

# **Faculty of Oral & Dental Medicine**

#### **Orthodontics**

#### Information:

Course Code: ORTH 412 Level: Undergraduate Course Hours: 2.00- Hours

**Department:** Faculty of Oral & Dental Medicine

### Area Of Study:

1)- To enable the students to diagnose orthodontic problems and methods of management.

- 2)- To understand appropriate time of intervention in potential orthodontic cases and to reach students preventive and interceptive measures in developing malocclusions and improve problem solving skills
- 3)- to understand the possible causes of orthodontic relapse and methods of retention.
- 4)- to understand the possible iatrogenic effects of orthodontic treatment.

Course ou	tcomes:				
a.Knowled	ge and Understanding: :				
1 -	Discuss the concept of extraction in orthodontics				
2 -	Discuss the biological principles of tooth movement				
3 -	Describe the basic biomechanical principles of orthodontics tooth movement				
4 -	Recognize the behavior of orthodontics wires				
5 -	Describe the needed measures for the prevention of malocclusion in the primary and mixed dentition stage				
6 -	State the appropriate management of abnormalities affecting the occlusion in the primary and mixed dentition				
7 -	Recognize the basic principles of orthodontic appliance design				
8 -	Recognize the problem of relapse and the procedures taken to maintain the position of teeth achieved by orthodontic treatment				
9 -	Recognize the sequelae of untreated malocclusion and its influence on oral health				
10 -	Recognize the iatrogenic effect in orthodontics				
o.Intellect	ual Skills: :				
1 -	Select appropriate time and methods of intervention in potential orthodontic cases.				
2 -	distinguish the underlying dento-skeletal abnormalities by analyzing cephalometric radiographs				
.Professi	onal and Practical Skills: :				
1 -	Propose diagnosis , prevention and treatment planning in the mixed dentition stage				
2 -	Design simple removable appliances to interfere with a developing malocclusion				
3 -	Plan appliances that interfere with abnormal oral habits that affect normal development of occlusion .				
4 -	Recommend appliances to correct cross bite situations in the primary and mixed dentition .				
d.General	and Transferable Skills: :				
1 -	Communicate with other healthcare professionals both verbally and in globally accepted written formats .				



2 - Recognize moral and ethical responsibilities involved in the provision of care to individual patents and to community

Course Topic And Contents :						
Topic	No. of hours	Lecture	Tutorial / Practical			
Tissue reaction and biomechanical principles of tooth movement	1	1				
Orthodontic appliance design	7	3	4			
Anchorage	1	1	2			
Preventive Orthodontics	3	1	2			
Interceptive Orthodontics	3	1	2			
Mixed dentition management	3	1	2			
Orthodontic retention and relapse	1	1				
latrogenic effects in orthodontics	3	1	2			
Revision	3	1	2			

# **Teaching And Learning Methodologies:**

Lectures

small group sessions

Practical demonstrations

Course Assessment :							
Methods of assessment	Relative weight %	Week No	Assess What				
ClassWork(Attendance, Requirement, Practical quiz)	20.00	7	Practical Skills & overall participation				
Final Written Examination	25.00	14	knowledge and understanding				
Midterm Examnation	20.00	9	knowledge and understanding				
Oral Examination	10.00	14	knowledge and understanding (and assessment general and professional skills)				
Practical Examination	15.00	12	ability of data collection , analysis and formulation of a treatment plan				
Theoretical Quiz Examination	10.00	5	knowledge and understanding				

# **Course Notes:**

### **Recommended books:**

"ÁContemporary orthodontics" by William R. Proffit, Henry W. Fields Jr., 5th edition; April (2012).

<sup>&</sup>quot;Æecorded lectures: available for students on moodle

<sup>&</sup>quot;Ápresentations used during teaching on the moodle