



Conservative Dentistry Practical (1)

*The University of Jordan
Faculty of Dentistry
Department of Conservative Dentistry*



The University of Jordan
Accreditation & Quality Assurance Center

COURSE Syllabus

1	Course title	Conservative Dentistry Practical (1)
2	Course number	1302316
3	• Credit hours (theory, practical)	Two credit hours (Blended online and practical)
	• Contact hours (theory, practical)	Two hours/week
4	Prerequisites/corequisites	None
5	Program title	Doctor of Dental Surgery (DDS)
6	Program code	NA
7	Awarding institution	The University of Jordan
8	Faculty	Faculty of Dentistry
9	Department	Department of Restorative Dentistry
10	Level of course	Bachelor
11	Year of study and semester (s)	Third year, First and second semesters
12	Final Qualification	DDS
13	Other department (s) involved in teaching the course	Non
14	Language of Instruction	English
15	Date of production/revision	29/Aug/ 2022

16. Course Coordinator:

Name: Dr. Islam Abd Alraheam, DDS, MS, American Board of Operative Dentistry.

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17. Other instructors:

<i>Name</i>	<i>email</i>
<i>Dr. Ayah Al-Asmar</i>	<i>Ayah.ahmed@ju.edu.jo</i>
<i>Dr. Noor Hasan</i>	<i>n.ismail@ju.edu.jo</i>
<i>Dr. Alaa Alhaddad</i>	<i>a.haddad@ju.edu.jo</i>
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<i>PTs</i>	

18. Course Description:

Operative Dentistry can be considered the backbone of the dental profession because most of the specialty areas rely heavily on the restorative or operative dentist. Operative Dentistry is the branch of dentistry dedicated to the restoration of the single tooth to proper shape and function. It includes diagnosis, prevention, as well as treatment phases for teeth in order to provide function, esthetics, health and comfort to the patient,

The objective of Conservative Dentistry Practical (1) course is to develop the required skills necessary to replace lost tooth structure through dental caries, traumatic injury, or physiologic, functional or chemical wear to proper form and function. This includes learning the principles of cavity preparation, the proper manipulation of various dental materials and the instruments used in the restoration process. Upon successful completion of this laboratory course, the dental student will be equipped to perform procedures of a similar nature on patients in the faculty of dentistry clinics with guidance provided by qualified instructors.

19. Course aims and outcomes:

- **Aims:**

- A- To learn the basic components of dental unit.
- B- To learn the different instruments used in operative dentistry and their uses.
- C- To learn the principles of cavity preparation for Class I, II, III, IV, V, VI.
- D- To learn the appropriate restorative technique for cavity preparation using Amalgam, Composite, and glass Ionomer.
- E- To learn the restorative technique for extensively carious teeth.
- F- To learn the appropriate techniques for teeth isolation.

- **B- Intended Learning Outcomes (ILOs):** Upon successful completion of this course students will be able to...

1. Students should gain practical skills of the concepts, principles and theories related to Operative Dentistry.
2. Students should be able to identify and use hand cutting and rotary instrument in addition to other devices used in the practice of Operative Dentistry.
3. Students should be able to use their allocated unit and position themselves in the correct position throughout the simulated clinical exercises.
4. Students should be able to prepare and restore all types of cavities applying the proper and modern principles in cavity preparation for all direct restorative materials.
5. Students should be able to perform the required task from the first try to an acceptable level and should be able to identify and correct their own mistakes.
6. Students should be able to practice the indirect technique using the mouth mirror during cavity preparation and other restorative procedures.
7. Students should be able to apply the concepts of esthetic dentistry

A. Knowledge and Understanding:

8. Develop a wide range manual skill needed for the applications of the basic principles of Operative Dentistry and management of dental lesions.
9. Have in depth knowledge in the principles and detailed features of different types of cavity preparations for metallic and tooth-colored restorations.
10. Develop a wide range knowledge and understanding of the instrumentation used in Operative Dentistry and the handling techniques for the restorative materials employed.
11. Be able to discuss and explain the biological aspects of operative dentistry.
12. Be able to discuss and explain the concepts of esthetic dentistry

B. Intellectual Skills:

13. Apply the knowledge of the basic dental sciences (dental anatomy, histology and dental caries) within the context of Operative Dentistry.
14. Understand and relate the properties and behavior of restorative dental materials to the concepts behind cavity preparation.
15. Understand and appreciate the biological aspects of Operative Dentistry and material applications in Operative Dentistry.
16. Integrate the knowledge and understanding of the esthetic needs and consideration with the properties and limitations of clinical dental material.

C. Subject-Specific Skills:

17. Classify different classes of carious and non-carious lesions and clinically apply the principles and the specific features of cavity preparation for metallic and tooth-colored restoratives.
18. Identify and explain the functions of instruments used in Operative Dentistry.
19. Select and handle various restorative dental materials used in the restoration of the prepared cavities properly, safely and efficiently.
20. To discuss and explain the biological aspects of operative dentistry.
21. To discuss and explain the concepts of esthetic dentistry.

D. Transferrable Skills:

22. Utilize the modern sources of information such as the internet and data basis to develop and update the knowledge in the field of Conservative Dentistry.
23. Appreciate the importance of clinical and laboratory-based research in the development of new categories of restorative dental materials.
24. Understand the importance of Operative Dentistry as a part of an integrated treatment plan that cover the dental needs of a patient and the importance of consultation with other specialties, referral and teamwork.

20. Topic Outline and Schedule: Blended learning schedule

Sessions	Week	Instructor	Achieved ILOs	Reference
<i>LAB EXCERSICE PRELIMINARY CONIDERATION FOR OPERATIVE DENTISTRY</i>	1	Dr. Ayah Dr. Haddad Dr. Islam Dr. Alaa Dr. Noor Dr. Aseel Dr. Rana Dr. Samer Dr. Mohammd Dr. Hawazen Dr. Majdoleen Dr. Daniel	1, 2, 3	The lab manual, Manufacture instructions for Kavo and DCI units
<i>LAB EXCERSICE ISOLATION TECHNIQUES, RUBBER DAM ISOLATION AND MANUAL DEXRITY EXCERSICE.</i>	2	Same instructors	1, 2, 3, 18, 10	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXCERSICE PRINCIPLES OF CAVITY PREPARATION AND CLASS I CAVITY PREPARATION AND RESTORATION ON A MANDIBULAR MOLAR (COMPOSITE)</i>	3	Same instructors	1,2, 3,4, 5, 8, 9	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXCERSICE PRINCIPLES OF CAVITY PREPARATION AND CLASS I CAVITY PREPARATION AND RESTORATION ON A MAXILLARY MOLAR (COMPOSITE)</i>	4	Same instructors	1, 2, 3, 4, 5, 6, 7, 8, 9	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>EVALUATION</i>	5	Same instructors	1, 2,3, 4, 5, 6, 7, 8, 9	The lab manual, Sturdevant's Art and Science of

				Operative Dentistry, 6 th Edition
<i>LAB EXCERSICE CLASS II CAVITY PREPARATION AND RESTORATION ON A MANDIBULAR MOLAR (COMPOSITE)</i>	6	Same instructors	1, 4, 5, 6, 7, 8, 9	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXERCISE CLASS II CAVITY PREPARATION AND RESTORATION ON A MAXILLARY MOLAR (COMPOSITE)</i>	7	Same instructors	1, 2, 3, 4, 5, 6, 7, 8, 9	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>Evaluation</i>	8	Same instructors	1, 4, 5, 6, 7, 8, 9	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXCERSICE CLASS III PREPARATION AND RESTORATION</i>	9	Same instructors	1, 4, 5, 6, 7, 8, 9	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXCERSICE CLASS IV PREPARATION AND RESTORATION</i>	10	Same instructors	1, 4, 5, 6, 7, 8, 9	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXERCISE CLASS V CAVITY PREPARATION AND RESTORATION GIC</i>	11	Same instructors	1, 2, 3, 4, 5, 6, 7, 8, 10, 13, 14, 19,	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXCERSICE CLASS II CAVITY PREPARATION AND RESTORATION (AMALGAM, MANDIBULAR)</i>	12	Same instructors	1, 2, 4, 5, 8, 9, 10, 11, 12, 13, 14, 16, 21	The lab manual, Sturdevant's Art and Science of Operative Dentistry, 6 th Edition
<i>LAB EXERCISE CLASS II CAVITY PREPARATION AND RESTORATION</i>	13	Same instructors	1, 2, 4, 5, 7, 8, 9, 10,	The lab manual, Sturdevant's Art

(AMALGAM, MAXILLARY),			12, 13, 14, 16, 21	and Science of Operative Dentistry, 6 th Edition
LAB EXERCISE , LINER, BASES AND COMPLEX RESTORATIONS (SEONDARY RETENTIONION FEATURES)	14	Same instructors	1, 2, 4, 8, 9, 10, 11, 13, 14, 15, 17, 19, 20, 22, 23,	The lab manual,Sturd evant's Art and Science of Operative Dentistry, 6 th Edition
Simulated teeth exercise (Anterior)	15		1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21	
Simulated teeth exercise (Posterior)	16		1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21	
Free Practice	17		1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21	
FINAL EXAM	18	Same instructors	1, 2, 4, 5, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21	The lab manual,Sturd evant's Art and Science of Operative Dentistry, 6 th Edition

21. Teaching Methods and Assignments:

Development of ILOs is promoted through the following teaching and learning methods:

1. **Laboratory Demonstrations**
2. **Videos and lab manual**
3. **Internet resources**
4. **Pictures and drawings**
5. **Dental models**

22. Evaluation Methods and Course Requirements:

- Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:
- **Completing the required task and fill the sheet in the logbook and sign it.**
- **Assignment projects: 60% of the final mark. Two evaluations include cavity preparation and tooth restoration (20 points each/ 40 points total), 10 points for daily assessment, general student attitude, knowledge, and preparation for the lab, 10 points for pop quiz.**
- **Final exam: 40 points. (TBD)**
- **Students should achieve 50 grades or more to pass the course.**

23. Course Policies:

A- Attendance policies:

Students are allowed 15% absence according to the laws of the university

B- Absences from exams and handing in assignment on time:

The student will be allowed to set for a make-up exam if he/she did not attend the exam due to an acceptable excuse and the excuse was presented in due time as set in the UJ's regulations. If he/she did not attend an exam without an acceptable excuse the student's mark for that exam will be zero.

C- Health and safety procedures:

Each student is required to wear a lab coat, gloves, goggles, and mask during all laboratory work. Care should be taken during the use of handpieces. In case of injuries, students should inform their instructor about the injury, wash the site of injury under running water for at least 10 minutes, then use the appropriate bandages and medicaments present in the first aid box (located in the lab corner adjacent to the door). In case the injury needs a medical intervention, the instructor will be responsible for taking the injured students to the emergency clinic in the University of Jordan Hospital.

D- Honesty policy regarding cheating, plagiarism, misbehavior:

Dishonesty of any kind with respect to examinations, course assignments, alteration of records, or illegal possessions of examinations will be considered as academic misconduct. It is the responsibility of the student not only to abstain from such behavior, but also to avoid the appearance of misbehavior and to guide against making it possible for others to misbehave. Students who collaborate in academic misconduct are as guilty as the student they assist. The student also should do everything possible to induce respect for the examination process and for honesty in the performance of assigned tasks in or out of class. Rules regarding this matter apply to all examinations and course work. Please refer for your Student Guide book for detailed regulations.

E- Grading policy:

All timed practical evaluation exercises must be completed during a timed laboratory period and submitted for grading. Percentage marks are converted to letters. (A)/(A-) are usually given for top 10-15% of students.

F- Available university services that support achievement in the course:

Students can utilize UJ's medical or main library facilities. In addition, they can access e-journals and e-books within campus. They can access the Moodle e-learning through the UJ's wireless internet facilities for free or through the computer lab in the Faculty of Dentistry. A lot of other facilities and support can be provided through the Deanship of Student Affairs.

24. Required equipment:

Each student should bring:

1. Examination set
2. Amalgam set
3. Calcium Hydroxide applicator
4. A variety of High speed and low speed cutting burs and composite finishing burs.
5. Maxillary and Mandibular jaws
6. Acrylic and simulated teeth.

25. References:

- A) The lab manual.
- B) The videos posted by the course director on e-learning.
- C) Required book (s), assigned reading and audio-visuals:

The Art and Science of Operative Dentistry, Sturdevant C M, Barton R E, Sockwell C L, Strickland W D.
The C.V. Mosby Co. St. Louis.

Fundamentals of Operative Dentistry: A Contemporary Approach, James B. Summitt, J. William Robbins,
Thomas J. Hilton, Richard S. Schwartz, Jose Dos Santos Jr. Quintessence Pub Co.

- D) Recommended books, materials, and media:

Pickard's Manual of Operative Dentistry, Kidd E A M, Smith B G N and Pickard H M, 6th edition, Oxford
Medical Publications.

Restorative Dentistry, An integrated approach, Jacobsen P H, 1st edition, Wright publication

26. Additional information:

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 lectures, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail.

Name of Course Coordinator: Islam Abd Alraheam Signature: Islam Abd Alraheam- Date:

Aug, 28th, 2022

Head of curriculum committee/Department: ----- Signature: -----

Head of Department: ----- Signature: -----

Head of curriculum committee/Faculty: ----- Signature: -----

Dean: ----- -Signature: -----

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Head of Department

Assistant Dean for Quality Assurance

Course File

