



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

TDEN326 Advanced Removable Prosthodontics Practical - JNQF Level: 7

Second Semester 2023-2024

Course Catalog

2 Credit Hours. This Practical Course in Digital Removable Prosthodontics is designed to provide dental technology students with hands-on experience and practical skills in utilizing digital technologies for the design, fabrication, and customization of removable prostheses. Through a combination of demonstrations and laboratory sessions, students will gain the basic skills in laboratory scanning, computer-aided design (CAD) software and CAM technologies specific to removable prosthodontics. Students will develop a comprehensive understanding of digital workflows in removable prosthodontics, including digital impression techniques and CAD/CAM design principle. Students will acquire skills in CAD software applications required for designing removable prostheses. Fabricate Removable Prostheses: Through hands-on laboratory sessions, students will fabricate removable prostheses using digital workflows. They will translate digital designs into physical prototypes, perform post-processing tasks, and evaluate the fit, function, and esthetics of the fabricated prostheses.

Teaching Method: On Campus

Text Book

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|--------------------------|--|
| Title | Clinical Applications of Digital Dental Technology. (2023). United Kingdom: Wiley. |
| Author(s) | Radi Masri, ? Carl F. Driscoll |
| Edition | 2nd Edition |
| Short Name | 1 |
| Other Information | |

Course References

| Short name | Book name | Author(s) | Edition | Other Information |
|------------|--|-----------|-------------|-------------------|
| 2 | Digital Removable Partial Denture Technology: From Design Analysis to Practical Skills. Germany: Springer Nature Singapore | Yu, H. | 2nd Edition | |

Instructor

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| Name | Dr. Noor Nawafleh |
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| Office Location | Faculty of Applied Medical Sciences/Second Floor |
| Office Hours | |
| Email | nanawafleh@just.edu.jo |

| Class Schedule & Room | |
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| Section 1: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 2: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 3: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 4: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 5: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 6: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 7: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 8: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |
| Section 9: | Lecture Time: Sun : 09:30 - 15:30 Room: LAB |

| Tentative List of Topics Covered | | |
|---|---|-------------------|
| Weeks | Topic | References |
| Week 1 | Introduction to Digital Removable Prosthodontics | From 1, From 2 |
| Week 2 | Laboratory Scanning: Understanding the importance of detailed data acquisition for successful digital workflows | From 1, From 2 |
| Week 3 | Fundamentals of digital model manipulation and design principles. | From 2 |

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|--------|---|--------|
| Week 4 | Hands-on exercises in CAD software applications for designing removable prostheses. | From 1 |
| Week 5 | Hands-on exercises in CAD software applications for designing removable prostheses. | |

| Mapping of Course Outcomes to Program Outcomes and NQF Outcomes | Course Outcome Weight (Out of 100%) | Assessment method |
|---|-------------------------------------|-------------------|
| Describe the principles and concepts of digital dentistry and its applications in removable prosthodontics. [10PLO 1] [10L7K1] | 10% | |
| Understand CAD/CAM workflow for designing removable prostheses [5PLO 1, 10PLO 2, 5PLO 4] [1L7K1] | 20% | |
| Apply scanning principles to capture accurate data for CAD/CAM design processes [5PLO 2, 10PLO 4, 5PLO 6] [10L7S2, 10L7S3] | 20% | |
| Utilize CAD software to design removable prostheses based on patient-specific anatomical data. [5PLO 2, 10PLO 6, 10PLO 8] [5L7S1, 5L7S2, 15L7S3] | 25% | |
| Implement CAM techniques to translate digital designs into physical prosthetic components using additive manufacturing methods. [5PLO 1, 10PLO 3, 10PLO 6] [5L7S1, 15L7S2, 5L7S3] | 25% | |

| 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 |
| 20 | 20 | 10 | 15 | | 25 | | 10 | | |

| Relationship to NQF Outcomes (Out of 100%) | | | |
|--|------|------|------|
| L7K1 | L7S1 | L7S2 | L7S3 |
| 30 | 10 | 30 | 30 |

| Policy | |
|------------|---|
| Cheating | Cheating the commitment of the Acts of Cheating and deceit such as copying during examinations is dishonest and will not be tolerated; JUST policy will be applied. |
| attendance | Student attendance and responsibility: Lateness more than 10 minutes is considered as an unexcused absence. JUST POLICY will be applied regarding absence |

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