



Beni-Suef University
Faculty of Dentistry
Quality Assurance Unit



Course Specification

University: Beni-Suef

Course Title: Orthodontics

Program on which the course is given: Bachelor's degree in Dentistry, Graduate programme

Department offering the course: Orthodontic Department

Academic year: Third year

Date of specification approval: 10-9-2023

Faculty: Dentistry

Course code: DOT4

A-Basic Information

Academic Year:	2023-2024
Course Code:	DOT4
Course Theoretical (contact hours):	1 hour
Practical (contact hours)	2 hours
Total Hours: -	3 hours
Prerequisite if any:	

B-Professional Information

1- Overall aims of the course

By the end of this course, students must be able to:

- Describe the mechanisms of bone growth and development of normal occlusion.
- Distinguish the malocclusion and classify it with the identification of its etiological factors.
- Diagnose and plan treatment and retention of orthodontic cases.
- Describe the different appliances used in orthodontic treatment.

2-Intended learning outcomes of course (ILOs)

a- Knowledge and understanding:

a 1- Describe the normal bone growth and occlusion.

a 2- Identify the different types of classification and etiological factors of malocclusion.

a 3- Describe the types of oral examinations and diagnostic records needed for orthodontic diagnosis.

a 4- Describe the different types of orthodontic treatment, appliances, and anchorage.

a 5- Identify the biological principles of tooth movement and retention planning for different cases.

a 6- Outline the sequelae of untreated malocclusion and their influence on oral health.

b- Intellectual skills:

b 1- Assess the normal occlusion to differentiate and classify the malocclusion.

b 2- Relate the etiological factors of malocclusion to the diagnosis and treatment of different malocclusion.

b 3- Analyze all the diagnostic data to reach a comprehensive diagnosis.

b 4- Interpret the diagnostic data to plan the appropriate interceptive orthodontic treatment in the mixed dentition stage.

b 5- Select and design the proper appliance and retention for the different malocclusions.

c- Professional and practical skills:

c1- Interpret all the diagnostic data to establish diagnosis and treatment plan for orthodontic cases.

c 2- Prescribe diagnostic records appropriate for different orthodontic cases.

c 3- Analyze cephalometric radiographs to record the dental and skeletal abnormalities.

c 4- Design simple removable appliances, habit breaking appliances and space maintainers.

d- General and transferable skills:

d1- Work effectively in a group or team to achieve goals.

d 2- Use computers and technology effectively.

d 3- Gather, interpret and analyze information.

d 4- Improve presentation skills and leadership abilities.

d 5- Manage and prioritize the workload and time effectively.

3-Contents:

Topic
1-Introduction, Growth and development
2-Development of normal occlusion
3-Description of normal occlusion
4-Terminology and classification of malocclusion
5-Etiology of malocclusion
6-Diagnosis
7-Treatment of malocclusion
8-Orthodontic appliances (Online)
9-Anchorage in orthodontics
10-Tissue changes in orthodontics
11-Orthodontic retention and relapse
12-Unfavorable sequelae of malocclusion

4- Teaching and learning methods

a- Small group discussion.	✓
b- Interactive lecture	✓
c- Demonstrations.	✓
d- Research project.	✓
e- Online Activities	✓

5- Student assessment methods

a. Written and short answer questions.	✓
b. Written and long essay.	✓
c. Multiple choice questions (MCQ)	✓
d. True or false question with justifying answer.	×
e. Practical	✓
f. Project work.	✓
g. logbooks.	×
h. Online work	✓

Topic	lecturer	Number of Lectures session covering the topic	Number of Practical sessions covering the topic	Total Hours	Weighing of the topic	ILOs covered by this topic	Teaching method used for this topic	Assessment methods used for this topic
1- Introduction, Growth and development	Dr. Rehab Abd El Razek	3	0	3	10 %	a1	Lecture	- Written and short answer questions. - Written and long essay - MCQ - Online work
2- Development of normal occlusion	Dr. Ahmed Mahran	2	0	2	6.6 %	a1 b1	lecture	- Written and short answer questions. - Written and long essay - MCQ - Online work
3-Description of normal occlusion	Dr. Ahmed Mahran	1	1 (2h)	3	3.4 %	a1 b1	- Lecture - Practical sessions	- Written and short answer questions. - Written and long essay - MCQ - Practical - Online work
4- Terminology and classification of malocclusion	Dr. Rehab Abd El Razek	2	1(2h)	4	6.6 %	a2 b1 d1-d5	- Lecture - Practical sessions - Research project	- Written and short answer questions. - Written and long essay - MCQ - Practical - Project work - Online work
5-Etiology of malocclusion	Dr. Ahmed Mahran	5	1(2h)	7	16.6 %	a2 b2	- Lecture - Practical sessions	- Written and short answer questions. - Written and long essay - MCQ - Practical - Online work

6-Diagnosis	Dr. Ahmed Mahran	4	6 (12h)	16	13.4 %	a3 b2, b3, c1, c2, c3 d1-d5	- Lecture - Practical sessions - Demonstrations. - Research project	- Written and short answer questions. - Written and long essay - MCQ - Practical - Project work - Online work
7-Treatment of malocclusion	Dr. Rehab Abd El Razek	5	4 (8h)	13	16.6 %	a4 b2, b4 c1, c4 d1-d5	- Lecture - Practical sessions - Research project	- Written and short answer questions. - Written and long essay - MCQ - Practical - Project work - Online work
8-Orthodontic appliances	Dr. Rehab Abd El Razek	3	15 (30 h)	33	10 %	a4 b4, b5 c1, c4 d1-d5	- Lecture - Practical sessions - Demonstrations. - Research project - Online Activities	- Written and short answer questions. - Written and long essay - MCQ - Practical - Project work - Online work
9-Anchorage in orthodontics	Dr. Ahmed Mahran	1	1(2h)	3	3.4 %	a4 b4, b5 c4	- Lecture - Practical sessions	- Written and short answer questions. - Written and long essay - MCQ - Practical - Online work
10-Tissue changes in orthodontics	Dr. Ahmed Mahran	2	0	2	6.6 %	a5	- Lecture	- Written and short answer questions. - Written and long essay - MCQ - Online work
11-Orthodontic retention and relapse	Dr. Ahmed Mahran	1	1(2h)	3	3.4 %	a5 b5 d1-d5	- Lecture - Practical sessions - Research project	- Written and short answer questions. - Written and long essay - MCQ

								- Practical - Project work - Online work
12- Unfavorable sequelae of malocclusion	Dr. Ahmed Mahran	1	0	1	3.4 %	a6	- Lecture	- Written and short answer questions. - MCQ - Online work
Total		30	60	90	100%	a1		

Assessment schedule

Quiz 1	Adams' clasp	Quiz 2	Cephalometric tracing assessment	Quiz 3	Quiz 4	Presentation of seminars
5 th week	7 th week	15 th week	15 th week	22 nd week	26 th week	
4 marks	2 marks	4 marks	2 marks	4 marks	4 marks	5 marks

Weighing of assessments

		Written	Practical	Oral Exam	Total
Final Exam		60	30	30	150
Participation	- Quizzes: 20 marks - Requirements: 5 marks - Seminar: 5 marks				

List of references:

1- Department handout

2- **Contemporary Orthodontics, 6th edition** (William R. Proffit, Henry W. Fields, Brent E. Larson, David M. Sarver, 2019).

3- **Orthodontics - Current Principles and Techniques, 6th edition** (Lee W. Graber, Robert L. Vanarsdall Jr., Katherine W.L. Vig, Greg J. Huang, 2017).

4- **Esthetics and Biomechanics in Orthodontics, 2nd edition** (Ravindra Nanda, 2015).

5- **Textbook of Orthodontics, 3rd edition** (Gurkeerat Singh, 2015).

Facilities required for teaching and learning.

- Lecture hall and labs.
- Data show and computers.
- Pliers, wires, and markers.
- Orthodontic models.

Course coordinator: Dr. Rehab Abd El Razek Abd El Aziz.

Head of Department: Prof. Dr. Ahmed Fathalla Shawky.

Date: 10 / 9 / 2023