## Jordan University of Science and Technology Faculty of Applied Medical Sciences Department of Applied Dental Sciences First Semester 2016-2017

Course Information	
Course Title	Conservative dentistry Practical
Course Number	ADS 323
Prerequisites	ADS 321 or corequisite
Course Website	-
Instructor	Suhair R. Obeidat BSc ADS, MSDH
Office Location	Faculty of Applied Medical Sciences – 2 <sup>nd</sup> floor
Office Phone	02/ 7201000 ext. (26925)
Office Hours	Sundays 12:15 – 1:15 pm, Mondays 9:15-11:15 am
E-mail	saobeidat@just.edu.jo
Credit Hours	1
Course Time and Location	Mondays 1:15 – 4:15 pm in ADS Lab
Teaching Assistant	TBA
Course Description	

The course is designed to bring the students to the basic knowledge in operative dentistry, crown and bridgework, and endodontics. The course emphasizes on the fundamentals of these disciplines of dentistry and the role of the dental assistant in improving the treatment outcome and assisting the dentist in the various clinical procedures

Text Book		
Title	Fundamentals of Operative Dentistry	
Author(s)	Schwartz	
Publisher	Oxford University Press	
Year	1997	
Edition	1 <sup>st</sup> edition	
Book Website	-	
Required Textbook	Obeidat, S. R. (2007). A Guide to Clinical Dental Assisting (Part One)	
References	<ol> <li>Harty FJ. (2004). Endodontics in Clinical Practice. 5<sup>th</sup> edition. Wright Co.</li> <li>Kidd and Edwina (2003). Pickard's Manual of Operative Dentistry. 8<sup>th</sup> edition.</li> <li>Bernard, Smith (1998). Planning and making crowns and bridges. 3<sup>rd</sup> edition.</li> <li>Schuster G.M., Wetterhus G.J., &amp; Dryden Ph. (1999). Handbook of Clinical Dental Assisting. W.B. Saunders Company, Philadelphia, Pennsylvania</li> <li>Phinney, D.J., &amp; Halstead J.H. (2002). Delmar's Handbook of Essential Skills and Procedures for Chairside Dental Assisting.</li> <li>Bernard Smith. Planning and making crowns and bridges. 3<sup>rd</sup> edition.</li> <li>Walton and Torabinejad. Principles and practice of endodontics. 2<sup>nd</sup> edition.</li> <li>Lecturers Notes and Handouts.</li> </ol>	

Assessment Policy*		
Assessment Type	Expected Due Date	Weight
Lab continuous assessment	Quizzes & practical exams: See practical part planner	30%
Midterm Exam	Week 11 (5.12.16)	25%
Lab preparation and participation	Weekly	5%
Final Practical Exam	Week 15	40%

<sup>\*</sup> Subjected to change according to modifications that may occur during the semester

Course Objectives	Weights
Define Endodontics and the role of the endodontist.	5%
Identify instruments used in endodontic procedures and describe their functions.	10%
Identify material used in endodontic procedures and describe their functions.	5%
Describe endodontic procedures and the responsibilities of the dental assistant.	10%
Define the scope of fixed prosthodontics.	5%
Describe the various types of fixed prostheses and their functions.	5%
7. Describe the dental materials used in fixed prostheses.	5%
Explain techniques of retaining prosthesis when there is little or no crown on the tooth.	5%
Describe the role of dental assistant in all phases of fixed Prosthodontics treatment.	10%
10. Define matrix and wedge and list types and uses of matrices.	10%
11. Explain the purpose of dental dam.	5%
12. Explain the function and different types of gingival retraction.	5%
<ol> <li>Describe the rationales of temporary (provisional) restoration and the role of dental assistant in fabricating custom temporaries.</li> </ol>	5%
14. List and explain the types of dental restorative materials.	5%
15. Explain dental amalgam restorative material.	5%
16. Identify the armamentarium and steps of an amalgam procedure.	5%

## **Course Objectives (Practical Part)**

Upon completion of the course, the student will be able to:

- 1. Discuss the sequence of most clinical operations performed in conservative dentistry
- 2. identify the basics in root canal therapy, instruments and infection control measures
- 3. define endodontics and the role of the endodontist
- 4. Identify instruments and materials used in endodontic procedures and describe their functions
- 5. describe endodontic procedures and the responsibilities of the the dental assistants
- 6. define the scope of fixed prosthodontics
- 7. describe the various types of fixed prostheses and their functions
- 8. describe the dental materials used in fixed prostheses
- 9. explain techniques of retaining prosthesis when there is little or no crown on the tooth

- 10. describe the role of the dental assistant in all phases of fixed prosthodontics treatment
- 11. define matrix and wedge and list types and uses of matrices
- 12. explain the purpose of rubber dam
- 13. explain the functions and different types of gingival retraction
- 14. describe the rationales of temporary (provisional) restoration and the role of dental assistant in fabricating custom temporaries
- 15. list and explain the types of dental restorative materials
- 16. explain dental amalgam restorative material
- 17. identify the armamentarium and steps of an amalgam procedure
- 18. explain the composition of composite resins
- 19. explain the properties and manipulation of various composite restorations
- 20. describe the use of GI restorative material
- 21. identify the parts of an instrument and describe how instruments are used
- 22. identify the categories and functions of dental burs
- 23. explain various dental handpieces and their uses

## **Teaching & Learning Methods**

Lectures, reading and homework assignments, group discussion, slide show, demonstrations, and preclinical practice on partners and dentoforms

Related Objective(s)	Learning Outcomes	
1	Being able to differentiate pulpal diseases including reversible, irreversible pulpitis, PA abscess, etc	
2, 3	Recognize name and function of every instrument and material used in RCT instrumentation & obturation	
1	Discuss how EPT & Endo Ice can be used to test pulp vitality	
2, 3, 4	Indicate role of DA in each step of RCT procedure	
5, 6	List types of bridges and crowns	
5	Mention purpose of Crown and Bridge fabrication	
7	Describe types and uses of polysiloxane impression material in fixed prostheses	
8	Identify stages and steps of post crown procedure	
9	Mention DA role in each step and phase of crown/bridge, and post crown fabrication	
10	Correctly assemble matrix band and tofflemire	
2, 3, 4, 11	Correctly apply dental dam for RCT procedure	
9, 12	List types & purposes of retraction cord application	
9, 13	Demonstrate correct temporary crown/ bridge fabrication and cementation	
13	List types and purposes of materials used for temporary Crown/ bridge fabrication	
14, 15	Recognize dental restorative materials including amalgam, composite and GI	
15, 16	Indicate sequential steps for amalgam class II procedure and role of DA in each step	

Useful Resources

## Planner for ADS 323

Wk (Mondays)	Topic	Activity/ assignment
1 26.9.16	Introduction into the cons practical part content	Orientation
2 3.10.16	Orientation into the dental clinic Four-handed dentistry I:	Chapter I: Introduction P. 20-23
	<ul> <li>Activity zones</li> <li>DA's stool characteristics</li> <li>DA positioning</li> <li>Seating and dismissing dental patient</li> </ul>	Demo and practice
	Four-handed dentistry II: Instrument Transfer	Chapter I: Introduction P. 23-30
	<ul> <li>Maintaining the operating field:</li> <li>Evacuation system</li> <li>Air-water syringe</li> <li>Tissue retraction</li> </ul>	Demo and practice
3 10.10.16	Hand and rotary instruments used in operative dentistry Tray system used in cons clinic	Chapter II: dental hand & rotary instruments P. 32-42 Identification and discussion
4 17.10.16	<ul><li>Class II Amalgam step-by-step procedure</li><li>Preparing cavity varnish</li><li>Using dental amalgamator/ triturator</li></ul>	Chapter IV: Restorative materials & procedures Introduction, part 1 & 4 P. 56-60, 70-75
5 24.10.16	Quiz/ Practical Exam I: Four-handed Dentistry and Instrument Identification 10%	Study Well!
	Tofflemire and matrix band preparation & placement: identification and <u>Demo.</u>	Chapter IV: Restorative materials & procedures Part 2 p. 62-68
6 31.10.16	Tofflemire and matrix band preparation & placement: Student practice on models	Chapter IV: Restorative materials & procedures Part 2 p. 62-68
	Mixing dental cements I	Chapter III: Dental Cements Parts 1 & 2 p. 43-55 Demo and practice (Mixing & handling)
7 7.11.16	Mixing dental cements II (cont.)	Chapter III: Dental Cements Parts 1 & 2 p. 43-55
	Clinical management of caries with composite and GI fillings (Class III and V cavities)	Demo and practice (Mixing & handling)
8 14.11.16	Quiz/ Practical Exam II: Tofflemire identification and practice and composite 10%	Study Well!
	Endodontics: pulpal & PA diseases, diagnosis tests, RCT instruments and materials	Chapter V: Endodontics Part 1, 2
9 21.11.16	Root Canal Treatment (step-by-step procedure):  Open/ instrumentation phase  Obturation phase	Identification and discussion  Chapter V: Endodontics  Part 3  Discussion
	The dental dam:  • Materials and equipment  • Placing and removing dental dam	Chapter V: Endodontics Part 4 Demo and practice
10	<ul> <li>Placing and removing dental dam</li> <li>Quiz/ Practical Exam III: Dental cements 10%</li> </ul>	2 Silio dila pidoloo
28.11.16	The dental dam:	Chapter V: Endodontics

	<ul><li>Materials and equipment</li><li>Placing and removing dental dam</li></ul>	Part 4 Student practice
11 5.12.16	Midterm Exam 25%	Study well!
	Crown and Bridge procedure I: Impression materials used in Crown/ bridge procedure - Crown & bridge primary impression with condensational silicone - Crown & bridge final impression with additional silicone	Chapter VI: Fixed Prosthodontics (Crowns & Bridges) Part3 P. 131-133
12 12.12.16	Crown and Bridge procedure II:         gingival retraction cord placement for crown and bridge final impression         Temporary (provisional) restorations	Study Well!  Chapter VI: Fixed Prosthodontics (Crowns & Bridges) Part 2 & 4 P. 128-130, 135-139  Demo and practice
13 19.12.16	Post crown step-by-step procedure	Chapter VII: Post and Core Crown Part 1 & 2 P. 140-154
14 26.12.16	Final Practical Exams Week	Good Luck

20.12.10		
	Additional Notes	
Assignments	Students are required to do all the homework and pre-clinical lab assignments given by the instructor	
Exams	Students are required to sit for the 2 semester examinations (Mid and final) and quizzes	
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: For necessary accused absence e.g. family emergency, extreme illness, etc., please contact instructor immediately.  Tardiness more than 10 minutes will be counted as an absence.  In case of illness, student must submit a formal written excuse from the physician. Otherwise, the absence will be considered unexcused. JUST POLICY will be applied regarding absence.	
Laboratory	Preclinical lab work  Students are required to be prepared with their lab coats, nametags, and protective eyeglasses in each preclinical session. Long hair must be tied.  Jewelries, long nails, high-heel and open shoes/ sandals, athletic shoes and jeans are not permitted. Please turn off all cell phones and pagers during preclinical sessions. Please Read the Faculty Dress Code and Code of Ethics policies on the E-learning Website	
Projects	-	
Feedback	Concerns or complaints should be expressed in the first instance to the course instructor. If no resolution is forthcoming then the issue should be brought to the attention of the Department Chair and if still unresolved to the Dean. Questions about the material covered in the lecture, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail to the following address <code>saobeidat@just.edu.jo</code>	