

## Faculty of Oral & Dental Medicine

### Orthodontics

#### Information :

**Course Code :** ORP 432

**Level :** Undergraduate

**Course Hours :** 2.00- Hours

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

#### Instructor Information :

Title	Name	Office hours
Professor	Hala Munir Abdelmajeed El Sayed	2
Professor	ESSAM MOHAMED NASSEF SELIM	2
Lecturer	SAMEH MOHAMED TALAAT TAHA MOHAMED	
Assistant Lecturer	Reem Mohamed Hazem Hassan Hassan Aly El Shazly	
Assistant Lecturer	Sara Usama Saeed Imam	
Teaching Assistant	Abdelrahman Mostafa Mahmood Eldesouky Elbosaily	
Teaching Assistant	Mohamed Mousa Mohamed Mousa Gomaa Dief	

#### Area Of Study :

- 1)-To educate the students about the basics features of facial growth and development and to familiarize students with progressing abnormalities in dental patients .
- 2)- To familiarize the student with the knowledge of occlusion and to be able to manage the etiological factors associated with the disordered occlusion.
- 3)- To enable the students to diagnose orthodontic problems
- 4)- 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
- 5)- To enable development and application of appropriate professional attitudes and communication .

#### Description :

Diagnosis, preventive and interceptive orthodontics. biology of tooth movements, therapeutic extraction. Orthodontics appliances principles, anchorage, materials used and retention. Practical appliances and wires.

#### Course outcomes :

##### **a.Knowledge and Understanding: :**

1 -	Recognize the basis of normal human facial growth and development from birth until completion of growth
2 -	Describe the stages of normal development of occlusion during infancy , primary dentition , mixed dentition , and permanent dentition
3 -	Recognize the phases of eruption and their effect on development of malocclusion
4 -	Define the terminology of malposed teeth and different types of classification of malocclusion

5 -	Identify the etiological factors of malocclusion and its impact on the	developing occlusion
6 -	Describe extra oral and intraoral examination from an orthodontic	perspective
7 -	Discuss the concept of extraction in orthodontics	
8 -	Discuss the biological principles of tooth movement and describe the	different types of tooth movement
9 -	Describe the basic biomechanical principles of orthodontics tooth	movement
10 -	Recognize the behavior of orthodontics wires	
11 -	Describe the needed measures for the prevention of malocclusion in the	primary and mixed dentition stage
12 -	Identify the appropriate management of abnormalities affecting the	occlusion in the primary and mixed dentition
13 -	Recognize the basic principles of orthodontic appliance design	
14 -	Enumerate possible orthognathic surgical techniques and list the types of	malocclusions that would indicate their choice for treatment
15 -	Recognize the problem of relapse and the procedures taken to maintain	the position of teeth achieved by orthodontic treatment
16 -	Recognize the sequelae of untreated malocclusion and its influence on	oral health
17 -	Recognize the interrelationship between orthodontics and other dental	specialties
18 -	Recognize the iatrogenic effect in orthodontics	
19 -	Identify the moral and ethical responsibility involved in the provision of	care to individual patients and community
<b>b.Intellectual Skills: :</b>		
1 -	Recognize a developing normal occlusion and be able to distinguish	abnormal deviation that necessitates treatment .
2 -	Select appropriate time of intervention in potential orthodontic cases and	what these interventions are likely to be
3 -	Apply knowledge and understanding of etiology in the process of	diagnosis , prevention and treatment in the mixed dentition stage
<b>c. Professional and Practical Skills: :</b>		
1 -	Record accurately patient's chief complaint	
2 -	Report and document a complete focused medical and dental history for	patients
3 -	Carry out extra-oral and intraoral examination of the patient including	head and neck , oral hard and soft tissues
4 -	Perform and document a complete physical and mental status examination	for a patient
5 -	Prescribe diagnostic aids appropriate for every individual case	
6 -	Interpret acquired data in term of their diagnostic significances	
7 -	Identify accurately underlying dento-skeletal abnormalities by analyzing	cephalometric radiographs
8 -	Identify accurately space problems through study cast analysis	
9 -	Identify problems, prioritize them and generate a treatment plan for each	patient
10 -	Design and effectively utilize simple removable appliances to interfere	with a developing malocclusion ( simple removable appliances )
11 -	Design and effectively utilize appropriate space maintenance appliances	tailored for individual cases .
12 -	Design and effectively utilize appliances that interfere with abnormal oral	habits that affect normal development of occlusion .

13 -	Design and effectively utilize removable space regaining appliances
14 -	Design and effectively utilize appliances to correct cross bite situations in the primary and mixed dentition
<b>d.General and Transferable Skills :</b>	
1 -	Communicate effectively with children , adolescents and their families
2 -	Recognize when and how to refer patients for specialist advise or treatment.
3 -	Communicate with other healthcare professionals both verbally and in globally accepted written formats .
4 -	Recognize moral and ethical responsibilities involved in the provision of care to individual patents and to community
5 -	Recognize the value and role of lifelong learning self assessment and critical thinking in maintaining competency

### **Course Topic And Contents :**

Topic	No. of hours	Lecture	Tutorial / Practical
Sequelate of untreated malocclusion	4		
Preventive Orthodontics	3		
Interceptive Orthodontics	3		
Orthodontic appliance design	4		
Therapeutic extraction	3		
Adjunctive orthodontics	3		
Orthodontic retention and relapse	4		
Ethics and medico legal issues	3		
Impression and Wire bending	3		

### **Teaching And Learning Methodologies :**

Lectures
Clinical and small group sessions
Workshops
Practical demonstrations, Practice of skills , and discussions
The lectural hall on the 3rd floor of the faculty of oral and dental medicine; Once per week from 12pm to 1pm
Small Group sessions and activities . Each term, students are divided into 12 equal groups, each group being assigned to a two hour small group session once per week. Students will be divided into two groups during each session.
Workshops During the course seven workshops will be given covering different topics. Workshops will include lecturing followed by hand on training. Each topic will be given six times within a one week period

### **Course Assessment :**

Methods of assessment	Relative weight %	Week No	Assess What
Final Written Examination	25.00		
Mid Term Examinations	30.00		assess knowledge and understanding
Mid Term Practical Examination	20.00		assess ability of data collection , analysis and formulation of a treatment plan

Oral Examination	10.00		assess knowledge and understanding (and assessment general and professional skills )
Practical Examination	15.00		

**Course Notes :**

- Department books : available for students to purchase from department secretary.
- Overhead projectors, slides and computer presentation used during teaching

**Recommended books :**

Contemporary Orthodontics by Profit & Ackerman