



**Jordan University of Science and Technology**  
**Faculty of Applied Medical Sciences**  
**Department of Applied Dental Sciences**  
**First Semester 2016/2017**  
**Course syllabus**

<b>Course Information</b>	
<b>Course Title</b>	Orthodontics 1 practical
<b>Course code</b>	TDEN343
<b>Prerequisite</b>	TDEN 209
<b>Credit hours</b>	2 credit Hours

<b>Lecturer information</b>	
<b>Lecturer</b>	Dr. Noor Al Mortadi
<b>Office Location</b>	Faculty of Applied Medical Sciences, Applied Dental Sciences Department
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<b>Office Hours</b>	
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<b>Teaching Assistant(s)</b>	Supervisors at the Dental Technology Laboratory

<b>Course Description</b>
<p>This is an undergraduate third year students course. The theoretical part of this course is designed to provide the students with the sufficient knowledge to be able to communicate with the orthodontic specialist, understand the treatment being rendered and the rationale behind it. The students will have the opportunity to gain a thorough knowledge related to the characteristics of normal occlusion, different types of skeletal and occlusal anomalies and how to describe them using different classification systems. In addition, the course will teach the students the various orthodontic records. The course also allows the students to recognize different orthodontic appliances and know their proper management. A large emphasis of this course will be on the removable orthodontic appliances: definition, materials used in construction, mode of action, indications, contraindications, limitations, proper design, various components, anchorage requirements, activation and clinical management.</p> <p>In this course of practical part of Orthodontics, the aim is providing the student with the basic technical knowledge and manual skills to fabricate various removable orthodontics appliances.</p>
<b>Course Objectives</b>
1- Introduce the students to the basic aspects and concepts of orthodontics.

- 2- Provide the students with a solid theoretical background regarding normal occlusion, different malocclusions, classification systems and rationale behind orthodontic treatment.
- 3- Explain the different types of tooth movements produced by orthodontic appliances.
- 4- Be able to recognize and understand the different types of orthodontic appliances and their mode of action.
- 5- Understand all the steps needed to conduct a proper clinical examination and detailed knowledge of diagnostic records needed in the orthodontic office.
- 6- Provide the student with a sufficient and thorough knowledge needed to understand and construct removable orthodontic appliances.
- 7- To train the student to handle the equipments and materials used in the construction of removable orthodontic appliance in the proper way.
- 8- Develop the manual skills necessary for the construction of various components of removable orthodontic appliances.

<b>Textbook and Supporting Material</b>	
<b>I- Text Book</b>	
<b>Title</b>	Removable Orthodontic Appliances
<b>Author(s)</b>	Isaacson K. G; Reed R. T; Muir J. D.
<b>Publisher</b>	Butterworth-Heinemann
<b>Year</b>	2002
<b>Edition</b>	1st edition
<b>II- Other References</b>	<ul style="list-style-type: none"> <li>1- Laura Mitchell. An Introduction to Orthodontics. Oxford University Press, 2007, 3<sup>rd</sup> Edition</li> <li>2- Laura Mitchell. An Introduction to Orthodontics. Oxford University Press, 2001, 2<sup>rd</sup> Edition</li> <li>3- Laura Mitchell. An Introduction to Orthodontics. Oxford University Press, 2007, 3<sup>rd</sup> Edition</li> <li>4- C. Philip Adams; <a href="#">W. John S. Kerr</a>. The design, construction and uses of removable orthodontic appliances, Butterworth-Heinemann, 1991, 6th Edition.</li> <li>5- Handouts given by the lecturer taken from the published articles.</li> </ul>

<b>Teaching &amp; Learning Methods</b>	
<ul style="list-style-type: none"> <li>➤ <b><u>Practical part</u></b> <ul style="list-style-type: none"> <li>➤ There will be 1 weekly lab during which a demonstration will be given, followed by individual supervised lab sessions.</li> <li>➤ Duration: 10 weeks</li> </ul> </li> </ul>	

### Assessment Policy

- Satisfactory completion of this course requires:
  1. Attendance of lectures and laboratory sessions.
    - Attendance is obligatory. More than 10% of absence from the lecture or laboratory sessions will deprive the student from taking the final examination (JUST regulations). Attendance is checked every lecture and lab. Another 10% is allowed in the cases of accepted absence.
  2. A minimal passing grade of 50% must be achieved of the combined grades of the didactic and laboratory components.

### Modes of assessment

The students will be evaluated by their performance during the course. The total grade is 100%, and it is distributed as follows:

Assessment	Expected due date	Percentage
Continuous Assessment	During the semester	60%
Final (Theoretical)	To Be announced	40%

### Additional Notes

#### 1- Attendance Policy:

To receive the maximum benefit from this course, students must attend all the lecture and laboratory sessions. JUST policy requires the faculty member to assign ZERO grade (35) if a student miss more than 10% of the classes without an excuse.

#### 2- Policy On Make-Ups:

- Excused absences that are unavoidable will be offered an alternate first, second or final exam with different questions.
- No make-up exams will be given for unexcused absences.

3- Out of respect for the lecturer and lab supervisors, it is kindly asked that students' attention is on the lecture being presented or demonstration being held. Cell phones or any other electronic devices are not to be used in the classroom.

- Making any kind of disruption and (side-talks) will affect you negatively.

4- Questions are welcome during lecture and students are highly encouraged to participate in the classes.

5- Cheating during exam will result in dismissal from the exam hall and the student will be penalized according to JUST regulations.

#### 6- Course Changes:

- Information contained in this course outline is correct at the time of publication.
- Content of the courses is revised on an ongoing basis to ensure relevance to changing educational, employment needs.

- The course instructor reserves the right to add or delete material from courses and will endeavor to provide notice of changes to students as soon as possible.
- The timetable may also be revised accommodating to holidays and unexpected off days.

**7- 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.

<b>Course content</b>	
<b>Week</b>	<b>Topics</b>
1-2	Introduction to orthodontics and Wire Exercise
3-4	Palatal finger spring
5-6	Z spring and Buccal Canine Retractor spring
7-8	Labial bow and Adams for appliance 1
9-10	Adams for appliance 2 and appliance 3
11	<b>Final Exam</b>

<b>Criteria of practical part</b>		
<b>Adams clasps 1</b>		
Enter undercut	/2	Total: /10
Arrowheads equal size, position	/2	Notes:
Bridge length and angle	/2	

Cross over	/2	
Equal tags and adaptation	/2	
<b>Adams clasps 2</b>		
Enter undercut	/2	Total: /10
Arrowheads equal size, position	/2	Notes:
Bridge length and angle	/2	
Cross over	/2	
Equal tags and adaptation	/2	
<b>Adams clasps 3</b>		
Enter undercut	/2	Total: /10
Arrowheads equal size, position	/2	Notes:
Bridge length and angle	/2	
Cross over	/2	
Equal tags and adaptation	/2	
<b>Adams clasps 4</b>		
Enter undercut	/2	Total: /10
Arrowheads equal size, position	/2	Notes:
Bridge length and angle	/2	
Cross over	/2	
Equal tags and adaptation	/2	
<b>Adams clasps 5</b>		
Enter undercut	/2	Total: /10

Arrowheads equal size, position	/2	Notes:
Bridge length and angle	/2	
Cross over	/2	
Equal tags and adaptation	/2	
<b>Adams clasps 6</b>		
Enter undercut	/2	Total: /10
Arrowheads equal size, position	/2	Notes:
Bridge length and angle	/2	
Cross over	/2	
Equal tags and adaptation	/2	
<b>Palatal finger spring</b>		
coil	/2	Total: /10
Active arm	/2	Notes:
Tag arm	/2	
Guard	/2	
Adaptation on tooth	/1	
Contact on the mesial/mesial or distal of tooth	/1	
<b>Z-Spring</b>		
Equal coil size, shape	/2	Total: /10
Guard	/2	Notes
Position on tooth, horizontal	/2	
Position of arms	/2	

Tag	/2	
<b>Buccal canine retractor</b>		
Coil size and position	/2	Total: /10
Tube length and position	/2	Notes:
Clasp contact against tooth	/2	
Arm length and position	/2	
Adaptation to palate	/2	
<b>Acrylic work 1</b>		
Covers all wirework and tags	/2	Total: /10
Uniform thickness	/2	Notes:
Extension	/2	
Fitting surface no sharps	/2	
Polish and luster	/2	
<b>Acrylic work 2</b>		
Covers all wirework and tags	/2	Total: /10
Uniform thickness	/2	Notes:
Extension	/2	
Fitting surface no sharps	/2	
Polish and luster	/2	
<b>Acrylic work 3</b>		
Covers all wirework and tags	/2	
Uniform thickness	/2	
Extension	/2	
Fitting surface no sharps	/2	

Polish and luster	/2	
<b>Labial Bow</b>		
Adaptation of the bow	/3	Total: /10
U loops	/3	Notes:
Tags	/2	
Level of the bow	/2	