

PDS 431 – INTRODUCTION TO ORTHODONTICS
Academic Year 2009-2010G [1430-1431H]

Course Director:	Dr. Naif A. Bindayel [DUC] / Dr. Huda M. Al-Kawari [MUC]
Course Name:	Introduction to Orthodontics
Course Number:	PDS 431
Credit Hours:	Four Credit Hours (1 Lecture + 1 Laboratory Session, per semester)
Pre-Requisites:	None
Course Level:	Offered in the fourth year (Level #6)
Room:	27/GA [DUC], Room 102 [MUC]
Time:	Sunday; Lecture: 8:00-9:00 am, Lab. Session: 9:00-12:00 pm [DUC] Tuesday; Lecture: 8:00-9:00 am, Lab. Session: 9:00-12:00 pm [MUC]

Course Description:

Knowledge of the basics of orthodontics is essential for the dental students. Through a series of lectures and practical sessions, this course will provide the undergraduate students with the background of the growth and development of dentofacial structures, characteristics of normal occlusion, etiology and diagnosis of malocclusion and the treatment of occlusal discrepancies. In addition, the course will expose the students to the various orthodontic records and it will prepare the students to analyze them and interpret the findings. The course also allows the students to recognize different orthodontic appliances and know their proper management.

The course consists of:

- Lecture (one hour)
- Practical session (three hours).

Course Goal:

The graduate of the Bachelor in Dental Surgery Program (B.D.S.) must be skilled in the recognition, diagnosis, and management of dentofacial abnormalities in the primary, mixed, and permanent dentitions.

Course Objectives:

This course aims to qualify the students to:

1. Have a sound knowledge of normal and abnormal growth and development of dentoskeletal facial structures including conditions that interfere with the patients' ability to function.
2. Be able to recognize esthetic deficiencies and understand their relationship to the overall management of the orthodontic patient.
3. Be able to recognize those complex problems that are beyond the ability of the general practitioner to treat and must know when to refer to a competent and qualified orthodontic specialist. In addition, student should have sufficient knowledge to evaluate the treatment rendered by that specialist.
4. Have sufficient knowledge to be able communicate with the orthodontic specialist and understand the nature of the treatment being rendered.
5. Have a thorough understanding of etiology and classification of malocclusion, diagnosis, and treatment planning of orthodontic problems.
6. Recommend early and comprehensive orthodontic management that should be carried out at the correct time.
7. Understand the relationship between the various dental specialties and must be able to assume the role of primary treatment coordinator in integrating a multi-disciplinary approach to the care of the adult patient.
8. Be able to recognize and utilize the different types of removable and functional appliances.
9. Be able to recognize the fixed orthodontic appliances and its components, and develop the wire bending skills.

10. Be able to inform the patient/parents regarding the nature and extent to the orthodontic problem and provide the appropriate management and/or referral.

Instructional staff will attempt to provide close supervision and feedback of laboratory procedures. A low student/staff ratio will be maintained during the introductory phases of the course to allow demonstrations of laboratory procedures and to provide assistance in the development of diagnosis and wire bending skills.

Course Evaluation:

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 Exam.		Total
1 st Mid-Term Exam.	Practical Quizzes	Mid-Year Exam.	2 nd Mid-Term Exam.	Case Presentation	Weekly Evaluation	Practical	Written	
10	5	15	10	6	14	10	30	100

a. Didactic section evaluation:

There will be four examinations, two mid-terms, one mid-year and one final. Each of the first three will be 1 hour in length and each examination will consist of 40-60 multiple-choice questions (MSQs). The material covered in the examinations will be taken required textbook and any handout given to students by instructors. In the final examination, 80 MCQs will be included in an examination booklet with answers recorded on standard scoring sheets. Examinations are given in three drafts and questions are scrambled according to college policy. New examinations with different questions are formulated each year so having old examinations might be of limited value. 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 distribution of the topics included in each didactic exam is as follows:

1. 1ST Mid-Term Exam:
 - 1st six lectures in the first semester (contents of week 2 to week 7)
2. Mid-Year Exam:
 - All lecture materials presented during the first semester.
3. 2nd Mid-Term Exam:
 - 1st seven lectures in the second semester (contents of week 1 to week 7)
4. Final Written Exam:
 - All lecture materials presented during the first and second semester.

b. Practical section evaluation:

Student's performance in the practical sessions and the laboratory projects will be evaluated weekly and that will constitute 14% of the total grade. A student who attends on time to the demonstration and completes the task by the end of each session in a good quality (based on the instructor's evaluation) should secure the total assigned mark.

Students will be assigned in groups of two persons, and each group must present one case (representing one of the two students) on a specified day. Failure of the group to present in that day will result in a complete loss of the mark. As a substitution, and based on the approval of the course director, that group can present in the following week. However, the presenters will be evaluated out of half of the original mark (i.e. out of 3, instead). The grades' distribution for the case presentation is as follows; 2 marks for the pictures quality of the diagnostic tools (photos, models, RG), 2 marks for the accuracy of the findings presented, and 2 marks for the demonstration of understanding of the material presented.

The distribution of the topics included in each practical exam is as follows:

1. 1ST Practical Quiz:

Molar, canine, and incisors classification (week 5)

2. 2nd Practical Quiz:

Cephalometric analysis, landmark definition, and identification (week 11)

3. Final Practical Exam:

The following topics must be reviewed as appeared in the practical manual; classification of malocclusion, model analysis (permanent and mixed dentition), hand and wrist RG and cephalometric analysis, identification of instruments/ appliances and its relevant notes.

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		

Remediation: Midterm Failure: Individual student failing the midterm reviews the exam with the course director.

Study Plan and Requirements:

To receive the maximum benefit from this course, students must attend all lecture and laboratory sessions. A large emphasis of this course is placed on the practical applications of the principles of orthodontics, which are presented in a variety of formats including lectures, practical exercises and demonstrations.

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.

The practical tasks completion requires dividing students in groups of two persons. Each student will be assigned with a fellow student according to his preference; otherwise, the course director will complete this process. Each student must note that all the tasks during the laboratory sessions will be completed using the records of each student's fellow (i.e. the other person in your group). Therefore, during the process of students' assignment into groups, care must be taken not to result in a group where both students are undergoing orthodontic treatment. If your colleague has braces on, take a duplicate for your case (models and ceph.).

Student Expectation:

Out of respect for our lecturers, it is kindly asked that students' attention is on the lecture being presented and that they 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 beginning of the lecture will not be allowed to sign-in his attendance.

b. Practical Attendance:

The materials presented in the practical session are new to the students and not exposed to them before. Attending the demonstration held by 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 practical manual is distributed to each student by the beginning of the academic year to ensure a smooth progression and knowledge acquisition. Hence, the practical manual must be presented with each student by the beginning of each practical session along with any required tools to complete the task. Failure to do so will result in either inability to perform the task or/and a disturbance to the instructor or a fellow student. Therefore, any student join the demonstration five minutes after its beginning and/or fail to bring the practical manual along with the required tools (as indicated in course schedule) will lose half of the mark of the grade assigned for that task. All exercises and practical tasks are expected and must be performed by the student *independently* after the laboratory instructor or technician's demonstrations. However, interpersonal 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 role 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 hrs 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 make-up exam will be similar but not the same.

Students who fail to get 60% of total course grade can take a make-up examination which is usually scheduled two week after the final examination period. The make-up exam will only replace the final examination grade (40% of the total) and students will enter this exam with their previously collected continuous assessment grade (out of 60%). Students who pass the course after taking the make-up exam will get a “D” grade, regardless of their new total grade.

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/ or posted on the course director’s website. It is a requirement of the course to check your e-mail daily. While in class, please turn off pagers and cell phones.

Recommended Textbook:

- An Introduction to Orthodontics, Third Edition
 Laura Mitchell
 2007, Oxford: Oxford University Press.
 ISBN: 0198568126

Also, some lectures refer to selected chapters of the following textbooks:

- Textbook of Orthodontics, First Edition
 Samir E. Bishara
 2001, Philadelphia: Saunders.
 ISBN: 0721682898
- Contemporary Orthodontics, Fourth Edition
 William R. Proffit, Henry W. Fields and David M. Sarver
 2006, Saint Louis: Mosby, Inc.
 ISBN: 0323040462

Course Schedule [DUC]:

First Semester

WEEK	DATE	LECTURE	PRACTICAL*
		Sunday, 8:00-9:00 am Room 27/GA	Sunday, 9:00-12:00 pm Phantom Lab.
1	4 OCT 2009	Introduction to the Course Dr. Bindayel	Introduction to the laboratory
2	11 OCT 2009	Facial Growth (L.M., 4) Prof. Bukhary	Study Models – I - Impressions of students & pouring
3	18 OCT 2009	Facial Growth (L.M., 4) Prof. Bukhary	Study Models – II - Demo. of model trimming & finishing <i>Deadline for models' delivery, the beginning of next session</i>
4	25 OCT 2009	Developing Dentition (L.M., 3)	Classification of Malocclusion

		Prof. Bukhary	- Description using students' models
5	01 NOV 2009	Orthodontic Diagnosis (Bishara, 9)	Laboratory Quiz – I, and Review Classification of Malocclusion
		Dr. Talic	
6	08 NOV 2009	Etiology of Malocclusion (Proffit, 5)	Radiographs (OPG, Occlusal, P-A) <i>Students are reminded to start taking their own Ceph.</i>
		Dr. Talic	
7	15 NOV 2009	Cephalometrics I (L.M., 6)	Hand & Wrist Radiographs <i>Final date for presenting Cephalometric images</i>
		Prof. Al-Jasser	
	19/11-4/12 09	Hajj Holiday	
8	06 DEC 2009	First Mid-Term Examination	
9	13 DEC 2009	Cephalometrics II (L.M., 6)	Cephalometrics I ** - Tracing & Landmark Identification
		Prof. Al-Jasser	
10	20 DEC 2009	Class I (L.M., 8)	Cephalometrics II ** - Measurement & Interpretation
		Dr. Bindayel	
11	27 DEC 2009	Class II div 1 (L.M., 9)	Laboratory Quiz – II, and Review Radiographic Interpretation
		Dr. Bindayel	
12	03 JAN 2010	Class II div 2 (L.M., 10)	Models Analysis (Permanent Dentition) **
		Dr. Bindayel	
13	10 JAN 2010	Class III (L.M., 11)	Models Analysis (Mixed Dentition) ** <i>Students are reminded to receive their instruments' kit</i>
		Dr. Bindayel	
14	17 JAN 2010	Malocclusal Problems (L.M., 12, 13)	Demo. of Orthodontic Appliances & Instruments Description ***
		Dr. Bindayel	
15	24 JAN 2010	Canines (L.M., 14)	Review
		Dr. Bindayel	
16	31 JAN 2010	Mid-Year Examination	

* All practical tasks must be **finished by the end of each practical session** and handed in for evaluation, except for the third week's task. And all students, kindly, **must bring their practical manual** for every practical session.

** All students must bring their own cephalometrics /or orthodontic models along with the following instruments; ruler, 90 degrees triangle, protractor, compass, and 0.5 mm pencil.

*** Students must have their wire bending instruments' kit ready by the beginning of the session.

Second Semester

WEEK	DATE	LECTURE Sunday, 8:00-9:00 am Room 27/GA	PRACTICAL* Sunday, 9:00-12:00 pm Phantom Lab.
1	21 FEB 2010	Treatment Planning (L.M., 7)	Review of 1 st semester, and preparation for case presentation
		Dr. Bindayel	
2	28 FEB 2010	Orthodontic Tx Timing (Proffit, 7)	Case Presentation
		Dr. Aldrees	
3	07 MAR 2010	Tx in Preadolescent Children (Proffit, 12)	Case Presentation
		Dr. Aldrees	
4	14 MAR 2010	Fixed Appliances (L.M., 18)	Case Presentation

		Prof. Bukhary	
5	21 MAR 2010	Functional Appliances (L.M., 19)	Functional App. Demonstration
		Prof. Bukhary	
6	28 MAR 2010	Removable Appliances (L.M., 17)	Removable App. Demonstration
		Prof. Al-Jasser	
7	04 APR 2010	Ortho. Forces & T. Reaction (Proffit, 9)	Adams Clasp on #26 **
		Dr. Aldrees	
8	11 APR 2010	Adverse Effects of Ortho. Tx (Thilander, 9)	Bending of Labial Bow **
		Dr. Aldrees	
	15-23 APR 10	Mid-2nd Semester Break	
9	25 APR 2010	2nd Mid-Term Examination	
10	02 MAY 2010	Adult Orthodontics (L.M., 20)	Bending of Z-Spring **
		Dr. Bindayel	
11	09 MAY 2010	Orthognathic Surgery (L.M., 21)	Acrylization, Finishing of Hawley R. ** <i>Deadline for handing-in H.R., the beginning of next session</i>
		Dr. Bindayel	
12	16 MAY 2010	Cleft Lip and Palate (L.M., 22)	Fixed Ortho. App. (Typodont) I
		Dr. Al-Balkhi	
13	24 MAY 2010	Stability and Retention (L.M., 16)	Fixed Ortho. App. (Typodont) II
		Dr. Al-Balkhi	
14	30 MAY 2010	Orthodontic First Aid (L.M., 23)	Fixed Ortho. App. (Typodont) III
		Dr. Bindayel	
15	06 MAY 2010	Review	Preparation for final practical examination
		Dr. Bindayel	
16	12-30 JUN 10	Final Examination	

* All practical tasks must be **finished by the end of each practical session** and handed-in for evaluation, except for the third week's task. And all students, kindly, **must bring their practical manual** for every practical session.

** Students must have their orthodontic models and wire bending instruments' kit ready by the beginning of the session.

PDS 432 – CLINICAL ORTHODONTICS
Academic Year 2009-2010G [1430-1431H]

Course Director: Dr. Khalid M. Al-Balkhi [DUC] / Dr. Sahar Taher Abdel-Aziz [MUC]
Course Name: Clinical Orthodontics
Course Number: PDS 432
Credit Hours: One Credit Hour
Pre-Requisites: PDS 431
Course Level: Offered in the 1st semester of the fifth year (Level #7)
Room: 2/GA and 37/2A [DUC], Room 101 [MUC]
Time: Wednesday, 1:00-3:00 pm [DUC & MUC]

Course Description:

The course is given over a period of 15 weeks. In each week, 2 groups of students will be alternating and participating in seminars and problem-based tutorial sessions to analyze the presented 10 orthodontic cases choose to cover the following topics:

- Orthodontic diagnosis and treatment planning of Class I, II and III malocclusions.
- Orthodontic treatment of patients with medical disorders
- Early orthodontic treatment
- Management of dentofacial skeletal problems (A-P/Vertical/Transverse)
- Assessment of patients for orthognathic surgery
- Adjunctive orthodontic treatment for adults.
- Iatrogenic effects of orthodontic therapy.

This method of learning involves an active participation of the students in their learning through generating hypotheses to explain the problems under discussion, contributing resources and knowledge to the group, and demonstrating the ability to understand and apply the available evidence to analyze the case.

Course Objectives:

The course has the following objectives:

1. To increase the knowledge of the students in the theoretical background of selected orthodontic topics.
2. To familiarize the students with the appropriate procedures of orthodontic diagnosis and treatment planning.
3. To help the students to resolve the problems and meet the challenges that are encountered in the clinical practice through the participation in the discussion of carefully selected orthodontic cases that demand from the students' acquisition of critical thinking, problem solving proficiency, self-directed learning strategies and team participation skills.

At the end of the course, students should be able to recognize and classify the different types of malocclusion and define the cases suitable for orthodontic treatment.

Course Evaluation:

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
Quizzes & Tutorial Participation	Midterm Exam.		
20	30	50	100

Mid-term Examination: It's given usually during the 8th or 9th week of the semester.

Required Textbook:Textbook of Orthodontics, 2nd Edition

Gurkeerat Singh

2007, Jaypee Brothers.

ISN 81-8448-080-6

Course Schedule [DUC]:

Week	Date	Dr. Khalid M. Al-Balkhi Room 02/GA	Dr. Naif Bindayel Room 37/2A
1	7 Oct. 09 18/10/1430H	Introduction	
		All Groups in Room 02/GA	
2	14 Oct. 09 25/10/1430H	Orthodontic records and cephalometric landmarks and analysis. Chapter 7, 8, 9, 10	
		All Groups in Room 02/GA	
3	21 Oct. 09 2/11/1430H	Seminar: Crowding and spacing Chapter 15, 16, 21, 53	Case #1 Case #2
		Group A	Group B
4	28 Oct. 09 9/11/1430H	Seminar: Crowding and spacing Chapter 15, 16, 21, 53	Case #1 Case #2
		Group B	Group A
5	4 Nov. 09 17/11/1430H	CPR COURSE KCUH – DEPT OF ANESTHESIA	
6	11 Nov. 09 23/11/1430H	Seminar : Openbite and vertical maxillary excess Chapter 45, 49, 54	Case #3 Case #2
		Group A	Group B
7	18 Nov. 09 01/12/1430H	Seminar : Openbite and vertical maxillary excess Chapter 45, 49, 54	Case #3 Case #2
		Group B	Group A
HAJJ HOLIDAY (19 November – 04 December 2009)			
8	9 Dec. 09 22/12/1430H	Seminar : Class II and III non-surgical Chapter 51, 52, 55	Case #5 Case #6
		Group A	Group B
9	16 Dec. 09 29/12/1430H	Seminar : Class II and III non-surgical Chapter 51, 52, 55	Case #5 Case #6
		Group B	Group A
10	23 Dec. 09 06/01/1431	MID TERM EXAMINATION	
11	30 Dec. 09 13/01/1431H	Seminar : Adult orthodontics and class I surgical Chapter 25, 56	Case #7 Case #8
		Group A	Group B
12	06 Jan. 10 20/01/1431H	Seminar : Adult orthodontics and class I surgical Chapter 25, 56	Case #7 Case #8
		Group B	Group A
13	13 Jan. 10 27/01/1431H	Seminar : Class II and III surgical Chapter 25, 51, 52	Case #9 Case #10
		Group A	Group B
14	20 Jan. 10 05/02/1431H	Seminar : Class II and III surgical Chapter 25, 51, 52	Case #9 Case #10
		Group B	Group A

15	27 Jan. 10 12/02/1431H	Review	
		Group A	Group B
16	3 Feb. 10 19/02/1431H	FINAL EXAMINATION	

PDS 341 – INTRODUCTION TO PEDIATRIC DENTISTRY
Second Semester of Academic Year 2009-2010G [1430-1431H]

Course Director:	Dr. Omar A. Bawazir [DUC] / Dr. Nouf S. Al-Hammad [MUC]
Course Name:	Introduction to Pediatric Dentistry
Course Number:	PDS 341
Credit Hours:	Two Credit Hours (1 Lecture + 1 Laboratory Session)
Pre-Requisites:	RDS 211
Course Level:	Offered in the 2 nd semester of the third year (Level #5)
Room:	11/GA [DUC], Room 003 [MUC]
Time:	Tuesday; Lecture: 8:00-9:00 am, Lab. Session: 9:00-12:00 pm [DUC] Wednesday; Lecture: 8:00-9:00 am, Lab. Session: 9:00-12:00 pm [MUC]

Course Description:

This is a two credit hour course made up of Didactic and Laboratory technique as Introduction to Pediatric Dentistry. The course holds in the second half of the third year. The primary goals of Pediatric Dentistry include the diagnosis and prevention of disease, the preservation of the natural dentition and the restoration of health, function and esthetics of stomatognathic system. The lectures will cover all these topics. The primary function of the laboratory is the development of psychomotor skills of the dentist. The psychomotor skills must be highly developed in order to provide quality care of the children. Due to the high degree of skill required, disappointments and frustrations may occur during the process of learning and development. Some students, for example, will need to repeat various projects. However, the pre-clinical laboratory is the place where mistakes can occur without damage to the patient, and where skills can be developed to a high level of proficiency. In order to maximize the benefits of each laboratory session, students will be expected to study the laboratory manual preparation for each project.

Course Objectives:

Upon completion of this course, the student should be able to:

1. Understand the basic morphologic applications of cavity preparation in primary teeth.
2. Gain the knowledge of matrix systems, amalgam and composite resin manipulation, stainless steel crown restoration as related to primary teeth.
3. Understand the technique and indications for pulpotomy.
4. Utilize the sealant system as a preventive measure against caries.
5. Predict possible crowding problems and to utilize the space maintainer as a preventive measure against malocclusion.
6. Acquire such psychomotor skills as to be able to treat a child by carrying of simple procedures in the clinic without any inhibitions.

Recommended Textbooks:

Pediatric Dentistry: Infancy through Adolescence, 4th Edition

Jimmy Pinkham

2005, Saint Louis: Mosby, Inc.

- i) Every student is required to purchase the recommended textbooks.
- ii) Lectures will be given from these books, students are required to read the assigned chapters for every lecture. The lecture may not cover everything. Examinations will be from the lectures and respective chapters in the textbooks.

Attendance:

Students MUST attend all lectures and laboratory exercises, and be ON TIME. Student who fails to attend a lecture/lab., he/she must report to the COURSE DIRECTOR the reason behind his/her

absence. Any student who fails to attend 75% of the lectures/laboratory exercises will not be allowed to sit for the FINAL EXAMINATION. No excuse whatsoever.

Grading:

- Didactic - 40%
- Laboratory - 60%

Students MUST pass both parts individually to pass the course. If a student passes the didactic but fails the laboratory part, or vice versa, he/she will not pass the course.

Didactic (40%):

The evaluation for the lecture part will be as the following:

- Mid-Term Exam [Essay/short note questions] (15%)
- Final Exam [Multiple choice questions and Essay/Short note] (25%)

Laboratory (60%):

The evaluation for the laboratory projects will be as the following:

Weekly projects/Cleaning the cubicle/Behavior 25%
Quizzes 5%
Midterm exam [specific lab procedure] 10%
Final Exam [specific lab procedure / spot exam] 20%

Quizzes:

During the course, quizzes will be given without prior notice. It can be given in the lecture or in the laboratory. Failure to participate attracts zero mark.

Course Outline [DIDACTIC]:

- Development and morphology of the primary dentition.
- Dental caries in the child and adolescent
- Restorative Dentistry
 - I : Posterior Restorations
 - II : Anterior Restorations
 - III : Stainless Steel Crowns
- Pulp therapy for the primary dentition.
- Local anesthesia and the use of the rubber dam.
- Prevention of dental diseases.
- Dental materials in pediatric dentistry.
- Space maintenance in the primary dentition.
- Oral habits.
- Examination of the child patient.

Course Outline [LABORATORY] Operative Technique:

The following procedures shall be carried out by students in the Phantom Head Laboratory on ivorene or natural teeth.

Occlusal cavity for amalgam on	# 54
Occlusal cavity for amalgam on	# 84
Occluso-lingual (OL)	# 55
Mesio-occlusal (MO)	# 65
Mesio-occlusal (MO)	# 85
Disto-occlusal (DO)	# 74
Forming and placing T-band matrix	
Amalgam restoration: condensing, carving, burnishing and finishing	
Preventive resin restoration	Permanent molar/premolar
Stainless steel crown preparation	# 75 or #85 and #64
Pulpotomy (Primary molar)	Extracted tooth

Composite crown (anterior strip crown)

Fissure sealant (Permanent Molar)

Fluoride application

Extraction techniques in children

Space maintainer

52 or # 62

Extracted tooth

Demonstration

Demonstration

Demonstration (Band selection and adaptation).

PDS 441 – CLINICAL PEDIATRIC DENTISTRY (1)
Academic Year 2009-2010G [1430-1431H]

Course Director:	Prof. Amjad H. Wyne [DUC] / Dr. Ibtisam Z. Murshid [MUC]
Course Name:	Clinical Pediatric Dentistry-1
Course Number:	PDS 441
Credit Hours:	Four Credit Hours (1 Lecture + 1 Clinical Session, per semester)
Pre-Requisites:	PDS 341
Course Level:	Offered in the fourth year (Level #6)
Room:	27/GA [DUC], Room 202 [MUC]
Time:	Wednesday; Lecture: 1:00-2:00 pm, Clinical Session: 2:00-5:00 pm [DUC] Sunday; Lecture: 1:00-2:00 pm, Clinical Session: 2:00-5:00 pm [MUC]

Course Description:

This is a four-credit hour course with the duration of one academic year. The course consists of didactic and clinical components. The didactic component addresses the different aspects of diagnosing, managing and treating the dental problems of school age children.

The clinical component is the first clinical course in Pediatric Dentistry. The course offers one session of three (3) hours each week for one academic year. It is a clinical setting in which the student acquires the motor skills necessary to render care for children. The student should have an opportunity to perform the clinical procedures commonly associated with children's dentistry. The concept of comprehensive care will be adapted so that the student develops an awareness of and appreciation for the total child. Patients with age ranging from 8 to 14 years will be selected according to course requirement.

Course Detail:

1. Assessment of the child which includes the medical and dental history, type of behavior, occlusion, oral habits, soft tissue, carious lesions, radiographic interpretation.
2. Practice of patient motivation, plaque control, topical fluoride therapy, fissure sealant.
3. Practice of operative dentistry for children, which include local anesthesia, rubber dam placement, amalgam and resin restorations, stainless steel crown, pulpal procedures for primary and young permanent teeth, extraction of primary teeth. Space management appliances and employment of behavior management aids.

Evaluation:

Didactic	-	50%
Clinic	-	50%

Didactic Distribution:

341-Based Review Exam	-	5%
Written Assessment No. 1	-	7.5%
Written Assessment No. 2	-	7.5%
Written Assessment No. 3	-	10%
Final Assessment	-	20%

Clinical:

Quality	-	35%
Effort	-	15%

The evaluation of the clinical work will be based on:

1. Weekly assessment of the quality of work (35 pts).
A number of instructors are assigned for this course. Each one of them will work with a group of seven or eight students for three weeks then rotate with other groups. The final grade for the quality of work will be an average of the grades given by the all instructors.

The knowledge of the student on clinical procedure being performed or related topics will be tested on weekly basis by the instructor.

2. Satisfying the course requirements and efforts (15 pts).

Minimum course requirement for the year:

- 3 Acceptable treatment plan
- 4 Class I cavity preparation including OL
- 4 Class II cavity preparation
- 2 Anterior restoration (Class III, IV, V build up)
- 2 Extraction
- 8 Fissure sealant i.e. Minimum of 4 points
- 3 Pulpotomy
- 2 Space maintainer
- 3 Preventive resin restoration
- 3 Stainless steel crown
- 2 Complete cases
- 3 Recall visit

The above are the minimum requirements accepted for the course. It is expected that the students would use their time wisely and show more effort. Point system will be adopted to assess this effort. The final grade will be measured according to class performance. Students are expected to complete every case started.

Points for various procedures to assess clinical effort:

Name of the Procedure	Point
1. Examination, Treatment Plan, Charting, Prophy/FI	3
2. Sealant (per tooth)	½
3. Class I / Preventive resin restoration	1
4. Class II	2
5. Class III / V	1
6. Class IV / MOD / build up	3
7. SSC / strip crown	3
8. Pulpotomy	3
9. I.P.C. / direct pulp cap.	1
10. Temporary dressing for incomplete cavity prep	0
11. Complete case (after polishing / prophyl / FI)	2
12. Exceptional cases (eg. Pulpectomy) to be determined by the instructor	
13. Extraction (not mobile tooth)	1
14. Space maintainers	
Band and Loop	2
Nance Appliance, Lingual Arch	3
15. Management problem patients	1-5
16. Caries control (gross excavation of caries in 2 or more quadrants and IRM dressing)	1
17. Recall visit (Prophy, Fluoride, OHI, X-ray etc.)	2

Notes:

- Punctuality, neatness, professional attitude and rapport with the instructors are variables to be considered in the final grade of the students.
- Traumatic pulp exposure or perforation of pulpal floor attracts a failure grade but the completed procedure will be awarded points.

Clinic Policy:

The student is required to perform during:

First Visit

1. Record personal data and case history – Dental/Medical.
2. Introduce the child to the clinic – apply the tell show and do technique.
3. Examine the child and record finding.
4. Take necessary radiographs and models if indicated.
5. Give oral hygiene instruction after disclosing the plaque and do rubber cup prophylaxis. Fluoride application (if indicated) should be done, following approval by the instructor.
6. Dispense a toothbrush for the patient, write his name over it and keep it in the cabinet for his use during subsequent appointment.
7. Formulate a treatment plan on a sheet of paper (if time allows).
8. Present treatment plan to the instructor. When approved, rewrite the treatment plan in the chart and have your instructor sign it.

Second Visit

1. Proceed with treatment as planned.
2. At each visit, the first ten minutes should be spent in teaching the patient the proper way of brushing, using disclosing solution or tablet and his/her own toothbrush.
3. If the patient has rampant caries or large cavities in two quadrants or more, gross excavation of caries should be done and I.R.M. is placed.

Student's Responsibilities

1. Give appointment to the patient.
2. Make sure that the patient attends the clinic. Re-confirm the appointment with parent 24 hours before the appointment. If the patient is not attending, book another patient (**NO EXCUSE**).
3. Be on time for the clinic.
If the student fails to attend for any reason, it is his/her responsibility to:
 - a. Cancel the patient.
 - b. Notify the course director about it.
 - c. Write a letter to the course director explaining the reason for his/her absence.
 - d. Notify the booking staff and arrange for the next appointment.

If the student fails to follow the above steps, he/she would be considered absent without excuse and be given "F" grade for the session.

Attendance Policy:

- Any student who is absent for 25% or more in the clinics/lectures would not be allowed to take final examination.
- All the students must be in time for the lectures. Any student who is late for 5 minutes will be allowed to sit in the lecture but will be marked absent. Any student late by 10 minutes will not be allowed to enter the lecture room.

Required Textbook:

Dentistry for the Child and Adolescent, 8th Edition
Ralph E. McDonald
2004, Saint Louis: Mosby, Inc.

Course Schedule [DUC]:

First Semester

DATE	TOPIC	LECTURER
07 Oct 2009	Introduction to Clinical Pediatric Dentistry & Infection Control Considerations for Children	Prof. Wyne
14 Oct.	Philosophy of Planning Dental Treatment for Children	Prof. Wyne
21 Oct.	341 LECTURE BASED EXAMINATION	Prof. Wyne
28 Oct.	Development of Occlusion	Dr. Al-Sehaibany
04 Nov.	Psychological Management of Children's Behaviors I	Prof. Khalil
11 Nov.	Psychological Management of Children's Behaviors II	Prof. Khalil
18 Nov.	Minor Oral Surgery in Children	Dr. Bello
HAJJ BREAK (19 Nov – 04 December 2009)		
09 Dec.	FIRST WRITTEN ASSESSMENT	FACULTY
16 Dec.	Anomalies of Developing Dentition I	Dr. Bawazir
23 Dec.	Anomalies of Developing Dentition II	Dr. Bawazir
30 Dec.	Planning for Space Management in Mixed Dentition	Dr. Al-Sehaibany
06 Jan 2010	Dental Caries in the Child and Adolescent I	Dr. Bello
13 Jan.	Dental Caries in the Child and Adolescent II	Dr. Bello
20 Jan.	Pulp therapy for Young Permanent Teeth	Dr. Al-Majed
27 Jan	Revision	Prof. Wyne
03 Feb.	SECOND WRITTEN ASSESSMENT	FACULTY
10 Feb.	Discussion of Clinical Requirements and Grades	Prof. Wyne

Second Semester

DATE	TOPIC	LECTURER
24 Feb 2010	Antimicrobials in Pediatric Dentistry	Dr. Wyne
03 Mar	Radiographic techniques for children	Dr. Mustafa Ali
10 Mar	Dental Trauma to Primary Teeth	Dr. Al-Majed
17 Mar	Managing Traumatic Injuries in Young Permanent Teeth	Dr. Al-Majed
24 Mar	Pharmacological Management of Patient Behavior	Dr. Bello
31 Mar	Nitrous Oxide – Oxygen Inhalation	Dr. Wyne
07 Apr	THIRD WRITTEN ASSESSMENT	FACULTY
14 Apr	Gingivitis and Periodontal Diseases in Children	Dr. Bello
21 Apr	MID-SEMESTER BREAK	
28 Apr	Dental Management of Disabled Children I	Prof. Khalil
05 May	Dental Management of Disabled Children II	Prof. Khalil
12 May	Oral Manifestations of Infectious Diseases in Children	Dr. Bawazir
19 May	Management of children with systemic diseases	Dr. Bawazir
26 May	Medical Emergencies in Children	Dr. Al-Sehaibany
02 June	Hospital Dentistry	Dr. Mustafa Ali
09 June	Revision of the Course (Didactic and Clinical)	Dr. Wyne

PDS 442 – CLINICAL PEDIATRIC DENTISTRY (2)
Academic Year 2009-2010G [1430-1431H]

Course Director:	Dr. Ibrahim M. Al-Majed [DUC] / Dr. Maha A. Al-Sarheed [MUC]
Course Name:	Clinical Pediatric Dentistry-2
Course Number:	PDS 442
Credit Hours:	Two Credit Hours (1 Clinical Session, per semester)
Pre-Requisites:	PDS 441
Course Level:	Offered in the fifth year (Level #7)
Time:	Tuesday; Clinical Session: 2:00-5:00 pm [DUC] Monday; Clinical Session: 2:00-5:00 pm [MUC]

Course Description:

This is final clinical course in pediatric dentistry. The course consists of one clinical training session of 3 hours per week for the whole academic year. The students are required to provide comprehensive dental treatment for children age 3 to 8 years presenting with a wide range of dental problems. Emphasis of the course will be on patient education and management, treatment planning, prevention of dental disease, restorative procedures, pulp therapy, and space management.

Course Objectives:

After completing the clinical training, the students should be able to:

1. Evaluate the patient's need for behavior modification.
2. Apply different behavior modification techniques learned.
3. Formulate a treatment plan for this age group.
4. Discuss with parents different approaches for the prevention of dental disease.
5. Teach and motivate parents in proper brushing technique according to their children age.
6. Administer local anesthesia.
7. Use rubber dam properly.
8. Restore primary teeth using different materials available.
9. Use several clinical procedures available for pulp therapy.
10. Effectively manage cases of premature primary tooth/teeth loss.
11. Manage dental trauma in children.
12. Recognize and manage/refer disabled individuals.

Clinical Course Outline:

1. Guidance of the child behavior (Psychological).
2. Guidance of the child behavior (Pharmacological).
3. Pulp Therapy
4. Stainless Steel Crown Restorations.
5. Treatment strategies of caries in children.
6. Space management
7. Management of patients with:
 - a. Traumatized primary teeth and immature permanent anterior teeth.
 - b. Oral and skin manifestations of infectious diseases.
 - c. Periodontal diseases.
 - d. Systemic diseases.
 - e. Disabled conditions.

Course Requirements:

Following are the minimum clinical requirements:

1. Comprehensive Treatment Plans Three

2. Behavior Management	Two
3. S.S.C	Five
4. Pulpotomies	Four
5. Space Maintainers	Three
6. Finished cases	Two

Course Evaluation/Grading:

Students are evaluated in three areas (total grade is 100):

1. Clinical Evaluation 70%
2. Written Examination 30%

1. Clinical Evaluation

(Failure to satisfy course requirements and course evaluation will lead to failure of the course)

Students will be evaluated on weekly basis in the following manner:

1a. Quality of Work and Knowledge – (45)

Several instructors are assigned for this course. Each instructor will work with a group of students for several weeks, and then rotate with other groups. The final grade for the quality of work will be calculated by averaging the grades given by all the instructors.

The knowledge of the students will be tested on weekly basis by the instructor on the clinical procedure he/she is performing or related topics.

Note: Factors such as patient's booking, punctuality, neatness, professional attitude, rapport with the instructors and infection control will be considered in the weekly grading of the students.

1b. Effort – (25)

The evaluation for the effort will depend on the following:

1. Satisfying the course requirements.
2. Attendance.
3. Amount of clinical work accomplished.

The point system will be adopted to assess the effort, and the final grade will be calculated according to the class performance.

Point Allocation for Clinical Procedures:

1. Examination, Treatment Plan (TP), Charting	2 pts. (Max of 5 TP)
Prophyl/FI., etc.	1 pt
2. Sealant	1 pt/quadrant
3. Class I	1 pt
4. Class II	2 pts
5. Class III	1 pt
6. Class IV / MOD	3 pts
7. SSC	3 pts
8. I.P.C.	1 pt
9. Pulpectomy – Exceptional cases(to be determined by the instructor)	4 pts.
10. Pulpotomy	3 pts
11. Temporary Dressing	0 pt
12. Extraction	1 pt
13. Space Management/Maintainer	
▪ Band and Loop	2 pts
▪ Nance and Lingual Arch	3 pts
14. Behavior Management of Patient	1 to 5 pts
15. Complete Case (after polishing/prophy/FI)	2 pts

5. Give oral hygiene instruction – If time allows, prophylaxis and fluoride application should be completed.
6. Dispense a toothbrush for the patient, write his name over it and keep it in your cabinet.
7. Formulate a treatment plan on a separate sheet of paper
8. Present treatment plan to your instructor. When approved, rewrite the treatment plan on allocated pages in the patient's file.
9. Make sure to obtain your instructor's signature on the treatment plan and all the other areas such as charting papers and daily notations.
10. Make sure that the parent/guardian signs the personal information and medical history pages in the patient's file.

Second Visit:

1. Proceed with treatment as planned.
2. At each visit, first ten minutes should be spent in teaching the patient the proper way of brushing using disclosing solution or tablets and his/her own toothbrush.
3. If the patient has rampant caries or large cavities in two quadrants or more, gross excavation of caries should be done followed by I.R.M placement.

Required Textbooks:

- Fundamental of Pediatric Dentistry, 3rd Edition
Mathewson, R.J. and Primosch, R.E.
1995.
- Pediatric Dentistry: Infancy through Adolescence, 4th Edition
Jimmy Pinkham
2005, Saint Louis: Mosby, Inc.
- Dentistry for the Child and Adolescent, 8th Edition
McDonald, R.E. and Avery, D.R.
2004, Saint Louis: Mosby, Inc.