



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

DENT741L Laboratory Training In Endodontics - JNQF Level: 6

First Semester 2024-2025

Course Catalog

1 Credit Hours. This one credit hour practical course is given during first semester of first year of the program. It consists of series of practical training. The first objective of this course is designated to expose the first year postgraduate dental students to the major topical areas in endodontics. This should help them achieving a successful management of various clinical aspects in endodontics. The course is designed to provide the first year endodontics master students with the advanced knowledge and skills needed in managing different clinical endodontics cases (practical competency), with more focus on challenging cases and to practice the contemporary techniques used in practical endodontics. The second objective of the course is the development of an understanding of how is the practice of endodontics requires two inseparable components: art and science. The art consists of executing technical procedures during uncomplicated root canal treatment. The science includes the basic and clinical sciences related to biological and pathological conditions that guide the art of endodontics through the principles of evidence-based treatment.

Teaching Method: On Campus

Text Book

Title	Endodontics Principles and Practice (2014)
Author(s)	Torabinejad M, Walton R & Fouad A
Edition	5th Edition
Short Name	Torabinejad
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Cohen's Pathways	Cohen's Pathways of the Pulp Expert Consult	Kenneth Hargreaves and Louis Berman	12th Edition	

Instructor

Name	Dr. TAHER ALOMARI
Office Location	-
Office Hours	
Email	tmalomari@just.edu.jo

Class Schedule & Room

Section 1:
 Lecture Time: U : -
 Room: HOSPITAL

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	SESSION TITLE 1: Laboratory Orientation; Teeth Identification, Preoperative Radiography; Mounting the Teeth. (mounted teeth total of 5 teeth: incisor, Canine, Premolar, Maxillary and Mandibular molars)	
Week 2	SESSION TITLE 2: Access Cavity (Incisor upper and lower, canine, Maxillary and Mandibular premolar, Maxillary and Mandibular Molar Anterior)	
Week 3	SESSION TITLE 3: Magnification and Microscope Training	
Week 4	SESSION TITLE 4: Root Canal Treatment (Anterior and Posterior)	
Week 5	SESSION TITLE 5: Irrigation, Working length determination, Intra-canal Medication; Temporization (Ready-made & IRM)	
Week 6	SESSION TITLE 6: Obturation, lateral and Warm vertical condensation	
Week 7	SESSION TITLE 7: Training lab	
Week 8	SESSION TITLE 8: Midterm Practical exam	

Week 9	SESSION TITLE 9: : Restoration of an Endodontically Treated Tooth. Post Space Preparation: Practice under Dental Operating Microscope	
Week 10	SESSION TITLE 10: Retreatment of Root Canal Treated Teeth-part I	
Week 11	SESSION TITLE 11: Retreatment of Root Canal Treated Teeth-Part II	
Week 12	SESSION TITLE 12: MTA Application (Perforation repair, MTA Plug)	
Week 13	SESSION TITLE 13: Fractured instrument management-Part I	
Week 14	SESSION TITLE 14: Surgical root canal treatment	
Week 15	Final competency practical exam	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Determine appropriate application of endodontic procedures. Design sound and reasonable clinical judgment in relation to case difficulty and patient risk management Recognize different types of dental instrument, techniques and materials with special emphasis on new trends in endodontic. [1PLO_9K1] [1L6K1]	15%	Midterm Practical exam
Interpersonal Skills & Responsibility Perform critical self-evaluation. Demonstrate effective time management and setting priorities Utilize critical thinking and scientific knowledge in decision making processes [1PLO_9S1] [1L6K2, 1L6S1]	10%	Midterm Practical exam
Communication, Information Technology, Numerical Operate new technologies (Apex locator, Dental Operating Microscope, new rotary system, RVG) to provide predictable treatment outcome Communicate effectively with colleagues and other instructors. [1PLO_9S1, 1PLO_9S2] [1L6S2, 1L6S3]	10%	Midterm Practical exam
Competently perform endodontic therapy on uncomplicated permanent teeth. Perform safely non-surgical root canal retreatment, with high outcome and handling different procedural errors. Prepare post space and restore root canal treated teeth appropriately [1PLO_9C1, 1PLO_9C6.1] [1L6C1, 1L6C3, 1L6C4]	50%	Final Practical Competency Exam
post grade endodontics student will be able to design and conduct treatment plan to manage and treat patient referred for post grade clinic [1PLO_9C1, 1PLO_9C4.2] [1L6C4, 1L6C5]	15%	Final Practical Competency 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, Communicator Professionalism and Ethics

Relationship to NQF Outcomes (Out of 100%)									
L6K1	L6K2	L6S1	L6S2	L6S3	L6C1	L6C3	L6C4	L6C5	
15	5	5	5	5	16.67	16.67	24.17	7.5	

Evaluation	
Assessment Tool	Weight
Midterm Practical exam	40%
Final Practical Competency Exam	60%

Policy	
Teaching and Learning Methods:	Lab briefing, Demonstration, hands on and Video tutorial are used to achieve the course objectives. Duration: (first semester) 15 weeks. Lab: (first semester) 26 hours, 2 hours per week (2-hours Midterm and 2-hours Final exam) You should read the assigned chapters and related articles before the lab session and participate in Lab discussion as much as possible to grasp this essential core course
Attendance policy	Students are expected to attend more than 90% of labs JUST policy requires the faculty member to assign ZERO grade(35) if a student misses 10% of the classes that are not excused.
Feedback	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 sessions, notes on the content of the course, its teaching and assessment methods can be also sent by e-mail.