

COURSE PLAN

FIRST: BASIC INFORMATION

College

College : Irbid College
 Department : Medical Department

Course

Course Title : Dental Ceramics Practice 1
 Course Code : **020813265**
 Credit Hours : 2 (0 Theoretical, 2 Practical)
 Prerequisite : **020813261***
 *Co-requisite

Instructor

Name :
 Office No. :
 Tel (Ext) :
 Email :
 Office Hours :

Building	Day	Start Time	End Time	Room No.

Text Book

Title : Dental laboratory technology: fixed and special prosthodontic. Dept. of the Air Force, Headquarters US Air Force, 1999.

References

1. Graber, Thomas M., and Vanarsdall, Robert L., Jr., eds. Orthodontics: Current Principles and Techniques. 4th ed. St. Louis: Elsevier Mosby, 2005.
2. Dental laboratory technology: fixed and special prosthodontic and orthodontic appliances. Dept. of the Air Force, Headquarters US Air Force, 1999.
3. Proffit, William R. (and others). Contemporary Orthodontics. 2d ed. St. Louis: Mosby-Year Book, 1993.

SECOND: PROFESSIONAL INFORMATION

COURSE DESCRIPTION

This course covers the practice of porcelain fused to metal (PFM) crown. It provides a method of using materials used for manufacturing PFM crown, a method of manufacturing metal copings, and a method of processing opaque.

COURSE OBJECTIVES

The objectives of this course are to enable the student to do the following:

- Design the manufacturing process of porcelain fused to metal(PFM) crown.
- **Make** impressions and models for making PFM crown.
- **Make** wax pattern to make a coping for PFM crown.
- **Perform casting** for making coping crown for PFM crown.
- **Perform** the surface treatment and heat treatment of coping crown for PFM crown.

COURSE LEARNING OUTCOMES

By the end of the course, the students will be able to:

- CLO1. Design the manufacturing process of porcelain fused to metal(PFM) crown
 CLO2. Make impressions and models for making PFM crown
 CLO3. Make a wax pattern to make a coping for PFM crown
 CLO4. **Perform** casting for making coping crown for PFM crown
 CLO5. **Perform** the surface treatment and heat treatment of coping crown for PFM crown
 CLO6. **Perform** the opaque treatment of coping crown for PFM crown

COURSE SYLLABUS

Week	Unit	Content	Related LO and Reference (Chapter)	Proposed assignments
1	Porcelain Fused to Metal(PFM) Crown	<ul style="list-style-type: none"> • Introduction to the manufacturing process of Porcelain Fused to Metal (PFM) Crown • Materials used in the manufacturing of PFM crowns 	CLO1	
2	Impression and Model	<ul style="list-style-type: none"> • Impression body use method • Dental stone use method 	CLO2	
3	Making of Working Cast	<ul style="list-style-type: none"> • Method of use of model trimming machine • Manufacturing of working cast 	CLO2	
4	Die Trimming	<ul style="list-style-type: none"> • Cutting of die from model • Finish line ditching • Application of die spacer 	CLO2	
5	Full Crown Wax-up	<ul style="list-style-type: none"> • Anterior tooth and posterior tooth full crown wax up 	CLO3	
6	Wax Crown Cut Back	<ul style="list-style-type: none"> • Cut back process of wax full crown 	CLO3	
7	Coping Crown Design	<ul style="list-style-type: none"> • Coping crown design for PFM • Manufacture of PFM coping wax crown 	CLO3	
8	Midterm Exam			
9	Sprue	<ul style="list-style-type: none"> • Sprue material usage method • Sprue position setting method 	CLO4	



Week	Unit	Content	Related LO and Reference (Chapter)	Proposed assignments
		<ul style="list-style-type: none"> • Sprue connection method 		
10	Investing	<ul style="list-style-type: none"> • Investing material usage method • Investing machine use method • Investing method 	CLO4	
11	Burn out	<ul style="list-style-type: none"> • Electric furnace use method • Burn out method 	CLO4	
12	Casting	<ul style="list-style-type: none"> • Method of using metal melting machine • Method of using centrifugal casting machine • Casting cooling method 	CLO4	
13	Metal Surface Treatment	<ul style="list-style-type: none"> • Coping crown surface treatment method • Method of using of surface treatment machine 	CLO5	
14	Heat Treatment	<ul style="list-style-type: none"> • Heat treatment(degassing) method for coping crowns • Method of using heat treatment machine 	CLO5	
15	Opaque treatment	<ul style="list-style-type: none"> • Steps and methods of opaque treatment • Method of using ceramic electric furnace 	CLO6	
16	Final Exam			

COURSE LEARNING RESOURCES

--

ONLINE RESOURCES

www.ncbi.nih.gov www.dentallearning.org www.padental.org
--

ASSESSMANT TOOLS

grading distribution table evaluation activity	
Homework	5
Report	5



Queses	10
mid term exam	20
Experience/Attendance/Participation	10
final exam	50
Total	100%

THIRD: COURSE RULES

ATTENDANCE RULES

Attendance and participation are extremely important, and the usual University rules will apply. Attendance will be recorded for each class. Absence of 10% will result in a first written warning. Absence of 15% of the course will result in a second warning. Absence of 20% or more will result in forfeiting the course and the student will not be permitted to attend the final examination. Should a student encounter any special circumstances (i.e. medical or personal), he/she is encouraged to discuss this with the instructor and written proof will be required to delete any absences from his/her attendance records.

GRADING SYSTEM

Example:

Grade	Points
FAILED	0-49
PASSED	50-100

REMARKS

{ The instructor can add any comments and directives such as the attendance policy and topics related to ethics }

COURSE COORDINATOR

Course Coordinator:
Signature:
Date:

Department Head:
Signature:
Date: