

1	Course title	Conservative Dentistry 1-Theory
2	Course number	1302315
3	<ul style="list-style-type: none"> Credit hours (theory, practical) 	One credit hour (theory)
	<ul style="list-style-type: none"> Contact hours (theory, practical) 	15 (one hour/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 Conservative Dentistry
10	Level of course	3rd year
11	Year of study and semester (s)	First and second semesters 2019/2020
12	Final Qualification	DDS
13	Other department (s) involved in teaching the course	None
14	Language of Instruction	English
15	Date of production/revision	8/ september/ 2019

16. Course Coordinator:

Name: Dr. Alaa Sabrah, BDS, MSD, PhD Operative Dentistry.
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17. Other instructors:

1. *Prof.Awni Al-Kayed, office hours: Sun.10-12, phone: 23552, E-mail: amkayed48@hotmail.com*
2. *Dr. Ayah Al-Asmar, office hours: Sun.9-12., phone no.23552, E-mail: dr.ayahalasmr@yahoo.com*
3. *Dr.Alaa Sabra, office hours: Mon.12-2., phone: 23552, Email: sabralolo@yahoo.com*
4. *Dr.Mariam Al-Abdallah, office hours: - , phone: 23552, E-mail: drmariam76@hotmail.com.*
5. *Dr. Alaa Haddad, office hours: - , phone: 23552, E-mail: alhaddad.alaa@gmail.com*

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,

This course discusses the process of caries and its control by preventive and conservative techniques. It emphasizes the sound understanding of the basic principles of management of dental caries and placement of different restorative materials.

1. 19. Course aims and outcomes:

- **Aims:**

- A. To provide the students with knowledge and understanding of the fundamentals of Operative Dentistry necessary to be able to deal with patients that needs operative treatment in a clinical setting.
- B. To review the topics related to tooth anatomy, histology and principles of dental caries within the context of Operative Dentistry.
- C. To introduce the students to concepts and principles of cavity preparation.
- D. To provide the students with in depth knowledge into the preparation of all types of cavities encountered in the dental practice.
- E. To provide the students with in depth knowledge in the restoration of all classes of dental lesions and the clinical handling of all classes of direct restoratives used in the dental practice.
- F. To introduce the students to the biological considerations in operative dentistry, caries detection and the management of grossly carious teeth.
- G. To familiarize students with the criteria for evaluating existing restorations.
- H. To introduce the students to the concepts of aesthetic dentistry including colour science and discoloration of dentition.

- **Intended Learning Outcomes (ILOs):**

Upon successful completion of this course students will be able to:

1. **Students should gain essentials of basic knowledge and understanding of the concepts, principles and theories related to Operative Dentistry.**
2. **Students should be able to discuss and explain the interaction between tooth anatomy and histology and the process of dental caries within the context of Operative Dentistry.**
3. **Students should be able to visualize, discuss and explain the concept and principles of cavity preparation.**
4. **Students should be able to discuss the steps of cavity preparation for individual lesions and the relation between the preparation features and the properties and characteristics of the restorative materials and techniques employed to restore the prepared cavity.**
5. **Students should be able to understand and appreciate the biological aspects of operative dentistry.**
6. **Students should be able to understand and appreciate the concepts of aesthetic dentistry and colour science.**

A. Knowledge and Understanding:

1. **Develop a wide range manual skills needed for the applications of the basic principles of Operative Dentistry and management of dental lesions.**
2. **Have in depth knowledge in the principles and detailed features of different types of cavity preparations for metallic and tooth-colored restoratives.**
3. **Develop a wide range knowledge and understanding of the instrumentation used in Operative Dentistry and the handling techniques for the restorative materials employed.**
4. **Be able to discuss and explain the biological aspects of operative dentistry.**
5. **Be able to discuss and explain the concepts of esthetic dentistry**

B. Intellectual Skills:

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

C. Subject-Specific Skills:

1. **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.**
2. **Identify and explain the functions of instruments used in Operative Dentistry.**
3. **Select and handle various restorative dental materials used in the restoration of the prepared cavities properly, safely and efficiently.**
4. **To discuss and explain the biological aspects of operative dentistry.**
5. **To discuss and explain the concepts of esthetic dentistry and color science.**

D. Transferrable Skills:

1. **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.**
2. **Appreciate the importance of clinical and laboratory based research in the development of new categories of restorative dental materials.**
3. **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 team work.**

20. Topic Outline and Schedule:

Topic	Week	Instructor	Achieved ILOs	Evaluation Methods	Reference
Introduction to operative dentistry	1	Prof. Awni	1	22 (1, 2, 3)	25 (1, 2)
Tooth structure (enamel & Dentine)	2	Dr. Alaa	2, B1	22 (1, 2, 3)	25 (1, 2, 5)
Dental caries I	3	Dr. Ayah	1,2,5, A1	22 (1, 2, 3)	25 (1, 4, 5)
Dental caries II	4	Dr. Ayah	1,2,5, A1	22 (1, 2, 3)	25 (1, 4, 5)
Caries detection	5	Dr. Ayah	1,2	22 (1, 2, 3)	25 (1, 2, 3, 4, 5)
Instrument used in operative dentistry I	6	Dr. Firas	A3, C2	22 (1, 2, 3)	25 (1, 2, 4)
Instrument used in operative dentistry II	7	Dr.Firas	A3, C2	22 (1, 2, 3)	25 (1, 2, 4)
Principles of cavity preparation	8	Prof.Awni	3,4 A2, C1	22 (1, 2, 3)	25 (1, 2, 3, 4)
Class I cavity preparation	9	Dr. Alaa	3,4 A2, C1	22 (1, 2, 3)	25 (1, 2, 3, 4)
Class II cavity preparation	10	Dr. Ayah	3,4 A2, C1	22 (1, 2, 3)	25 (1, 2, 3, 4)
Class III cavity preparation	11	Dr. Alaa	3,4 A2, C1	22 (1, 2, 3)	25 (1, 2, 3, 4)
Class VI cavity preparation	12	Dr. Alaa	3,4 A2, C1	22 (1, 2, 3)	25 (1, 2, 3, 4)
Class V cavity preparation	13	Dr. Alaa	3,4 A2, C1	22 (1, 2, 3)	25 (1, 2, 3, 4)
Posterior	14	Dr. Alaa	3,4,5	22 (1, 2, 3)	25 (1, 2, 4, 5)

Composites			B2, C1		
Field isolation for restorative dentistry	15	Dr. Ayah	5 A4, B3, C4	22 (1, 2, 3)	25 (1, 2, 4, 5)
Matrices	16	Dr. Haddad	A3, C2	22 (1, 2, 3)	25 (1, 4, 5)
Placement of amalgam restoration	17	Dr. Haddad	B2, C1	22 (1, 2, 3)	25 (1, 2, 3, 5)
Bonding techniques to tooth structure	18	Dr. Alaa	2,5 A4, B2, B3, C1, C4	22 (1, 2, 3)	25 (1, 2, 4)
Placement of composite restorations	19	Dr. Alaa	2,6 B2, C1	22 (1, 2, 3)	25 (1, 2, 4, 5)
Pulp Protection (Liners and Bases)	20	Dr. Alaa	5 A4, B2, B3, C1, C4	22 (1, 2, 3)	25 (1, 2, 3, 5)
Clinical Handling of Glass- Ionomer	21	Dr. Alaa	5 A4, B2, B3, C1, C4	22 (1, 2, 3)	25 (1, 2)
Treatment of grossly carious teeth	22	Dr. Alaa	3,4,5 B2, C1	22 (1, 2, 3)	25 (1, 2, 3, 5)
Pin-retained restorations	23	Dr. Alaa	3,4,5 B2, C1	22 (1, 2, 3)	25 (1, 2, 3, 5)
Evaluation criteria for restorations	24	Dr. Alaa	3,4,5 B2, C1	22 (1, 2, 3)	25 (1, 2, 3, 4, 5)
Tooth Discoloration: Etiology and Diagnosis	25	Dr. Alaa	1, 2, 5, 6 A5, C5	22 (1, 2, 3)	25 (1, 2, 4)
Dentine-Pulp complex histopathology	26	Dr. Rawan	1, 2, 5 A4, B1, B3, C4	22 (1, 2, 3)	25 (1, 2, 5)
Biomematic Approach in Operative Dentistry	27	Dr. Alaa	1, 2, 5 A4, B1, B3, C4	22 (1, 2, 3)	25 (1, 2, 5)
Occupational	28	Dr.	1, 2, 5	22 (1, 2, 3)	25 (1, 2, 5)

and Environmental hazard in Operative Dentistry		Mariam	A4, B3, C3		
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21. Teaching Methods and Assignments:

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

Teaching methods:

- **Duration: 32 weeks in 1st and 2nd semesters (3rd year), 32 hours in total.**
- **Lectures: 28 hours, 1 per week (including two 1-hour 1st and 2nd exams and one 2-hours final exam).**

22. Evaluation Methods and Course Requirements:

Opportunities to demonstrate achievement of the ILOs are provided through the following assessment methods and requirements:

Methods of evaluation:

- 1- First exam: 25 points, MCQs or essay type (to be announced).**
- 2- Second exam: 25 points, MCQs.**
- 3- Final Exam: 50 points, MCQs.**

23. Course Policies:

A. Attendance policies:

Lecture attendance is obligatory. The handout and recommended textbook are not comprehensive and additional material will be covered in lectures. Students are responsible for all material covered in lectures. However, 15% allowed absence is granted for students by the university law.

B. Absences from exams and handing in assignments on time:

According to the rules and regulations of the University of Jordan.

C. Health and safety procedures:

According to the rules and regulations of the Faculty of Dentistry.

D. Honesty policy regarding cheating, plagiarism, misbehavior:

According to the rules and regulations of the University of Jordan.

E. Grading policy:

According to the rules and regulations of curriculum for the academic degree of Doctor of Dental Surgery (DDS).

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. A lot of other facilities and support can be provided through the Deanship of Student Affairs.

24. Required equipment:

Non Special

25. References:

A- Required book (s), assigned reading and audio-visuals:

- Strongly recommended:
 - The Art and Science of Operative Dentistry; Sturdevant C M, Barton R E, Sockwell C L, Strickland W D, 5th edition, Mosby Co. St. Louis.

B- Recommended books, materials, and media:

1. Fundamentals of Operative Dentistry: A Contemporary Approach; Summitt J B, Robbins J W, Hilton T J, Schwartz R S, Santos J, 3rd edition, Quintessence Pub Co.
2. Pickard's Manual of Operative Dentistry; Kidd E A M, Smith B G N and Pickard H M, 6th edition, Oxford Medical Publications.
3. Clinical Cariology and Operative Dentistry in the Twenty-First Century; Fejerskov O, Kidd E A M, London, Blackwell, Munksgaard, 2003.
4. Tooth Coloured Restoratives: Principles and Techniques; Albers H F, 9th edition, London, Hamilton.
5. The Biological Basis of Dental Caries; Lewis M, USA, 1980.

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: Alaa Sabrah Signature: Alaa Sabrah- Date: Sep, 8th, 2018

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

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

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

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

Copy to:

Head of Department

Assistant Dean for Quality Assurance

Course File