

University of Detroit Mercy School of Dentistry

Pediatric Dentistry
Course Syllabus

Pediatric Dentistry Lecture I DPD 830/DH 818

Course Information

Course Directors:

Gail Molinari DDS MS MS Office: Room 320 Office Hours by appointment or contact Ms. Gayle Baxter, Dept. Administrative Assistant (313-494-6790). Phone: 313-494-6789 Email: molinage@udmercy.edu	Salwa Atwan BDS DDS MS Office: Room 311 Office hours by appointment or contact Ms. Gayle Baxter, Dept. Administrative Assistant (313-494-6790). Phone: 313-494-6791 Email: atwansm@udmercy.edu
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Winter Term, 2007-2008

DS2 Students (Class of 2010)

DH1 Students (Class of 2009)

Room: #2460, Wednesdays, 1-1:50 pm

Credit Hours: Dental 1.0
Dental Hygiene 1.0

Prerequisites:

Dental: None

Dental Hygiene: None

Lecturers/Support Faculty

Lecturers:

Dr. Gail Molinari DDS MS MS 313-494-6789

Dr. Salwa Atwan BDS DDS MS 313-494-6791

Ms.Carolynn Zeitz RDH BS RDA 313-494-6792

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Academic Policies:

All policies in the School of Dentistry Academic Policies Handbook including but not limited to academic integrity, mandatory attendance, professional decorum & dress code, identification (ID) badges, preclinical and classroom decorum, use of cell phone and electronic devices, examination policies and exam/quiz absences apply.

Accommodations:

If you would like to request a classroom, testing, preclinical, clinical, or other accommodation because of a legally protected disability, or if you might require any special assistance in the event of an emergency or evacuation, please contact the University of Detroit Mercy's Office of University Academic Services (UAC) at 313-578-0310 or email your request for information to gallegem@udmercy.edu

Student Evaluation of Instruction

Student feedback is valued by the faculty and the administration. All students are required to complete the School of Dentistry's on-line course evaluation by a specified date. Failure to comply by posted deadline dates will result in the receipt of an F (Failing) grade of record for the Evaluation Responsibility Course. Only constructive, professional recommendations will be reported and considered.

Course Description

Purpose of the course:

The purpose of the course is to introduce dental and dental hygiene students to the concepts of behavior management, prevention, and treatment planning of pediatric dental patients.

Course Goals: The course goals are to:

- Introduce the student to basic behavior development theories and behavior management techniques, including the administration of local anesthesia, of pediatric dental patients
- Introduce the student to clinical procedures associated with treatment planning of pediatric dental patients
- Present appropriate prevention techniques utilized with pediatric dental patients
- Prepare students to become mandated reporters of suspected child abuse and neglect

Course Objectives:

At the conclusion of the course, the dental student will be able to:

- Discuss the specific behavior characteristics of the different age groups in terms of social/emotional, mental/intellectual, and motor development.
- Explain several types of non-verbal communication that can be effectively used to manage children's behavior in the dental office
- Describe the normal development of the dentition including terminal planes, primate space, leeway space, early and late mesial shift
- Describe and differentiate between the five categories of pediatric dental patient's behavior: cooperative child, emotionally compromised child, shy, introverted child, frightened child and child who is adverse to authority
- Describe the following techniques used to guide children's behavior and their indications: Tell-Show-Do, desensitization, distraction, expectation, biofeedback, modeling, positive reinforcement, negative reinforcement
- Select radiographs for primary, early mixed and late mixed dentition patients for recall and initial examination appointments, and describe the characteristics of acceptable bitewing, occlusal, periapical and Panoramic radiographs of a pediatric patient.

- Explain the difference in caries development in the permanent vs. primary dentition
- Define Early Childhood Caries/rampant caries and describe its clinical appearance
- Develop an appropriate prevention program for pediatric dental patients including OHI, chemotherapeutic agents, recall schedule and caries risk assessment
- Describe the procedures for a complete dental examination of the child/infant including the medical, dental and dietary histories, the soft and hard tissues and occlusal examination, and describe the procedures followed for a "new" patient and "recall" patient in the clinic.
- Identify physical findings that should make a dental professional suspicious of child abuse or neglect and identify appropriate reporting protocol for suspected cases of child abuse and neglect
- List the maximum dosage levels of local anesthetics for children (in mg/kg and mg/lb) and describe how to prevent and treat complications associated with local anesthesia procedures in children

Dental Hygiene Specific Instructional Objectives:

At the conclusion of learning unit one, the dental hygiene student will be able to:

- Discuss the specific behavior characteristics of the different age groups (infancy, toddler, pre-school, school age, adolescent) in terms of social/emotional, mental/intellectual, and motor development.

At the conclusion of learning unit two, the dental hygiene student will be able to:

- Explain several types of verbal and non-verbal communication that can be effectively used to manage children's behavior in the dental office

At the conclusion of learning unit three, the dental hygiene student will be able to:

- Describe the normal development of the dentition including distal, mesial and straight terminal planes, primate space, leeway space, and early and late mesial shift

At the conclusion of learning unit four, the dental hygiene student will be able to:

- Select radiographs for primary, early mixed and late mixed dentition patients for recall and initial examination appointments.
- Describe the characteristics of an acceptable bitewing, occlusal, periapical and Panoramic radiographs of the pediatric patient.

At the conclusion of learning units five and six, the dental hygiene student will be able to:

- Develop an appropriate prevention program for pediatric dental patient including OHI, chemotherapeutic agents, recall schedule and caries risk assessment

At the conclusion of learning unit seven, the dental hygiene student will be able to:

- Describe the procedures for a complete dental examination of the child including the medical, dental and dietary histories, the soft and hard tissues and occlusal examination
- Describe the procedures followed for a "new" patient and "recall" patient in the pediatric clinic
- Utilize basic treatment planning procedures to develop a treatment plan for a pediatric dental patient

At the conclusion of learning unit eight, the dental hygiene student will be able to:

- Describe appropriate oral hygiene and preventative procedures for infants and toddlers and identify common oral pathologic conditions in young children

At the conclusion of learning unit nine, the dental hygiene student will be able to:

- Describe and differentiate between the five categories of children's behavior during dental treatment (cooperative child, emotionally compromised child, shy, introverted child, frightened child and child who is adverse to authority)
- Describe the following techniques used to guide children's behavior and their indications: Tell-

Show-Do, desensitization, distraction, expectation, biofeedback, modeling, positive reinforcement, negative reinforcement

At the conclusion of learning unit ten, the dental hygiene student will be able to:

- Identify physical findings that should make a dental professional suspicious of possible child abuse or neglect, and identify appropriate reporting protocol for suspected cases of child abuse and neglect

At the conclusion of learning units eleven and twelve, the dental hygiene student will be able to:

- List the maximum dosage levels of local anesthetics for children (in mg/kg and mg/lb), and describe how to prevent and treat complications associated with local anesthesia procedures in children

Instructional Methods:

Instructional methods utilized in the course include :

Quizzes, midterm examination, final examination, one take-home project (dental/dental hygiene students), attendance at one seminar (dental hygiene students only) and completion of one observation/assisting experience in the Holden Pediatric Dentistry Clinic.

School of Dentistry Competencies

Competency-based Education: Assumes that learning to become an entry-level professional is a progression through stages from novice to competent.

Stages of Progression to Competence:

F or Foundation Knowledge: Basic knowledge, skills, and attitudes needed to begin the journey to competence.

N or Novice Level: Ability to articulate or describe the appropriate skills, knowledge, and professional attitudes. Novices need structure, clarity of goals, single and clearly explained approaches.

B or Beginner Level: Combines the appropriate skills, knowledge, and professional attitudes, all of which are performed with guidance and correction.

C or Competent Level: Combines the appropriate supporting skills, knowledge, and professional attitudes, all of which are performed reliably without assistance.

	Competencies of the Graduating Dental Student	Addressed	Evaluated	Method
1.	The graduating student obtains, records, updates and organizes accurate and completed medical/dental histories including pertinent psychological and socioeconomic information.	YES	F	Written Evaluation Project NA
2.	The graduating student performs, records and organizes a physical assessment appropriate for dental care.	YES	F	Written Evaluation Project NA
3.	The graduating student determines differential, provisional or definitive diagnoses by correlating and interpreting examination and assessment findings.	YES	F	Written Evaluation NA NA
4.	The graduating student develops alternative treatment plans which are sequenced to address the chief complaint, eliminate oral disease, restore function, and maintain health, and prevent oral disease consistent with assessment and diagnoses.	YES	F	Written Evaluation NA NA
5.	The graduating student establishes with the patient a mutually acceptable treatment plan.	YES	F	Written Evaluation NA NA
6.	The graduating student monitors and provides for patient comfort associated with dental care.	YES	F	Written Evaluation NA NA
7.	The graduating student delivers and/or manages the planned treatment in sequence and in accordance with accepted standards of care.	YES	F	Written Evaluation NA NA
8.	The graduating student promotes health maintenance and disease prevention.	YES	F	Written Evaluation NA NA
9.	The graduating student applies the principles of infection control and environmental safety.	NO	NO	NA NA NA
10.	The graduating student makes professional decisions affecting the practice of dentistry based on values that	YES	F	Written Evaluation NA

	satisfy legal and ethical principles and service to society.			NA
11.	The graduating student performs routine self evaluation.	NO	NO	NA NA NA
12.	The graduating student applies business and practice management skills.	NO	NO	NA NA NA
13.	The graduating student demonstrates interpersonal skills to function successfully in a multicultural work environment.	NO	NO	Written Evaluation NA NA
14.	The graduate critically evaluates the validity of new information, new products, and/or techniques and their relevance to the practice of dentistry.	NO	NO	NA NA NA

	Competencies of the Graduating Dental Hygiene Student	Addressed	Evaluated	Method
1.	The graduate demonstrates interpersonal communication skills to function successfully in a multicultural work environment with diverse populations.	NO	NO	NA NA NA
2.	The graduate makes professional decisions affecting the practice of dental hygiene that satisfy legal, societal and ethical principles.	NO	NO	NA NA NA
3.	The graduate performs routine evaluation of self and staff members and takes corrective action to address perceived deficiencies.	NO	NO	NA NA NA
4.	The graduate critically evaluates the validity of new information, new products, and/or techniques and their relevance to the practice of dental hygiene.	NO	NO	NA NA NA
5.	The graduate applies business and practice management skills.	NO	NO	NA NA NA
6.	The graduate promotes health maintenance and disease prevention.	YES	F	Written Evaluation NA NA
7.	The graduate applies the principles of infection control and environmental safety.	NO	NO	NA NA NA
8.	The graduate obtains, records, updates and organizes accurate and complete medical/dental histories including pertinent psychological and socioeconomic information.	YES	F	Written Evaluation Project NA
9.	The graduate performs, records and organizes a physical assessment appropriate for dental care.	NO	F	NA NA NA
10.	The graduate determines differential, provisional or definitive dental hygiene diagnoses related to and congruent with the diagnosis of the dentist and other health professionals.	NO	NO	NA NA NA

11.	The graduate develops alternative dental hygiene care plans which are sequenced to address patients' needs, consistent with assessment and diagnoses.	NO	NO	NA NA NA
12.	The graduate establishes with the patient a mutually acceptable dental hygiene care plan.	NO	NO	NA NA NA
13.	The graduate monitors and provides for patient comfort associated with dental hygiene care.	NO	NO	NA NA NA
14.	The graduate delivers and/or manages planned dental hygiene treatment and education in sequence and in accordance with accepted standards of care.	NO	NO	NA NA NA

Course Policies

Tutorial sessions will be offered and are highly recommended for students who are not progressing well in the course. A course director will arrange any tutorial sessions. If you are unable to take the midterm or final examination due to an absence that has been approved by the Office of the Associate Dean for Academic Administration, the course directors will offer a make-up examination. The make-up examination will be short-answer and essay format. The student must contact a course director within one week of the missed test in order to reschedule the examination.

The quizzes will usually be administered during the first 5 minutes of lecture time (quizzes may be given at the end of a lecture). Students who arrive after or leave before the quiz has been distributed will not be allowed to take the quiz and will receive a zero for that quiz. Students who leave the classroom after taking a quiz will be given a zero for that quiz. There will not be an opportunity to make-up **ANY** missed quizzes.

You are expected to **ACTIVELY** observe and/or assist DS III and DS IV students treat pediatric dental patients during the observation/assisting experience - especially treatment planning and prevention appointments. Please note the objectives for this experience described on the form on page 12. **This form is not available in the pediatric clinic**-you must bring your copy of the form with you to the clinic. Any student who does not complete this experience will lose 10 percentage points from their final grade. Students who hand in documentation after the deadline will lose one point for each school day after the deadline up to a maximum of 10 points (credit for the entire project).

Instructions for the **Dental Students' take-home project** will be distributed on March 5, 2008. Projects are due no later than 5 pm on April 9, 2008. Projects handed in late will lose 10% of the project grade for each school day that the project is late. Students are required to work in groups of 6-8 on this project and submit the form attached to this syllabus on page 13. Dental Hygiene students are expected to submit their projects on the day of the seminar or within 48 hours after the seminar, or the same penalty will be applied.

If you are unable to take the midterm or final examination due to an absence that has been approved by the Office of the Associate Dean for Academic Administration, the course directors will offer a make-up examination. The make-up examination will be short-answer and essay format. The student must contact a course director within one week of the missed test in order to reschedule the examination.

For any student who receives an "F" grade, the department will recommend to the Academic Performance Committee that the student repeat the DPD 830/DH818 course next year. Students who fail DPD 830 or DH 818 will not enter the Pediatric Dentistry Clinic until they have successfully completed the course. Please note that a minimum grade of C- in DPD 830 is required for all dental students to proceed to DPD 833 in the Summer Term.

Textbook and Resource Materials

Required Textbook: Pediatric Dentistry: Infancy Through Adolescence, Pinkham, et.al., 2005.

Lecture Hand-outs

Evaluation and Grading

Grading Scale, Dental

A	=94-100%
A-	=90-93.99
B+	=87-89.99
B	=83-86.99
B-	=80-82.99
C+	=77-79.99
C	=73-76.99
C-	=70-72.99
D	=60-69.99
F	=below 60%
W	Withdraw, no credit
I	Incomplete, a temporary grade not of record

Grading Scale, Dental Hygiene

A	=94-100%
A-	=90-93.99
B+	=87-89.99
B	=83-86.99
B-	=80-82.99
C+	=77-79.99
C	=73-76.99
C-	=70-72.99
D+	=67-69.99
D	=60-66.99
F	=below 60%
W	Withdraw, no credit

I Incomplete, a temporary grade not of record

Course Grade Components

Midterm examination	25%
Quizzes (10 out of 11 taken)	20%
Final Examination	45%
Take-home Project (DS II) or Seminar (DH I)	<u>10%</u>
	100%

Course Evaluation Methods

Quizzes

The quizzes will be from material discussed in previous lectures and reading assignments for the previous and/or current lecture. The format for the quizzes will be short-answer. Failure to take a quiz will result in a zero for that quiz. At the end of the course, the lowest quiz grade will be dropped and 10 quizzes will comprise 20% of the Course Grade.

Midterm Examination

A midterm examination will consist of 50 questions. It will require approximately fifty minutes for completion. The examination will be formulated from material presented in the lectures and reading assignments (in the required textbook and the hand-outs). The examination will be evaluated by computer analysis.

Final Examination

The final examination will be cumulative, consist of 80 questions, and be given during your assigned final examination week. The examination will be formulated from material presented in the lectures and reading assignments (in the required textbook and the hand-outs). The examination will be evaluated by computer analysis

Projects

One take-home project (**dental students**)

One take-home project and attendance at one seminar (**dental hygiene students**)

Observation/assisting experience

An **observation/assisting experience** of at least two hours duration must be completed in the Pediatric Dentistry Clinic no later than April 25, 2008. This experience must be documented with an Observation/Assisting Experience sheet (see page 12) signed by a Pediatric Dentistry faculty member and returned to one of the course directors within 6 school days of the experience.

LECTURE SCHEDULE

DATE	TOPICS	LECTURER	READINGS/ASSIGNMENTS
Wednesday, Jan 23 1:00-2:00 Room #2460	INTRODUCTION/ BEHAVIOR DEVELOPMENT	DR MOLINARI	Text, pp. 192, 194-198, 281-283, 469-471, 654-656. Handouts
Wednesday, Jan 30 1:00-2:00 Room #2460	THE CHILD AS A PATIENT	DR MOLINARI	Text, pp. 394-398, 664-665.
Wednesday, Feb 6	****NO CLASS		

Wednesday, Feb 13 1:00-2:00 Room #2460	DEVELOPING DENTITION	DR ATWAN	Text, pp. 172-198, 343 (box 21-1) 466-471, 482-491 Handouts
Wednesday Feb 20 1:00-2:00 Room #2460	RADIOLOGY	DR ATWAN	Text, pp. 304-308, 506-511, 679 table 32-7, 242-243 Handout
Wednesday Feb 27 1:00 –2:00 Room #2460	MID-TERM EXAMINATION		
Wednesday Mar 5 1:00 –2:00 Room #2460	PREVENTION I **DS II Students: Tx plan project distributed TODAY	DR MOLINARI	Text, pp. 225-230, 313-316, 514- 515, 693-694.
Wednesday Mar 12 1:00 –2:00 Room #2460	PREVENTION II	MS ZEITZ	Text, pp. 230-233, 316-323, 513- 514, 515-519, 690-693. Handout
Wednesday Mar 19 1:00 –2:00 Room #2460	TREATMENT PLANNINGPEDIATRIC DENTAL PATIENTS	DR. ATWAN	Handout
Wednesday Mar 26 1:00 –2:00 Room #2460	ANTICIPATORY GUIDANCE	DR MOLINARI	Text, pp. 206-218, 220-225.
Wednesday Apr 2	SPRING BREAK		
Wednesday Apr 9 1:00 –2:00 Room #2460	BEHAVIOR GUIDANCE **DS II Students: Treatment planning project due TODAY	DR MOLINARI	Text, pp. 96-106, 398-412, 478.
Wednesday, Apr 16 1:00 – 2:00 AM Room #2460	CHILD ABUSE & NEGLECT	DR.MOLINARI	Text, pp. 5-6. Handout
Wednesday, Apr 23 1:00 – 2:00 AM Room #2460	LOCAL ANESTHESIA I	DR. ATWAN	Text, pp. 447-454, Malamed, <u>Handbook of Local Anesthesia</u> , Chapter 17 "Local Complications, 4th edition, 1997 , Handout
Wednesday, Apr 30 1:00 – 2:00 Room #2460	LOCAL ANESTHESIA II	DR ATWAN	Text, pp. 447-454, Malamed, <u>Handbook of Local Anesthesia</u> , Chapter 17 "Local Complications, 4th edition, 1997 , Handout

The Final Examination will be given during the Final Exam Period/see final examination schedule.

Observation/Assisting Experience Pediatric Dentistry DPD 830/DH 818

Please Print:

Name of Student: _____

Name of Faculty: _____

Date of Observation: _____

Time of Observation: _____ am/pm to _____ am/pm

A MINIMUM OF 2 HOURS IS REQUIRED**

Faculty Signature: _____

*****This form must be given to one of the course directors within six working days of completion.**

Objectives of the Observational Experience:

The student should be able to:

1. locate the pediatric dentistry clinic, identify the chair numbering system, and identify the pediatric dentistry staff members (four chairside dental assistants and one clinic manager).
2. identify non-pharmacological behavior management techniques appropriately used with cooperative and partially cooperative pediatric dental patients.
3. become familiar with the electronic chart of a pediatric dental patient including digital radiography techniques.
4. become familiar with the role of the dental assistants in the pediatric dentistry clinic.

DPD 830 Group Project Form

***Form & Project are due by April 9, 2008**

Student Names (Print):

We have chosen to work collaboratively on the Take-Home Project for DPD 830 and state that each of us has provided equal effort to complete this project and we have not worked with any other people.

Student Signatures:
