PDS 341 – INTRODUCTION TO PEDIATRIC DENTISTRY
Tuesday, 8:00 – 12:00 noon [DUC]
Wednesday, 8:00 – 12:00 noon [MUC]

Academic Year 2007 - 2008G [1428–1429H]

Course Directors : Dr. Thamer Al-Khadra [DUC]
                   Dr. Asma Al-Jobair [MUC]

Course Contributors : Dr. Amjad Wyne [DUC]
                     Dr. Fares Al-Sehaibany
                     Dr. Lanre Bello
                     Dr. Thamer Al-Khadra

Course Contributors : Dr. Aljohara Al Hussyeen [MUC]
                     Dr. Maha Al Sarheed
                     Dr. Nouf Al-Hammad

Course Number : 341
Course Code : PDS
Credit Hour : Two (2) Credit Hours
Pre-Requisite Course : 211 RDS
Location in the Curriculum : Third Year
Recommended Textbooks : Pediatric Dentistry
                         Infancy Through Adolescence

                         Dentistry for the Child and Adolescent
                         By: McDonald, R.E. and Avery, D.R.
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:

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]:

- The practical importance of pediatric dentistry.
- 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.
• Eruption and development of primary dentition.
• 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
- Stainless steel crown preparation #75 or #85 and #64
- Pulpotomy (Primary molar) Extracted tooth
- Composite crown (anterior strip crown) #52 or #62
- Fissure sealant (Permanent Molar) Extracted tooth
- Fluoride application
- Extraction techniques in children Demonstration
- Space maintainer Demonstration (Band selection and adaptation)

Betchay, October 1, 2007
### 341 PDS
**Introduction to Pediatric Dentistry**

**SECOND HALF OF ACADEMIC YEAR 2008**

**Lecture Outline**
February – May 2008
Tuesday, 8:00 – 9:00 am

**Course Director:** Dr. Thamer Al-Khadra [DUC]

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<th>Week</th>
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<td>Development and morphology of the primary teeth <em>(McDonald, Ch. 4, pg. 53)</em></td>
<td>Dr. Wyne</td>
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<td>3</td>
<td></td>
<td>Restorative Dentistry for the Primary Dentition I <em>(Pinkham, Ch. 21, pg. 313)</em></td>
<td>Dr. Al-Dlaigan</td>
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<td>Restorative Dentistry for the Primary Dentition II <em>(Pinkham, Ch. 21, pg. 331)</em></td>
<td>Dr. Al-Dlaigan</td>
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<td>Dental caries in the child and adolescent <em>(McDonald, Ch. 10, pg. 46)</em></td>
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<td>6</td>
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<td>The practical importance of pediatric dentistry <em>(Pinkham, Ch. 1, pg. 1)</em></td>
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<td>7</td>
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<td>Pain perception control <em>(Pinkham, Ch. 7, pg. 85 and Ch. 28, pg. 411)</em> Use of rubber dam in pediatric restorative dentistry <em>(Pinkham, Ch. 21, pg. 311)</em></td>
<td>Dr. Al-Khadra</td>
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<td>Restorative Dentistry for the Primary Dentition III <em>(Pinkham, Ch. 21, pg. 324)</em></td>
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<td>9</td>
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<td>MID-TERM EXAMINATION</td>
<td>FACULTY</td>
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<td>10</td>
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<td>Prevention of dental disease <em>(Pinkham, Ch. Pg. 195)</em></td>
<td>Dr. Bello</td>
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<td>11</td>
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<td>Pulp therapy for the primary dentition <em>(Pinkham, Ch. 22, pg. 341)</em></td>
<td>Dr. Wyne</td>
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<td>12</td>
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<td>Space maintenance in the primary dentition <em>(Pinkham, Ch. 25, pg. 385)</em></td>
<td>Dr. Al-Sehaibany</td>
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<td>13</td>
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<td>Dental materials <em>(Pinkham, Ch. 20, pg. 296)</em></td>
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<td>14</td>
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<td>Examination of the mouth and other relevant structures <em>(McDonald, Ch. 1, pg. 1)</em></td>
<td>Dr. Bello</td>
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<td>15</td>
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<td>Oral Habits <em>(Pinkham, Ch. 26 pg. 393)</em></td>
<td>Dr. Al-Khadra</td>
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<td>16</td>
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<td>Revision</td>
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//Betchay, October 1, 2007
### 341 PDS
**Introduction to Pediatric Dentistry**
**SECOND HALF OF ACADEMIC YEAR 2007**

**Laboratory Procedures**
*February – May 2007*

**Tuesday, 9:00 AM – 12:00 Noon**

**Course Director:**  Dr. Thamer Al-Khadra  [DUC]

**Course Contributors:** Drs. Wyne, Al-Sehaibany, Bello, Al-Khadra

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<td>Forming and placing T-band</td>
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<td>Strip crown preparation</td>
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<td>Restoration of strip crown</td>
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<td>Stainless steel crown (SSC)</td>
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<td>Preparations # #85</td>
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<td>SSC fitting and adaptation</td>
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<td>Pulpotomy</td>
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<td>Band selection, adaptation</td>
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<td>Laboratory demonstration</td>
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/ Betchay, October 1, 2007
# 341 PDS
## Introduction to Pediatric Dentistry
### SECOND HALF OF ACADEMIC YEAR 2008

#### Lecture Outline
- **February – May 2008**
- **Wednesday, 8:00 – 9:00 am**

**Course Director:** Dr. Asma Al-Jobair

**Course Contributors:** Drs. Al-Hussyeen, Al-Sarheed, Al-Hammad

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(Pinkham, Ch. 21, pg. 313) | Dr. Al-Jobair |
| 4    |      | Restorative Dentistry for the Primary Dentition II  
(Pinkham, Ch. 21, pg. 331) | Dr. Al-Jobair |
| 5    |      | Dental caries in the child and adolescent  
(McDonald, Ch. 10, pg. 46) | Dr. Al-Jobair |
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Use of rubber dam in pediatric restorative dentistry  
(Pinkham, Ch. 21, pg. 311) | Dr. Al-Sarheed |
| 8    |      | Restorative Dentistry for the Primary Dentition III  
(Pinkham, Ch. 21, pg. 324) | Dr. Al-Jobair |
| 9    |      | MID-TERM EXAMINATION | Dr. Al-Jobair |
| 10   |      | Prevention of dental disease  
(Pinkham, Ch. Pg. 195) | Dr. Al-Sarheed |
| 11   |      | Pulp therapy for the primary dentition  
(Pinkham, Ch. 22, pg. 341) | Dr. Al-Hammad |
| 12   |      | Space maintenance in the primary dentition  
(Pinkham, Ch. 25, pg. 385) | Dr. Al-Sehaibany |
| 13   |      | Dental materials  
(Pinkham, Ch. 20, pg. 296) | Dr. Al-Jobair |
| 14   |      | Oral Habits  
(Pinkham, Ch. 26 pg. 393) | Dr. Al-Hussyeen |
| 15   |      | Examination of the mouth and other relevant structures  
(McDonald, Ch. 1, pg. 1) | Dr. Bello |
| 16   |      | Revision | Dr. Al-Jobair |

*Date: October 1, 2007*
### 341 PDS

**Introduction to Pediatric Dentistry**

**SECON HALF OF ACADEMIC YEAR 2008**

**Laboratory Procedures**

_February – May 2008_  
_Wednesday, 9:00 am – 12:00 noon_

**Course Director:**  
Dr. Asma Al-Jobair  
[MUC]

**Course Contributors:**  
Drs. Al-Hussyeen, Al-Sarheed, Al-Hammad

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341 PDS
INTRODUCTION TO PEDIATRIC DENTISTRY

Week 1: Lecture
INTRODUCTION AND COURSE REQUIREMENTS

Course description, Course objectives, Text books, Attendance, Grading Criteria, Didactic and laboratory projects outline.

Week 2: Lecture
DEVELOPMENT AND MORPHOLOGY OF THE PRIMARY TEETH
(McDonald, Chapter 4, page 53)

Life cycle of the tooth. Early development and calcification of anterior primary teeth. Early development and calcification of posterior primary teeth and the first permanent molar. Morphology of individual primary teeth. Morphologic differences between primary and permanent teeth. Size and morphology of the primary tooth pulp chamber.

Week 3: Lecture
RESTORATIVE DENTISTRY FOR THE PRIMARY DENTITION I
(Pinkham, Chapter 21, page 313)


Week 4: Lecture
RESTORATIVE DENTISTRY FOR THE PRIMARY DENTITION II
(Pinkham, Chapter 21, page 331)

Restoration of primary incisors and canines. Indications for restoration of primary incisors and canines, class III resin restorations. Class V restorations for incisors and canines. Full coronal coverage of incisors.

Week 5: Lecture
DENTAL CARIES IN THE CHILD AND ADOLESCENT
(McDonald, Chapter 10, page 46)

Week 6: Lecture
THE PRACTICAL IMPORTANCE OF PEDIATRIC DENTISTRY
(Pinkham, Chapter 1, page 1)


Week 7: Lecture
PAIN PERCEPTION CONTROL (LOCAL ANESTHESIA)
(Pinkham, Chapter 7, page 85; Chapter 28, page 411)


USE OF RUBBER DAM IN PEDIATRIC RESTORATIVE DENTISTRY
(Pinkham, Chapter 21, page 311)

Advantages for use of rubber dam (RD). Contraindication for use of RD. Preparing and placement of the RD. Removing the RD.

Week 8: Lecture
RESTORATIVE DENTISTRY FOR THE PRIMARY DENTITION III
(Pinkham, Chapter 21, page 324)

Use of stainless steel crown (SSC). Types and indications for use of SSC. Steps of preparation and placement of SSC to primary molars. Special considerations for SSC. Placement of adjacent crowns. Preparing crowns in areas of space loss.

Week 9: MIDTERM EXAMINATION (20 MARKS)

Week 10: Lecture
PREVENTION OF DENTAL DISEASE
(Pinkham, Chapter 14, page 195)

Week 11: Lecture
PULP THERAPY FOR THE PRIMARY DENTITION
(Pinkham, Chapter 22, page 341)


Week 12: Lecture
SPACE MAINTENANCE IN THE PRIMARY DENTITION
(Pinkham, Chapter 25, page 385)


Week 13: Lecture
DENTAL MATERIALS
(Pinkham, Chapter 20, page 296)


Week 14: Lecture
ORAL HABITS
(Pinkham, Chapter 26, page 393)


Week 15: Lecture
EXAMINATION OF THE MOUTH AND OTHER RELEVANT STRUCTURES
(McDonald, Chapter 1, page 1)

Initial parental contact with the dental office. The diagnostic method. Periodicity of examination, preventive dental services and oral treatment for children. History form and contents.

Week 16: Revision

/Betchay, October 1, 2007