



Jordan University of Science and Technology
Faculty of Dentistry
Dental Surgery Department

DENT714 Advanced Restorative Dentistry 1 - JNQF Level: 9
First Semester 2024-2025

Course Catalog
2 Credit Hours. The course consists of many lectures on the domains of restorative dentistry. It will revise the basic principles and current concepts in restorative dentistry, and develop a basic knowledge about the principles, technical steps, indications, and contraindications of the different procedures and the materials involved mainly in the operative and endodontic disciplines.
Teaching Method: Blended

Text Book	
Title	Summitt's Fundamentals of Operative Dentistry : A Contemporary Approach
Author(s)	Broome, James C.; Ferracane, Jack L.; Hilton, Thomas J.
Edition	4th Edition
Short Name	Reference #1
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Reference #2	The Art & Science of Operative Dentistry	Andre V. Ritter	7th Edition	
Reference # 3	Endodontics principles and practice.	Torabinejad Walton	5th Edition	
Reference #4	Oral histology, development, structures, and function, Ten Cate	Antonio Nanci	8th Edition	
Reference # 5	Selected papers and literature reviews	Multiple authors	1st Edition	

Instructor	
Name	Dr. Ghada Maghaireh
Office Location	234
Office Hours	
Email	gmaghair@just.edu.jo

Class Schedule & Room	
Section 1: Lecture Time: Wed : 09:00 - 11:00 Room: U	

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Craniofacial development and growth. Structure of the oral tissues. General account of development of teeth and its supporting tissues	From Reference #4
Week 2	Clinical Significance of Dental Anatomy, Histology, Physiology, and Occlusion.	From Reference #4
Week 3	Patient assessment, examination and diagnosis ? History-taking ? Clinical examination ? Radiographic interpretation	From Reference #2
Week 4	Development of treatment strategies and treatment planning. ? Components of proper treatment plan and treatment plan sequencing	From Reference #2
Week 5	Clinical Dental materials	From Reference #1 , From Reference # 5
Week 6	Instrument and equipment for tooth preparation. Preliminary Considerations for Operative Dentistry	From Reference #1
Week 7	Cariology	From Reference # 5

Week 8	Cariology I: Etiology, clinical characteristics and Dynamics of dental caries	From Reference # 5
Week 9	Cariology II: Caries Management, Diagnosis and Treatment Strategies	From Reference # 5
Week 10	Conservative Preparation and Restoration ? Minimally invasive approach -Composite Restorations - Common Problems: Causes and Potential Solutions -Light Polymerization and its equipment	From Reference #2
Week 11	Fundamentals of Tooth Preparation and Pulp Protection.	From Reference #2
Week 12	- Introduction to endodontics, diagnosis and treatment planning - Diagnostic tools and techniques used in endodontics - Local anesthesia - Access opening and length determination.	From Reference # 3
Week 13	- Isolation - Endodontic instruments - Biological and mechanical objectives of cleaning and shaping	From Reference # 3

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Recall the acquired knowledge in histology, physiology, the dentition and the supporting tissues. [1PLO_9K1][1L9K1]	10%	Midterm Exam
Recognize the dynamics of the caries process, the optimum methods for detection, diagnosis and management of dental caries. [1PLO_9K2][1L9K2]	20%	Midterm Exam, Oral presentation
Describe the steps needed for medical and dental history-taking, intra and extra-oral examination and making the appropriate diagnoses. [1PLO_9K1][1L9K1]	10%	Midterm Exam
Describe the phases and sequences of writing a treatment strategy and composing a problem-based treatment plan. [1PLO_9C1][1L9C1]	10%	Midterm Exam
Recognize the instruments and equipment for tooth preparation and identifying the fundamentals of tooth preparation and pulp protection. [1PLO_9K1][1L9K1]	15%	Final exam
Acquire an up-to-date knowledge on minimal invasive approaches for preparation and restoration of teeth considering advancements in adhesive dentistry. [1PLO_9K1][1L9K1]	15%	Final exam
Obtain an up-to-date knowledge in endodontics diagnosis and treatment planning, endodontic instruments and cleaning and shaping. [1PLO_9K1][1L9K1]	20%	Final exam

1.1 Scientific Knowledge and Cognitive Skills	1.2 Scientific Knowledge and Cognitive Skills	1.3 Scientific Knowledge and Cognitive Skills	1.4 Scientific Knowledge and Cognitive Skills	1.5 Scientific Knowledge and Cognitive Skills	1.6 Scientific Knowledge and Cognitive Skills	1.7 Scientific Knowledge and Cognitive Skills	2.1 Person Centered Care	2.2 Person Centered Care	2.3 Person Centered Care	2.4 Person Centered Care	3.1 Responsibility, Communication, Professionalism and Ethics	3.2 Responsibility, Communication, Professionalism and Ethics	3.3 Responsibility, Communication, Professionalism and Ethics

Relationship to NQF Outcomes (Out of 100%)		
L9K1	L9K2	L9C1
70	20	10

Evaluation	
Assessment Tool	Weight
Midterm Exam	40%
Oral presentation	10%
Final exam	50%

Policy	
Exams	All exams are closed books and notes. The final exam is comprehensive (covers all the material). Incomplete and makeup exams will need approval from the dean. All exams will be in essay format.
Cheating	Prohibited, and in case of cheating the student will be subject to punishment according to the university regulations.
Attendance	Attendance is mandatory and will be recorded and uploaded to the online system regularly. University regulations in this matter will be followed strictly. No excuses will be given.