Jordan University of Science and Technology
Faculty of Applied Medical Sciences
Dental Technology Department

TDEN334 Fixed Prosthodontics (3) - JNQF Level: 7
Second Semester 2023-2024

Course Catalog
1 Credit Hours. This course is designed for the students studying Bachelor of Dental Technology in their third year of study and it is one theoretical credit hour. This course designed to provide students with theory necessary to become competent in using CAD/CAM digital dentistry and other emerging restorative technologies. Lectures introduce dental technology students to the principles, techniques, and technologies involved in designing and fabricating dental fixed prostheses using digital workflows. Students will learn about the various aspects of digital dentistry applied to fixed prosthodontics, including impression scanning, CAD/CAM design, materials selection, various digital systems and clinical considerations.

Teaching Method: Blended

Text Book	
Title	Clinical Applications of Digital Dental Technology
Author(s)	Radi Masri & Carl F. Driscoll
Edition	2nd Edition
Short Name	Textbook
Other Information	

Course References

Short name	Book name	Author(s)	Edition	Other Information
Ref #1	Contemporary Fixed Prosthodontics	Rosentiel S F, Land M F & Fujimoto J.	5th Edition	
Ref #2	Digitization in Dentistry: Clinical Applications	Priyanka Jain & Mansi Gupta	1st Edition	

Instructor	
Name	**Mrs. Maha Alomari**

Office Location	Faculty of Applied Medical Sciences/Second Floor
Office Hours	Sun : 12:30 - 13:30 Mon : 10:00 - 12:00 Mon : 13:00 - 14:00 Tue : 08:30 - 09:30 Wed : 12:30 - 13:30
Email	maalomari2@just.edu.jo

Class Schedule & Room

Section 1:
  Lecture Time: Mon : 09:00 - 10:00
  Room: NF37

Section 2:
  Lecture Time: Mon : 12:00 - 13:00
  Room: N4205

Tentative List of Topics Covered

Weeks	Topic	References
Week 1	Course Overview	
Week 2	Digital Dentistry in Fixed Prosthodontics - available systems and digital workflows	From **Textbook**, From **Ref #1**
Week 3	Digital Dentistry in Fixed Prosthodontics - tooth preparation, design and material selection	From **Textbook**, From **Ref #1**
Week 4	CAD/CAM Milling Materials Properties and Composition I	From **Textbook**
Week 5	CAD/CAM Milling Materials Properties and Composition II	From **Textbook**
Week 6	Digital Scanning ? digital impressions and cast scan	From **Textbook**
Week 7	Computer-Aided Design (CAD) Software	From **Textbook**
Week 8	Midterm Exam	
Week 9	Designing and Milling Monolithic Crowns	From **Textbook**, From **Ref #2**
Week 10	Designing and Milling Monolithic Fixed Partial Dentures	From **Textbook**, From **Ref #2**
Week 11	Digital photography	From **Textbook**, From **Ref #1**
Week 12	Digital Smile Design	From **Ref #2**
Week 13	CAD/CAM Provisional Restorations	From **Textbook**

Week 14	CAD/CAM and 3D-Printing for Fixed Application	From **Textbook**, From **Ref #1**
Week 15	Rivision	
Week 16	Final Exam	

Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Understand the differences between conventional and digital workflows for fabrication of fixed dental prostheses. [5PLO 2] [5L7K1]	5%	
Describe the principles and concepts of digital dentistry and its applications in fixed prosthodontics. [5PLO 1, 10PLO 2, 10PLO 3, 5PLO 6] [30L7K1]	30%	
Understand CAD/CAM workflow for designing and milling dental fixed prostheses. [10PLO 2, 5PLO 3, 5PLO 5, 10PLO 6] [30L7K1]	30%	
List the steps of combining conventional and digital workflows or complete digital workflow for the fabrication of fixed prostheses. [5PLO 2] [5L7K1]	5%	
Recognize the importance of patient assessment, treatment planning, preparation design and communication with clinicians in digital fixed prosthodontics workflows. [10PLO 3, 10PLO 5] [20L7K1]	20%	
Evaluate, select, and identify the appropriate restorative materials for the selected digital workflows of fixed prosthodontics. [5PLO 3, 5PLO 8] [10L7S3]	10%	

Relationship to Program Student Outcomes (Out of 100%)									
PLO 1	PLO 2	PLO 3	PLO 4	PLO 5	PLO 6	PLO 7	PLO 8	PLO 9	PLO 10
5	30	30		15	15		5		

Relationship to NQF Outcomes (Out of 100%)	
L7K1	L7S3
90	10

Evaluation	
Assessment Tool	**Weight**
Midterm Exam	50%
Final Exam	50%

Policy

Statement on Professionalism	Professional behavior is expected of students at all times. Attitude and professional behavior are a minimum criterion for passing this class. Examples of unprofessional behavior include but are not limited to: missing classes, tardiness, lack of attention for a speaker, talking to others during lecture, leaving a lecture prior to its completion without prior authorization of the instructor, working on other class material during class, and sleeping during class.
Cheating	University regulations will be applied on cases of cheating and/or plagiarism
Cell phone	The use of cellular phone is prohibited in class rooms and during exams. The cellular phone must be switched off in class rooms and during exams.
Attendance	No points will be count for points attendance of this class, however attending the lectures will greatly enhance your grade. The student is responsible for any information discussed in lecture sessions. It is imperative to attend all classes!
Absences	University regulations will be applied. Students are not allowed to be absent for more than 20% of lectures for any reason or excuse. If a student exceeds the absence limit, he or she will not be allowed to sit for future course exams. (Please review university regulation for more details)
Make-up Exam	Make-up exams is entitled for students who miss the exam with accepted legal or medical excuse endorsed by the instructor within 24 hours after the scheduled exam (Please review university regulation for more details)
Feedback	Concerns, complaints, questions, and/or feedback are appreciated and will be important for the instructor. You can contact your instructor using the e-mail or during office hours.

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