



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

TDEN344 Orthodontics (2) - JNQF Level: 6

Second Semester 2022-2023

**Course Catalog**

1 Credit Hours. This course is for undergraduate third year students. This theoretical part is designed to provide the students with the sufficient knowledge and theoretical background relevant to technical and clinical aspects of the types of orthodontics appliances and the rationale of using the various orthodontic appliances.

**Text Book**

<b>Title</b>	Orthodontic Retainers and Removable Appliances
<b>Author(s)</b>	Luther, F; Nelson-Moon Z
<b>Edition</b>	1st Edition
<b>Short Name</b>	Reference 1
<b>Other Information</b>	Butterworth-Heinemann, 2012

**Course References**

Short name	Book name	Author(s)	Edition	Other Information
Reference 2	An Introduction to Orthodontics	Laura Mitchell	3rd Edition	Oxford, University Press, 2007
Reference 3	An Introduction to Orthodontics	Laura Mitchell	2nd Edition	Oxford, University Press, 2001
Reference 4	The design, construction and uses of removable orthodontic appliances	C. Philip Adams; W. John S. Kerr.	6th Edition	Butterworth-Heinemann, 1991
Reference 5	Removable Orthodontic Appliances	Isaacson K. G; Reed R. T; Muir J. D	1st Edition	Butterworth-Heinemann, 2002

**Instructor**

Name	<b>Dr. Noor Al-Mortadi</b>
Office Location	L2 -18

Office Hours	Sun : 08:00 - 09:00 Mon : 08:30 - 09:30 Tue : 09:00 - 12:00 Tue : 13:30 - 15:30 Thu : 13:30 - 15:30
Email	naalmortadi@just.edu.jo

Class Schedule & Room	
Section 1:	Lecture Time: Thu : 11:30 - 12:30 Room: M4201
Section 2:	Lecture Time: Mon : 08:30 - 09:30 Room: LAB

Prerequisites		
Line Number	Course Name	Prerequisite Type
513412	TDEN341 Orthodontics (1)	Prerequisite / Study

Tentative List of Topics Covered		
Weeks	Topic	References
Week 1	Introduction to the course	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 2	Review of Orthodontics I	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 3	Interceptive and corrective orthodontic	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 4	Space Maintainers	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>

Week 5	Maxillary Expansion I	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 6	Maxillary Expansion II	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 7	Solders and Flux	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 8	Functional Appliances I	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 9	Functional Appliances II	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 10	Fixed appliances I: Overview & Components	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 11	Fixed appliances II: Bond-up & Indirect bonding	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 12	Retainers	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
Week 13	Revision	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>

Week 14	Revision	From <b>Reference 1</b> , From <b>Reference 2</b> , From <b>Reference 3</b> , From <b>Reference 4</b> , From <b>Reference 5</b>
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Mapping of Course Outcomes to Program Outcomes and NQF Outcomes	Course Outcome Weight (Out of 100%)	Assessment method
Provide the students with a solid theoretical background related to the field of space maintainers, maxillary expansion and different appliances used to expand the maxillary arch. [10PLO 1, 10PLO 3] [7L6K1, 7L6K2, 6L6C4]	20%	
Be able to recognize and understand the different types of functional orthodontic appliances, their components, their mode of action and their clinical management [10PLO 1, 5PLO 3, 5PLO 6] [10L6S1, 5L6S2, 5L6S3]	20%	
Detailed knowledge of fixed orthodontic appliances: definition, components, indications, contraindication, bond-up [6PLO 1, 7PLO 7, 7PLO 8] [6L6K1, 7L6K2, 7L6S3]	10%	
To provide training on the various laboratory steps involved in the fabrication of orthodontic appliances mainly the wire bending of the various components of an orthodontic appliance, the construction of the acrylic base plate and soldering to fixed bands. [10PLO 6, 10PLO 7, 10PLO 8] [10L6C1, 10L6C2, 10L6C3]	30%	
Develop the manual skills necessary for the construction of various components of removable, functional and fixed orthodontic appliances. [10PLO 2, 10PLO 4] [7L6S1, 7L6S2, 6L6C3]	20%	

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
23	10	15	10		15	13.5	13.5		

Relationship to NQF Outcomes (Out of 100%)									
L6K1	L6K2	L6S1	L6S2	L6S3	L6C1	L6C2	L6C3	L6C4	
15.13	7.93	17	12	5.93	10	10	16	6	

Evaluation	
Assessment Tool	Weight
Mid Term Exam	50%
Final Exam	50%