

# TEMPLATE FOR COURSE SPECIFICATION

## HIGHER EDUCATION PERFORMANCE REVIEW: PROGRAMME REVIEW

### COURSE SPECIFICATION

This Course Specification provides a concise summary of the main features of the course and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate if he/she takes full advantage of the learning opportunities that are provided. It should be cross-referenced with the programme specification.

1. Teaching Institution	Ministry of higher education and scientific research
2. University Department/Centre	Kirkuk dental college/Department of Orthodontics
3. Course title/code	DEOR-431 Orthodontics
4. Programme(s) to which it contributes	Dentistry
5. Modes of Attendance offered	Lectures, seminars and clinics
6. Semester/Year	Annual
7. Number of hours tuition (total)	30 hr. theoretical and 60 hr. practical
8. Date of production/revision of this specification	2020-2021
9. Aims of the Course	Prepare the students to diagnose various types of malocclusion, their management using removable and functional orthodontic appliances

### Learning Outcomes, Teaching ,Learning and Assessment Method

<b>A- Cognitive goals</b>	
A1	Learning the causes of malocclusions.
A2	An understanding of the methods of diagnosis and treatments of malocclusion.
A3	Knowledge of different types of orthodontic appliances
<b>B. The skills goals special to the course.</b>	
B1	Learning the construction of different parts of removable orthodontic appliance.
B2	Learning the insertion, the activation and adjustment of different springs and clasps of the removable orthodontic appliance.
<b>Teaching and Learning Methods</b>	
	Theoretical lectures using power point presentation on large screen
	practical training to construct different removable orthodontic appliances

<b>Assessment methods</b>					
Quizzes, semester, mid-year and final year exams					
<b>C</b>					
C1 Solving malocclusion problems.					
C2 Stimulate the thinking on how to make a design to fabricate a removable orthodontic appliances					
<b>D. General and rehabilitative transferred skills (other skills relevant to employability and personal development)</b>					
D1-Preparing the student to deal practically with the removable orthodontic appliances.					
D2- Preparing the student to be able to design and construct different removable orthodontic appliances.					

<b>10. Course Structure</b>					
<b>Week</b>	<b>Hours</b>	<b>ILOs</b>	<b>Unit/Module or Topic Title</b>	<b>Teaching Methods</b>	<b>Assessment Method</b>
1-2-3	3	Introduction to orthodontics a. Definition of orthodontics b. Normal occlusion versus malocclusion. c. Important definitions in orthodontics	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
4-5	2	Etiology of malocclusion a. major factor b. minor factor	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
6-7-8-9-10	5	Removable appliances - Indications. - Advantages. - Disadvantages. - Components. - Wire components (active, passive) - Base plate (types, indications, uses.. etc.) - elastics. - Screws	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
11-12-13	3	Biomechanics of tooth movements. a. Theories. b. Changes occur during orthodontic movement at pressure, tension sites. c. Changes occur during retention period. d. Magnitude of applied force for different tooth movements.	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
14-15	2	Anchorage in orthodontics. a. Definition. b. indications. c. Types.	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

16-17-18-19-20	5	Growth and development of cranio-mandibular structures. a. Theories b. Prenatal and postnatal growth and development of cranium and calvaria. c. Prenatal and postnatal growth and development of maxilla. d .Prenatal and postnatal growth and development of mandible.	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
21-22-23	3	Development of dental occlusion.	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
24-25	2	Extra oral appliance .	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
26-27-28	3	Fixed orthodontic appliances. - Types. - Components. - Indications. - Advantages and disadvantages. - Bonding and banding.	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
29	1	Myofunctional appliances. - History. - Types. - Indications.	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams
30	1	New concepts in orthodontics. a- Laser in orthodontics. 1. Definition. 2. Indications. Advantages and disadvantages. B- Implants in orthodontics. 1. Definition. 2. Indications. 3. Advantages and disadvantages.	Orthodontics	Theoretical lecture using power point presentation	Quizzes, semester, mid-year and final year exams

## 11. Infrastructure

### 1. Books Required reading:

1. Singh G. Textbook of orthodontics. 3<sup>rd</sup> ed. New Delhi: Jaypee Brothers Medical Publishers (P) Ltd.; 2015.
2. Littlewood SJ, Mitchell L. An introduction to orthodontics. 5<sup>th</sup> ed. Oxford: Oxford university press; 2019.
3. Proffit WR, Fields Jr HW, Larson BE, Sarver DM. Contemporary orthodontics. 6<sup>th</sup> ed. Philadelphia: Elsevier; 2019.
4. Graber LW, Vanarsdall RL, Vig KWL, Huang GJ. Orthodontics: current principles and techniques. 6<sup>th</sup> ed. St. Louis: Elsevier, Inc.; 2017.
5. Nakajima E. Manual of wire bending technique. 1<sup>st</sup> ed. Chicago: Quintessence Publishing Co., Inc; 2010.

2. Main references (sources)	
A- Recommended books and references (scientific journals, reports...).	1. European journal of Orthodontics. 2. Angle Orthodontist. 3. Progress in Orthodontics
B-Electronic references, Internet sites...	
12. The development of the curriculum plan	

## Lab requirement

Practical Requirements	Hours
<p>The student should construct the following springs and clasps:</p> <p>A- Wires (Spring constructions).</p> <ol style="list-style-type: none"> <li>1. Finger spring.</li> <li>2. Modified Finger spring.</li> <li>3. Z-spring.</li> <li>4. Double Z-spring.</li> <li>5. T-spring.</li> <li>6. Canine retractor.</li> <li>7. Modified canine retractor.</li> <li>8. Adam's clasp.</li> <li>9. Fitted labial arch.</li> <li>10. Hawely labial arch.</li> <li>11. Robbert retractor.</li> </ol> <p>B- Base plate construction.</p> <p>C. Seminars.</p>	
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