3-pins not separated from the die	/1
4- finish line	/3
6-spacer	/1
2.Waxing	
1-margins (open, short or overextended ...etc)	/3
2- finish line (chamfer) in the veneering area	/1
3- reduction of contour (labial, lingual & proximals)	/3
4- occlusal reduction	/2
5- pontic design and connectors	/2
6-colar & butt joint (ceramometal junction)	/1
3. Metal framework finishing	
1-fitting (margins & looseness)	/3
2- metal finish line (chamfer)	/2
2- contour & thickness of metal	/2
3- no sharp edges – same direction preparation	/2
4- colar & butt joint (ceramometal junction)	/1
5- occlusal clearance	/2
4.Porcelain build-up	
1- contour & morphology	/4
2- occlusion	/3
3- contact points	/2
4- margins	/2
5- shade * layers (enamel & dentine) * metal coverage by opaque * matching with shade guide	/3
6- fitting, sandblasting of fitting surface & colar polishing	/2
7- errors , cracks & pits	/1

Additional Notes

- JUST policy requires the faculty member to assign ZERO grade (35) if a student misses 10% of the classes without an excuse.
- Sign in sheet will be distributed at the beginning of the lab session.
- Cheating during exam will result in dismissal from the exam hall and the student will be penalized according to JUST regulations