



Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Department of Applied Dental Sciences
First Semester 2013/2014
Course syllabus

Course Information	
Course Title	Principles of Dental Technology
Course Number	TDEN213
Prerequisites	ADS203 or co-requisite
Instructor	Dr. Zeid Al-Hourani
Office Location	Faculty of Applied Medical Sciences
Office Phone	02-7201000 extension 23847
Office Hours	
E-mail	zahorani@just.edu.jo
Teaching Assistant	Supervisors of dental technology laboratory
Course Description	
This a 2 credit hours course (1 theoretical and 1 practical) is designed to provide the undergraduate dental technology students with the basic technical knowledge and skills to fabricate casts, custom-made impression trays, temporary and permanent denture bases, and occlusal rims for partially dentate and edentulous cases along with a theoretical background relevant to technical and clinical aspects of the types of appliances named below	

Text Book	
Title	Dental laboratory technology : basic sciences
Author(s)	United States. Dept. of the Air Force.
Publisher	United States Government Printing
Edition	3 rd Edition, 2005
Book Website	
References	Dental Laboratory Technology: Prosthodontic Technique John B. Sowter, 2 nd Ed. 1997

Assessment Policy		
Assessment Type	Expected Due Date	Weight
First Exam	6/11/2013	15%
Second Exam	18/12/2013	15%
Assignments	Continuous Assessment	30%
Final Exam	TBA	20% Theory 20% Practical

Course Objectives	Weights
1. To develop practical competence, skill and safe working practice in a range of basic laboratory techniques	10%
2. To understand the principles and concepts involved in dental technology	30%
3. To cover the principles of cast production techniques and introduces particular mounting systems.	30%
4. to provide an understanding of the requirements of custom-made impression trays, the formation of temporary and permanent denture bases, and occlusal rims for partially dentate and edentulous cases.	30%

Teaching & Learning Methods
Students are expected to attend one hour lecture to be able to understand general principles and terminology of dental technology and attend three hours lab session during which a demonstration will be given for 30 minutes followed by individual supervised lab session

Additional Notes	
Assignments	Students are required to do all the written homework and references search assignments on the assigned due date
Exams	-
Cheating	Cheating the commitment of the Acts of Cheating and deceit such as copying during examinations is dishonest and will not be tolerated; JUST policy will be applied.
Attendance	Student attendance and responsibility: students are required to attend all the weekly meetings with the supervisor. <u>Two unexcused absences will result on two points deducted from the supervisor continuous assessment. Three or more unexcused absences will deserve a grade of “ZERO” for the attendance evaluation grade.</u> For excused absences, i.e. illness or emergency, student must contact the course coordinator immediately. In case of illness, student must submit a formal written excuse from the physician. Otherwise, the absence will be considered unexcused.

Learning Outcomes: Upon successful completion of this course, students will be able to		
Related Objective(s)		Reference(s)
1, 2	Be familiar with the instruments and materials used in dental technology in general	Text Book I
3	Differentiate between primary and secondary impressions and the materials used in them	Text Book I
2, 4	Differentiate between custom and stock trays	Text Book I
3	Pour primary and secondary impressions	Text Book I
1, 2	Deal with wax	Handout
4	Fabricate special trays	Text Book I
4	Fabricate base plates and occlusal rims	Text Book I

Course Content (Theory)				
Week	Date	Topic	Chapter in textbook and handouts	Lecturer
1	25/9/2013	Introduction to Dental Technology	Handouts	Al-Hourani
2	2/10/2013	Preliminary Impressions	Chapter 1	Al-Hourani
3	9/10/2013	Safety Rules in the lab	Handouts	Al-Hourani
4	16/10/2013	Study and Working Casts	Chapter 2	Al-Hourani
5	23/10/2013	Stock & custom-made trays 1	Chapter 3	Al-Hourani
6	30/10/2013	Stock and custom-made trays 2	Chapter 3	Al-Hourani
7	6/11/2013	First exam	Study Hard	Al-Hourani
8	13/11/2013	Record bases	Chapter 5	Al-Hourani
9	20/11/2013	Occlusal rims	Chapter 5	Al-Hourani
10	27/11/2013	Waxes in dentistry	Handouts	Al-Hourani
11	4/12/2013	Articulator	Chapter 7 & Handout	Al-Hourani
12	11/12/2013	Forming and curing acrylic resins	Handouts	Al-Hourani
13	18/12/2013	Second exam	Study Hard	Al-Hourani
14	25/12/2013	Case presentation	Handouts	Al-Hourani
15	1/1/2014	Type of Dental Prosthesis	Handouts	Al-Hourani
16	8/1/2014	Revision	Handouts	Al-Hourani
to be announced		Final Exam	To be announced	Al-Hourani

Course Content (Laboratory)		
Week. Date	Topics	Chapter in Textbook (handouts)
23/09/2013	Introduction to dental technology lab	Handout
30/09/2013	Pouring of impression & cast preparation I	Chapter 2
07/10/2013	Pouring of impression & cast preparation II	Chapter 2
14/10/2013	Construction of custom-made tray 1	Chapter 3
21/10/2013	Construction of custom-made tray 2	Chapter 3
28/10/2013	Construction of custom-made tray 3	Chapter 3
04/11/2013	Construction of base plate (shellac)	Chapter 5
11/11/2013	Construction of base plate (acrylic) 1	Chapter 5
18/11/2013	Construction of base plate (acrylic) 2	Chapter 5
25/11/2013	Dealing with wax I	Handout
02/12/2013	Dealing with wax II	Handout
09/12/2013	Construction of occlusal rims 1	Chapter 6
16/12/2013	Construction of occlusal rims 2	Chapter 6
23/12/2013	Basic Principles of Teeth Selection	
30/12/2013	Catch-Up session	
06/01/2014	Final Practical Exam	