



POS 423 PRE-CLINICAL ORTHODONTICS

ACADEMIC YEAR 1437-1438H [2016-2017G]

COURSE DIRECTOR: DR. KHALID A. ALMOAMMAR

POS 423 COURSE SYLLABUS

ACADEMIC YEAR 1437 - 1438H [2016 - 2017G]

Course Code and Number:	POS 423
Course Name:	Introduction to Orthodontics
Credit Hours	Four Credit Hours
Pre-Requisites:	None
Course Level:	Offered in the 1 st and 2 nd semesters of the fourth year (Level #6)
Room:	Room 27/GA, Phantom Laboratory, and Computer Room, BUC
Time:	Monday; Lecture: 8:00-9:00 am, Laboratory Session: 9:00-12:00 pm
Dates:	September 2016 – May 2016

Course Director:	Office Hours	Office Location	Telephone	E-mail
Dr. Khalid Almoammar BDS, MSc, MOrth RCSed, PhD	Monday, 1 ^{pm} -2 ^{pm} Tuesday, 12 ^{pm} -1 ^{pm}	2A / 49A	011-4696622	kalmoammar@ksu.edu.sa

Course Contributors:	Prof. Mohammad Bukhary Prof. Nasser Aljasser Dr. Nabeel Talic Dr. Fares Alsehaibany Dr. Nayef Bin Dayel Dr. Mushabab Asiry Dr. Naif Almosa Dr. Abdulazez Almudhi Dr. Mohammad Aldosary	Lectures Contributors:	Prof. Khalid Albalkhi
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COURSE DESCRIPTION:

The course is given through an academic year over two semesters. A combination of didactic and practical sessions will be undertaken on a weekly basis throughout a period of 30 weeks, in the form of 4-hour teaching experiences. The design of the course will provide the fourth year undergraduate students with the basic knowledge of craniofacial growth and development, orthodontic diagnosis, and basic orthodontic techniques. This course should prepare the students to conduct a comprehensive orthodontic assessment using clinical examination, and orthodontic records' analysis and interpretation, leading to the formulation of an orthodontic problem list and diagnostic summary for different dentofacial abnormalities.

The lectures will cover wide range of orthodontic topics including the basic knowledge of craniofacial growth and dental development, orthodontic assessment, orthodontic records and analysis, orthodontic malocclusion and abnormalities, and different orthodontic appliances and techniques. While, the practical and active learning sessions will expose the students to case-based activities, case presentations and practical management of different orthodontic appliances.

COURSE GOAL:

At the end of the course, the students should be able to comprehensively assess an orthodontic patient, diagnose an orthodontic malocclusion, and identify the treatment protocols in orthodontic management.

COURSE OBJECTIVES:

The course consists of the following objectives and competencies:

- A. Achieve the competency of:
- 1- Carrying out a comprehensive orthodontic assessment
 - 2- Analyzing orthodontic records including study model assessment and radiographic interpretation
 - 3- Formulating an orthodontic problem list and a diagnostic summary
- B. Have knowledge of:
- 1- Craniofacial growth and dental development
 - 2- Normal occlusion, and the common orthodontic malocclusions
 - 3- The etiology of orthodontic malocclusion
- C. Be Familiar with:
- 1- The orthodontic treatment options and appliances
 - 2- The management of orthodontic emergencies

COURSE ASSESSMENT:

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

Continuous Assessment						Final Examination		Total
1 st Mid-Term Examination	Quizzes	Mid-Year Examination	2 nd Mid-Term Examination	Case Presentation	Weekly Evaluation	Practical	Written	
10	5	15	10	5	15	10	30	100

a. Didactic section assessment:

There will be two mid-terms, one mid-year and one final examinations. The 1st mid-term examination will consist of 20-30 multiple-choice questions (MSQs). In the mid-year and final examinations, 60-80 MCQs will be included in an examination booklet with the answers being recorded on standard scoring sheets. Examinations are given in three drafts and questions are scrambled according to the college policy. At the end of each examination session both the computer answer sheet and the signed original copy of the examination must be handed in to the proctors. The 2nd mid-term examination will consist of two orthodontic cases with full records including photographs and radiographs supplied in glossy A4 printouts. The students will be required to assess and diagnose the presenting malocclusions. A special designed answer sheet will be provided with clear instructions.

There will be 5 Quizzes conducted throughout the academic year. These quizzes will take place at the beginning of the lectures and will last for 5 minutes. Each quiz will consist of two multiple-choice questions or one short-answer question.

b. Practical section assessment:

Student's performance in the practical sessions will be evaluated on weekly basis. This section will constitute 15% of the total grade. A student who maintains attendance at the beginning of each session, and completes the tasks at the end of each session, should secure (Complete) in the assessment form. Completing all the tasks as advised throughout the academic year should secure the full mark designated for the "Weekly Evaluation" (15%).

Each student will be required to present two cases. The first is a complete orthodontic case will be chosen by the course director and given to the students to prepare and present these cases. The second, is a pediatric patient records that the student should choose from their own fourth year pediatric course (POS 413). These records will include intra-oral photographs and OPG. The total mark designated for these case presentations is 5%. A standard assessment form will be used in evaluating the student's performance.

Grading System: Grades will be determined using the following scale:

A+	100 - 95	C	74 – 70
A	94 – 90	D+	69 – 65
B+	89 – 85	D	64 – 60
B	84 – 80	F	< 60
C+	79 – 75		

STUDY PLAN AND REQUIREMENTS:

To receive the maximum benefit from this course, students must attend all lecture and practical sessions. Satisfactory completion of this course requires:

1. Attendance in lectures and laboratory is mandatory. Twenty-five percent (25%) of absence from the lecture or laboratory sessions will deprive the student from taking the final examination (University Rules & Regulations). Attendance is checked every week.
2. A minimal passing grade of 60% must be achieved of the combined grades of the didactic and laboratory components.
3. Presentations of the two cases on the due dates are required from all students.

STUDENT EXPECTATION:

Out of respect for our lecturers, it is kindly asked that students' attention is on the lecture being presented and interact, as much as possible, with the presenter. Students are expected to present professionalism by not focusing attention on other materials such as other class notes and text, preparation for other exams, etc. Students are expected to demonstrate punctuality for every lecture and laboratory sessions. Students are also expected to demonstrate preparedness for laboratory sessions with respect to bringing the necessary instruments and the laboratory manual, this ensure that practical time is used effectively and efficiently (see below for more details).

POLICY ON ATTENDANCE AND PERFORMANCE:

Due to the interactive and participatory nature of this course, attendance at each class session is required. If you miss a class as an unexcused absence, your instructor reserves the right to require the completion of additional coursework. If you are unable to attend class due to a medical or family emergency, you should contact the course director and submit an excuse in writing. Attendance will be taken at every didactic and practical session throughout course period. Lectures are given to enhance students' understanding of course topics and complement their assigned readings. The lectures are not a replacement for course readings and assignments. In order to maximize teaching and learning, students are expected to attend all lectures.

a. Lecture Attendance:

All students are welcomed to join the class at any time of the lecture. However, any student enters the classroom ten minutes after the begging of the lecture will not be allowed to sign-in his attendance.

b. Practical Attendance:

The materials presented in any given practical session are important and usually new to the students. Attending the demonstration held at the beginning of each practical session on time is essential for the student to be able to complete the required task effectively and efficiently. A written document containing information related to each practical session will be supplied to the student, at least one week prior to the practical session. The students are required to bring these documents for the practical session. Usually there will be a demonstration or a small group discussion at the beginning of each practical session. Therefore, any student joins the demonstration five minutes after its beginning and/or fail to bring the required tools and documents (as advised) will loose 10% of the mark designated for that

session. All exercises and practical tasks are expected and must be preformed by the student independently following the demonstration. However, inter-personal communication and inquiry with fellow students regarding the assigned task are allowed.

POLICY REGARDING INCOMPLETE GRADES / PRACTICAL TASK:

Compromised coursework and performances are regarded as a major inconvenience for both students and the instructor. To avoid this situation, students are expected to complete each task to the best of their knowledge and/or skills. It is the responsibility of the student to notify the course director of such circumstances as far in advance as possible. It is the course director's responsibility to provide reasonable accommodations/opportunities to make up examinations that have an impact on the course grade. The Academic Guidance Committee reviews all student failures. The ultimate decision for remediation for students in academic difficulty lies within their authority.

Due to the significant rule of the practical section in fulfilling the course objectives, students are required and motivated to attend all practical sessions. All practical tasks are needed to be completed and handed-in for evaluation by the end of each practical session. Except where specified in the course schedule, none of the practical task presented after the end of the session will be qualified for grading. If so, or in case a student didn't attend a practical session, he'll be still required to present the finished task by the beginning of the next session, however without its assigned grade. The information provided during that missed session can be reviewed based on the student's on inquiry.

GRADE DISPUTE:

If a grade that is assigned to an exam or a question and/or its answer is to be disputed by a student, it must be done so in writing within 24 hours after receiving the results. A specific rationale for why a question or answer requested to be reviewed should be included. Any global changes in grading will be considered for the entire class.

POLICY ON MAKE-UPS:

Excused absences that are unavoidable will be offered an alternate midterm or final exam with different questions (including essay and short notes), and the level of difficulty between the original and the makeup exam will be similar but not the same.

In accordance with the college's policy, this course (423 POS) has no make-up examination. Students who fail to get 60% of total course grade will be required to take the course again the following year.

STUDENT ACADEMIC INTEGRITY AND SCHOLASTIC DISHONESTY:

Scholastic misconduct is broadly defined as "any act that violates the right of another student in academic work or that involves misrepresentation of your own work. Scholastic dishonesty includes, (but is not necessarily limited to), cheating on assignments or examinations; depriving another student of necessary course materials; or interfering with another student's work." Students preparing for entry into the dental profession are expected to govern their conduct toward patients, other students, faculty, and other professionals with integrity, mutual respect, and honor. Scholastic misconduct will result in failure of the course and the course will be required as a retake during the following year.

COMMUNICATION:

All individual and full class communication will be either through your e-mail account or through your Class Representative. Announcements intended for the whole class will be sent by e-mail and website. It is a requirement of the course to check your e-mail daily. While in class, please turn off cell phones.

RECOMMENDED TEXTBOOK:

- An Introduction to Orthodontics, 4th edition, 2013; Laura Mitchell. Oxford University Press, UK, ISBN: 978-0199594719.

- Contemporary Orthodontics, Fifth Edition, 2014; W. Proffit, H. Fields, D. Sarver. Mosby Press, USA, ISBN: 978-0323083171.
- Diagnosis of the Orthodontic Patient, 1999; F. McDonald & A. Ireland. Oxford University Press, UK, ISBN: 978-0192628893.
- The Orthodontic Patient: Treatment and Biomechanics, 2003; F. McDonald & A. Ireland. Oxford University Press, UK, ISBN: 978-0198510482.

COURSE SCHEDULE (1st Semester):

WEEK	DATE	DIDACTIC	PRACTICAL & ACTIVE LEARNING SESSIONS
1	19 SEPT 2016	INTRODUCTION TO THE COURSE	DENTAL DEVELOPMENT
2	26 SEPT 2016	FACIAL GROWTH – PART 1	FACIAL GROWTH – PART 2
3	03 OCT 2016	CLASSIFICATION AND ETIOLOGY OF MALOCCLUSION	Classification and Etiology of Malocclusion Practical: Simulated Records – Extra-Oral & Intra-Oral Photographs of Different Cases
4	10 OCT 2016	ORTHODONTIC ASSESSMENT I C. Complaint, Hx, Extra-Oral Exam	Extra-Oral Examination Practical: 1. Analysis of <i>Patient A</i> case Extra-Oral Photographs 2. Simulated Extra-Oral Photographs of Cases
5	17 OCT 2016	ORTHODONTIC ASSESSMENT II Intra-Oral Exam	Intra-Oral Examination Practical: 1. Analysis of <i>Patient A</i> case Intra-Oral Photographs 2. Simulated Intra-Oral Photographs of Cases
6	24 OCT 2016	STUDY MODELS ASSESSMENT Mixed & Permanent Dentitions (Video Demonstration: Orthodontic Model Trimming)	Study Model Analysis Practical: <i>Patient A</i> case Permanent Dentition Study Model Analysis
7	31 OCT 2016	RADIOGRAPHIC ASSESSMENT I Orthopantomograph (OPG) & Upper Standard Occlusal Radiographs	Study Model Analysis Practical: 1. Mixed Dentition Study Model Analysis 2. OPG Interpretation Exercises (<i>Patient A</i> case OPG)
8	07 NOV 2016	MID-TERM EXAMINATION (8:00 – 8:45)	RADIOGRAPHIC ASSESSMENT II Lateral Cephalometric Radiograph Practical: OPG Interpretation Exercises (<i>Patient A</i> case OPG)
MID 1st SEMESTER HOLIDAY (11 – 19 NOV 2016)			
9	21 NOV 2016	PROBLEM LIST & DIAGNOSTIC SUMMARY	Practical: Lateral Cephalometric Radiographs – <i>Patient A</i> case Lateral Cephalometric Tracing, Landmark Identification, and Analysis
10	28 NOV 2016	CLASS I MALOCCLUSION & IMPACTED CANINE	Case Based Discussion Practical: Mini Case Work-up (Analysis of Class I Cases Records: Extra-Oral Photos, Intra-Oral Photos, Study Models, OPG, and Lateral Ceph. Tracing)
11	05 DEC 2016	CLASS II DIVISION 1 MALOCCLUSION	Case Based Discussion Practical: Mini Case Work-up (Analysis of Class II div 1 Cases Records: Extra-Oral Photos, Intra-Oral Photos, Study Models, OPG, and Lateral Ceph. Tracing)
12	12 DEC 2016	CLASS II DIVISION 2 MALOCCLUSION	Case Based Discussion Practical: Mini Case Work-up (Analysis of Class II div 2 Cases Records: Extra-Oral Photos, Intra-Oral Photos, Study Models, OPG, and Lateral Ceph. Tracing)
13	19 DEC 2016	CLASS III MALOCCLUSION	Case Based Discussion Practical: Mini Case Work-up (Analysis of Class III Case Records: Extra-Oral Photos, Intra-Oral Photos, Study Models, OPG, and Lateral Ceph. Tracing)
14	26 DEC 2015	VERTICAL DISCREPANCIES Anterior Open Bite & Deep Overbite	Case Based Discussion Practical: Mini Case Work-up (Analysis of Vertical Cases Records: Extra-Oral Photos, Intra-Oral Photos, OPG, and Lateral Ceph. Tracing)
15	02 JAN 2016	TRANSVERSE DISCREPANCIES Crossbites	Case Based Discussion Practical: Mini Case Work-up (Analysis of Transverse Cases Records: Intra-Oral Photos, and Study Models)
MID-YEAR EXAMINATION			

COURSE SCHEDULE (2nd Semester):

WEEK	DATE	DIDACTIC	PRACTICAL & ACTIVE LEARNING SESSIONS
16	06 FEB 2017	NO COURSE ACTIVITY FOR SALUD TRAINING	
17	13 FEB 2017	ORTHODONTIC TREATMENT PLANNING I	Small Group Discussion 1. Timing of Treatment/Growth Prediction (CVM, and Hand & Wrist Radiographs Methods "H&W Atlas") 2. Mini Case Work-up
18	20 FEB 2017	ORTHODONTIC TREATMENT PLANNING II	Students' Case Presentations (4 Groups per Class; 20 Students per Group; 5 Student Presentations per Group)
19	27 FEB 2017	Students' Case Presentations (4 Groups per Class; 20 Students per Group; 5 Student Presentations per Group)	
20	06 MAR 2017	Students' Case Presentations (4 Groups per Class; 20 Students per Group; 5 Student Presentations per Group)	
21	13 MAR 2017	Students' Case Presentations (4 Groups per Class; 20 Students per Group; 5 Student Presentations per Group)	
22	20 MAR 2017	TREATMENT IN PREADOLESCENT CHILDREN I	Student's Pediatric Case Presentation: 4 Groups per Class; 20 Students per Group; 10 Student Presentations per Group
23	27 MAR 2017	TREATMENT IN PREADOLESCENT CHILDREN II	Student's Pediatric Case Presentation: 4 Groups per Class; 20 Students per Group; 10 Student Presentations per Group
MID 2nd SEMESTER HOLIDAY (31 MAR – 08 APRIL 2017)			
24	10 APRIL 2017	THE MID-TERM EXAMINATION (8:00 – 8:45)	REMOVABLE & FUNCTIONAL APPLIANCES Small Group Discussion: 1. Examples of Appliances 2. Mini Case Work-up
25	17 APRIL 2017	FIXED APPLIANCES	Components of Fixed Orthodontic Appliances Basic Wire Bending Exercises – I
26	24 APRIL 2017	BIOLOGY OF TOOTH MOVEMENT	Typodont Exercise – I
27	01 MAY 2017	INTRODUCTION TO ADULT ORTHODONTICS/ADVERSE EFFECTS	Typodont Exercise – II
28	08 MAY 2017	RETENTION & STABILITY	Small Group Discussion 1. Understand the different types of retainers 2. Perform the adjustment and activation of Hawley Retainers
29	15 MAY 2017	EMERGENCIES IN ORTHODONTICS	Manage Orthodontic Emergencies (using Typodonts)
30	22 MAY 2017	FINAL PRACTICAL EXAMINATION	
FINAL EXAMINATION			

DIDACTIC TIME-TABLE (1st Semester):

WEEK	DATE	LECTURE	LEARNING OUTCOMES
1	19 SEPT 2016	INRODUCTION Lecturer: Dr. K. Almoammar Time: 8:00-9:00	
		DENTAL DEVELOPEMENT Lecturer: Dr. N. Bin Dayel Time: 9:30-11:30	1. Describe the sequence and eruption timing in primary and permanent dentitions 2. Explain the changes in arch length and width during primary, mixed and permanent dentitions 3. Recognize major alerts regarding eruption timing and sequence Reference: Contemporary Orthodontics, Fifth Edition; W. Proffit, H. Fields, D. Sarver; Chapter: 3, Pages: 66-91.
2	26 SEPT 2016	FACIAL GROWTH – PART 1 Lecturer: Dr. K. Almoammar Time: 8:00-9:30	1. Describe the basic concepts of growth 2. Discuss the theories of growth Reference: Contemporary Orthodontics, Fifth Edition; W. Proffit, H. Fields, D. Sarver; Chapter: 2. Pages: 20–25 and 40–50.
		FACIAL GROWTH – PART 2 Lecturer: Dr. K. Almoammar Time: 8:00-9:30	1. Describe growth of the Cranial Vault 2. Describe growth of the Cranial Base 3. Describe growth of the Maxilla 4. Describe growth of the Mandible 5. Illustrate the effect of maxillary and mandibular growth on the timing of orthodontic interventions Reference: Contemporary Orthodontics, Fifth Edition; W. Proffit, H. Fields, D. Sarver; Chapter: 2. Pages: 33–40.
3	03 OCT 2016	CLASSIFICATION & ETIOLOGY OF MALOCCLUSION Lecturer: Dr. N. Almosa Time: 8:00-9:00	1. Identify the different malocclusions 2. Explain the commonly used malocclusion classifications 3. List the possible causes of malocclusion 4. Describe the genetic and environmental influences on malocclusion 5. Discuss the soft tissue role on malocclusion 6. Discuss the habits role on malocclusion Reference: Diagnosis of the Orthodontic Patient; F. McDonald & A. Ireland; Chapter: 2; Pages: 13–62. Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 2; Pages: 9–15.
4	10 OCT 2016	ORTHODONTIC ASSESSMENT I Lecturer: Dr. K. Almoammar Time: 8:00-9:00	1. Discuss the importance of assessing: Patient’s concerns, Dental History, Medical History, and consent 2. Identify the steps in extra oral orthodontic patient examination 3. Describe the skeletal extra-oral features 4. Describe the soft tissue features 5. Identify the TMJ examination Reference: Diagnosis of the Orthodontic Patient; F. McDonald & A. Ireland; Chapter: 4; Pages: 71–95. Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 5; Pages: 54–61.

5	17 OCT 2016	ORTHODONTIC ASSESSMENT II Lecturer: Dr. M. Aldosary Time: 8:00-9:00	<ol style="list-style-type: none"> 1. Identify the steps in intra oral orthodontic patient examination 2. Recognize the different occlusal classifications (Incisor, Canine, and molar) 3. Identify the normal/abnormal overjet 4. Identify the normal/abnormal overbite 5. Identify the upper/Lower centerlines 6. Recognize the different types of crossbites <p>Reference: Diagnosis of the Orthodontic Patient; F. McDonald & A. Ireland; Chapter: 5; Pages: 96–118.</p> <p>Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 5; Pages: 61–62.</p>
6	24 OCT 2016	STUDY MODELS ASSESSMENT Lecturer: Dr. N. Almosa Time: 8:00-9:00	<ol style="list-style-type: none"> 1. Recognize the steps to produce orthodontic study models (Video demonstration) 2. Describe the steps for space analysis in the mixed dentition based on Tanaka & Johnson method 3. Describe the steps for space analysis in the permanent dentition 4. Describe the steps in calculating tooth-size discrepancy (Bolton's Analysis) <p>Reference: Contemporary Orthodontics, Fifth Edition; W. Proffit, H. Fields, D. Sarver; Chapter: 6. Pages: 181–184. Chapter: 11. Pages: 427–429 (Supplemented with a handout).</p>
7	31 OCT 2016	RADIOGRAPHIC ASSESSMENT I Lecturer: Dr. K. Almoammar Time: 8:00-9:00	<ol style="list-style-type: none"> 1. Recognize the normal and abnormal findings in an OPG radiograph 2. Report any dental abnormality that can be detected on a periapical radiograph 3. Recognize the use of USO in identifying the position of un-erupted teeth <p>Reference: A handout will be provided.</p>
MID-TERM EXAMINATION (8:00 – 8:45)			
8	07 NOV 2016	RADIOGRAPHIC ASSESSMENT II (LATERAL CEPHALOMETRICS) Lecturer: Dr. K. Almoammar Time: 9:30-11:30	<ol style="list-style-type: none"> 1. Identify the Cephalostat 2. List the indications for cephalometric evaluation 3. Describe the methods for cephalometric assessment 4. Identify orthodontic landmarks on a cephalogram, general points 5. Determine the commonly used cephalometric reference lines and angles 6. Describe the: anteroposterior skeletal pattern, the vertical skeletal pattern, the incisor position and the soft tissue analysis 7. Recognize the possible cephalometric errors <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 6; Pages: 74–84.</p>
MID 1st SEMESTER HOLIDAY (11 – 19 NOV 2016)			
9	21 NOV 2016	PROBLEM LIST & DIAGNOSTIC SUMMARY Lecturer: Dr. K. Almoammar Time: 8:00-9:00	<ol style="list-style-type: none"> 1. List the orthodontic problems 2. Summarize the orthodontic diagnosis <p>Reference: A handout will be provided.</p>

10	28 NOV 2016	CLASS I MALOCCLUSION & IMPACTED CANINE Lecturer: Dr. M. Asiry Time: 8:00-9:00	<ol style="list-style-type: none"> 1. List and describe the different features of Class I malocclusion 2. Identify the etiology of Class I malocclusion 3. Explain the rationale behind using each treatment approach (indications & contraindications) 4. Outline the development of the upper and lower canines 5. Identify the causes of impacted canines 6. Indicate the diagnostic tools used in identifying impacted canines 7. Appraise the treatment options for impacted canines 8. Discuss the risks encountered with impacted canines <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 8. Pages: 102–111.</p>
11	05 DEC 2016	CLASS II DIVISION 1 MALOCCLUSION Lecturer: Dr. M. Asiry Time: 8:00-9:00	<ol style="list-style-type: none"> 1. List and describe the different features of Class II Division 1 malocclusion 2. Identify the etiology of Class II Division 1 malocclusion 3. Explain the rationale behind using each treatment approach (indications & contraindications) <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 9. Pages: 114–122.</p> <p>Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 14. Pages: 170–178</p>
12	12 DEC 2016	CLASS II DIVISION 2 MALOCCLUSION Lecturer: Dr. A. Almudhi Time: 8:00-9:00	<ol style="list-style-type: none"> 1. List and describe the different features of Class II Division 2 malocclusion 2. Identify the etiology of Class II Division 2 malocclusion 3. Explain the rationale behind using each treatment approach (indications & contraindications) <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 10. Pages: 128–134.</p>
13	19 DEC 2016	CLASS III MALOCCLUSION Lecturer: Dr. M. Aldosary Time: 8:00-9:00	<ol style="list-style-type: none"> 1. List and describe the different features of Class III malocclusion 2. Identify the etiology of Class III malocclusion 3. Explain the rationale behind using each treatment approach (indications & contraindications) <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 11. Pages: 138–145.</p>
14	26 DEC 2016	VERTICAL DISCREPANCIES Lecturer: Dr. K. Almoammar Time: 8:00-9:00	<ol style="list-style-type: none"> 1. Define the different vertical problems 2. Recognize the etiology of deep bite 3. Recognize the etiology of anterior and posterior open bites 4. Explain the rationale behind using each treatment approach to correct the vertical problems (indications & contraindications) <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 12. Pages: 150–156.</p>
15	02 JAN 2016	TRANSVERSE DISCREPANCIES Lecturer: Dr. K. Almoammar Time: 8:00-9:00	<ol style="list-style-type: none"> 1. Define the different transverse problems 2. Recognize the etiology of transverse problems 3. Describe the different types of crossbites 4. Explain the rationale behind using each treatment approach to correct the transverse problems (indications & contraindications) <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 12. Pages: 150–156.</p>
MID-YEAR EXAMINATION			

DIDACTIC TIME-TABLE (2nd Semester):

WEEK	DATE	DIDACTIC	PRACTICAL & ACTIVE LEARNING SESSIONS
17	06 FEB 2017	ORTHODONTIC TREATMENT PLANNING I Lecturer: Dr. A. Aldrees Time: 8:00-9:00	<ol style="list-style-type: none"> 1. Formulate a problem list 2. Discuss treatment planning concepts and considerations, including patient's opinion 3. Describe the treatment options to resolve crowding 4. Describe the treatment options to correct transverse problems 5. Describe the treatment options to correct Class II problems 6. Describe the treatment options to correct Class III problems 7. Recognize the methods available to predict growth Reference: Contemporary Orthodontics, Fifth Edition; W. Proffit, H. Fields, D. Sarver; Chapter: 7. Pages: 220–240. (Supplemented with a handout).
18	20 FEB 2017	ORTHODONTIC TREATMENT PLANNING II Lecturer: Dr. K. Almoammar Time: 8:00-9:00	<ol style="list-style-type: none"> 1. List the indications of an orthodontic/surgical approach to correct severe skeletal problem in adults 2. Describe the steps of the combined orthognathic approach 3. Discuss the common orthognathic procedures Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 21. Pages: 263–281.
CASE PRESENTATION SESSION 9:00-12:00			
19	27 FEB 2017	NO DIDACTIC SESSION (CASE PRESENTATION SESSION 9:00-12:00)	
20	06 MAR 2017	NO DIDACTIC SESSION (CASE PRESENTATION SESSION 9:00-12:00)	
21	13 MAR 2017	NO DIDACTIC SESSION (CASE PRESENTATION SESSION 9:00-12:00)	
22	20 MAR 2017	TREATMENT IN PREADOLESCENT CHILDREN I Lecturer: Prof. K. Albalkhi Time: 8:00-9:30	<ol style="list-style-type: none"> 1. Discuss the management of specific eruption problems in preadolescent children including; retained primary teeth, ectopic eruption, supernumerary teeth, delayed incisor eruption, and ankylosed primary teeth 2. Discuss the management of space problems in preadolescent children Reference: Contemporary Orthodontics, Fifth Edition; W. Proffit, H. Fields, D. Sarver; Chapter: 11. Pages: 417–444. (Supplemented with a handout).
23	27 MAR 2017	TREATMENT IN PREADOLESCENT CHILDREN II Lecturer: Prof. K. Albalkhi Time: 8:00-9:30	<ol style="list-style-type: none"> 1. Discuss the management of specific eruption problems in preadolescent children (Transposition and primary failure of eruption) 2. Discuss the management of crowding problems in preadolescent children Reference: Contemporary Orthodontics, Fifth Edition; W. Proffit, H. Fields, D. Sarver; Chapter: 12. Pages: 446–470. (Supplemented with a handout).
MID 2nd SEMESTER HOLIDAY (31 MAR – 08 APRIL 2017)			
24	10 APRIL 2017	THE MID-TERM EXAMINATION (8:00 – 8:45)	

		<p>REMOVABLE & FUNCTIONAL APPLIANCES Lecturer: Dr. M. Asiry Time: 10:00-11:00</p>	<ol style="list-style-type: none"> 1. List the components of a removable appliance 2. Describe the mode of action of removable appliance 3. List the indications for removable appliance use 4. Describe the commonly used removable appliances 5. Define functional appliance 6. Describe the mode of action of functional appliance 7. List the indications for functional appliance use 8. Describe the different types of functional appliances 9. Discuss the clinical management of removable and functional appliances <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 17. Pages: 207–217. Chapter 19. Pages: 235–250.</p>
25	17 APRIL 2017	<p>FIXED APPLIANCES Lecturer: Dr. N. Bin Dayel Time: 8:00-9:00</p>	<ol style="list-style-type: none"> 1. Describe the principles of fixed appliances 2. List the indications of fixed appliances 3. List the components of fixed appliances 4. Describe the different fixed appliance systems <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 18. Pages: 220–233. (Supplemented with a handout).</p>
26	24 APRIL 2017	<p>BIOLOGY OF TOOTH MOVEMENT Lecturer: Dr. A. Aldrees Time: 8:00-9:00</p>	<ol style="list-style-type: none"> 1. Explain the biology of tooth movement 2. Clarify the link between clinical tooth movement and bone biology 3. List the drugs and diseases that inhibit and slow bone turnover and orthodontic tooth movement <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 4. Pages: 46–51 (Supplemented with a handout).</p>
27	01 MAY 2017	<p>INTRODUCTION TO ADULT ORTHODONTICS/ADVERSE EFFECTS Lecturer: Dr. A. Almudhi Time: 8:00-9:00</p>	<ol style="list-style-type: none"> 1. Identify the anticipated problems of orthodontic treatment in adults 2. Recognize the effects of periodontal disease in orthodontics 3. Describe the orthodontic treatment options as adjunctive to restorative care 4. Describe the different esthetic orthodontic appliances offered to adults 5. Recognize the basics of Obstructive Sleep Apnea 6. Describe the extra-oral iatrogenic effects of orthodontic treatment 7. Describe the intra-oral iatrogenic effects of orthodontic treatment <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 20. Pages: 252–262. The Orthodontic Patient: Treatment and Biomechanics; F. McDonald & A. Ireland; Chapter: 9. Pages: 309–331.</p>
28	08 MAY 2017	<p>RETENTION & STABILITY Lecturer: Dr. M. Aldosary Time: 8:00-9:00</p>	<ol style="list-style-type: none"> 1. Define the concepts of <i>Relapse, Retention & Stability</i> 2. List the causes of relapse 3. Describe the methods of retention 4. Identify the types of retainers used in orthodontics 5. Discuss the adjunctive methods proposed to enhance retention <p>Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 16. Pages: 194–205.</p>

29	15 MAY 2017	EMERGENCIES IN ORTHODONTICS Lecturer: Dr. K. Almoammar Time: 8:00-9:00	1. Recognize the management of emergencies encountered with fixed appliances 2. Recognize the management of emergencies encountered with removable appliances 3. Recognize the management of emergencies encountered with growth modification appliances Reference: Introduction to Orthodontics; L. Mitchell; Fourth Edition; Chapter: 12. Pages: 150–156. (Supplemented with a handout)
FINAL EXAMINATION			