

- I. DH 209: PAIN CONTROL- Laboratory
- II. PREPARED BY: Lisa Kamibayashi R.D.H., M.S.D.H.
- III. REVISED FOR: Spring 2015
- IV. PREREQUISITES: COMPLETION OF ALL ATTEMPTED DENTAL HYGIENE COURSES WITH A FINAL GRADE OF "C" OR BETTER.
- V. UNITS AND HOURS: ONE UNIT, 54 hours Lab Hours/semester
WEDNESDAY 1:30 to 4:50 p.m.
(3 hours 5 minutes with 15 minutes break)
- VI. COURSE INSTRUCTORS: Eleanor Padnick, D.D.S., M.S.
Office Hours: Wednesday 4:50 p.m. – 5:20 p.m.
- Lisa Kamibayashi R.D.H., M.S.D.H.
Office Hours: Tuesday 10:00 to 12:00 p.m.
- Amanda De La Vega, R.D.H., B.S.
Office Hours: Wednesday 4:50 p.m. – 5:50 p.m.

VII. COURSE DESCRIPTION:

This course introduces the students to current methods of pain management and anxiety control in dentistry. Emphasis will be on the use of local anesthetics and nitrous oxide and oxygen through lectures and demonstrations.

VIII. REQUIRED TEXT:

LOGOTHETIS, D.D. Local Anesthesia for the dental hygienist, St. Louis, 2012, Mosby Co. Frist Edition. (ISBN # 978-0323-07371-4)

CLARK, Morrison S. and Brunick Ann L. Handbook of Nitrous Oxide and Oxygen Sedation St. Louis, 2008 Mosby Co. 3rd Edition (ISBN #9780323048279)

X. COURSE OBJECTIVES:

Institutional SLOs:

A. Critical Thinking: Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.

F. Technical Competence: Utilize the appropriate technology effectively for informational, academic, personal, and professional needs.

Program SLO #10: Provide and evaluate dental hygiene services, including preventive and pain management procedures, that are based on current scientific evidence for a variety of periodontal conditions of children, adolescents, adults, geriatrics and medically compromised patients from diverse populations.

Program SLO #11: Recognize and provide the appropriate care for medical emergencies that occurs in the dental setting.

Program SLO #12: Apply problem solving strategies and critical thinking to insure comprehensive oral health care for individuals, groups and communities.

Course SLOs:

- Demonstrate proper local anesthetic technique showing understanding of rationale, preparation and administration of injections.
- Verbally explain and demonstrate proper administration of nitrous oxide technique showing understanding of rationale, preparation and administration.

Course SLO	Criterion Level
1. Demonstrate proper local anesthetic technique showing understanding of rationale, preparation and administration of injections.	At least 80 of students must achieve minimum of 90% of the grading rubric components.
2. Verbally explain and demonstrate proper administration of nitrous oxide technique showing understanding of rationale, preparation and administration.	At least 80 of students must achieve minimum of 90% of the grading rubric components.

Course Objectives:

Upon completion of this course, the students will be able to:

1. Prepare the equipment necessary for the administration of local anesthesia in dentistry.
2. Demonstrate proper technique of assembling the syringe, the needle, the local anesthetic cartridge, and additional items of equipment.
3. Demonstrate all the following injection techniques with 100 % accuracy.
4. Explain proper tissue preparation, amount of solution, selection of needle size and length, post administration instruction, safe handling of syringe and needle, and post-operative instruction for all the following injection techniques.
 - a. Infiltration,
 - b. PSA,
 - c. MSA,
 - d. Infraorbital NB, (ASA NB)
 - e. Inferior Alveolar NB, Long Buccal NB, Lingual NB
 - f. Incisive NB, (Mental NB)
 - g. Gow Gates NB,
 - h. Greater palatine NB,
 - i. Nasopalatine NB
 - j. AMSA NB
5. Demonstrate proper technique of nitrous oxide – oxygen sedation.
6. Explain orally step by step procedures of the sedation techniques.

XI. METHODS OF INSTRUCTION:

Hands on Demonstration, Video Demonstrations, Discussions, Clinical Instruction

XII. METHODS OF EVALUATION:
DH 209-Spring 2015

Evaluation will be based upon your attainment of the knowledge of material presented in each lecture and Lab of the course, in the outline and textbook and the selected articles and pamphlets. While every effort will be made to cover the material as thoroughly and comprehensively as possible during lectures, students are responsible for attainment of all of the course objectives whether covered in labs/lectures or not. Students should read the appropriate section of your textbooks prior to the related lecture and laboratory topics, so that questions can be dealt with at the appropriate time.

Your final grade will be determined as follows:

Local anesthesia Laboratory Practice

Local anesthesia practical examination

Nitrous Oxide/Oxygen Sedation Practical Examination

Complete all injection practices

must achieve 90% or over

must achieve 90 % or over

In order to pass this course, a minimum grade of **90 %** is required in each examination.

Course grade will be based on **CREDIT – NO CREDIT basis**.

XIII. COURSE CONTENT OUTLINE

**DH 207 Pain Control and DH 209 Pain Control Lab
Schedule Spring Session 2015**

Things to bring to Lecture: One non sterile syringe with a needle capper and the Textbook.

Things to bring to Lab: **Two sterilized** syringes with needle cappers. Safety Glasses. Gown, Mask. & Textbook.

Weeks	DH 207: Lecture Topic Mrs. Kamibayashi Wednesday 12:00 to 1:05 p.m. (65 min)	DH 209: Lab Topic Dr. Padnick Mrs. De La Vega Mrs. Kamibayashi Wednesday 1:30 to 4:50 p.m. (3 hours 20 minutes)	Reading Assignment & Homework
1 2/11/15	Introduction of DH 207 & DH 209 Review of Course Requirements Introduction to Local Anesthesia Local Anesthesia - Neurophysiology	Prevention of needle stick Armamentarium Handling of syringe Basic injection technique Practice handling of syringe on peach. Practice set up cubicles, pretend syringe orientation on each other in clinic. Documentation Supraperiosteal Injection, MSA and Mental/Incisive injection techniques Medical Assessment Local Complications Systemic complications	Logothetis Chapter 1 (Intro) Chapter 2 (Neurophysiology) Chapter 9 (Armanmentarium), 10 (Anatomic Consideration), 11 (Basic Injection Technique) Logothetis Chapter 14 (Local Complications), Chapter 7 (Assessment) Page 227-230 (Max Supraperiosteal) Page 299 -300 (Mand Supraperiosteal) Page 289-295 (Mental/Incisive) Page 237 – 241 (MSA) *Bring a peach or nectarin, paper plates, napkins, sterile syringes, gloves, yellow cassette and textbook to the lab on 2/10/14.
2 2/18/15	Infraorbital, ASA	MSA, Supraperiosteal Injection, Incisive and mental on each other	HW Sheet: (IO, Mental, Incisive) Logothetis Page 241- 249 (ASA & IO), 261-265 (Common Maxillary Injection Errors)
3 2/25/15	Posterior Superior Alveolar (PSA)	Infraorbital and incisive/mental on each other	HW Sheet (PSA) Logothetis Page 231 – 237(PSA), 261- 265 (Common Maxillary Injection Errors)
4 3/4/15	Inferior Alveolar/Buccal	PSA and Infraorbital on each other	HW sheet (IA & Buccal) Logothetis Page 271 – 288 (IA & Buccal)
5 3/11/15	Gow Gates	IA/ Buccal and PSA on each other	HW Sheet (Gow Gates) Logothetis Page 295 – 299 (Gow Gates)

Weeks	DH 207: Lecture Topic Mrs. Kamibayashi Wednesday 12:00 to 1:05 p.m. (65 min)	DH 209: Lab Topic Dr. Padnick Mrs. De La Vega Mrs. Kamibayashi Wednesday 1:30 to 4:50 p.m. (3 hours 20 minutes)	Reading Assignment & Homework
6 3/18/15	AMSA/Greater Palatine/Naso Palatine	Gow Gates and IA each other	HW Sheet (AMSA, GP & Naso) Logothetis Page 249 – 261 (Maxillary Palatal Injections)
7 3/25/15	Case studies on the following topics: Legal Considerations Local anesthetic consideration in dental specialties Neurophysiology Pharmacology of Local Anesthetics Drug Doses Specific drugs Vasoconstrictors	GP/ Naso Palatine/AMSA	Logothetis Chapter 3 (Pharmacology) Chapter 4 (Vasoconstrictors) Chapter 5 (Local Anesthetic Agents) Chapter 6 (Topical Anesthetic) Chapter 8 (Drug Doses) Chapter 15 (Legal Considerations)
8 4/1/15	Comprehensive Injection Quiz	Practice for all injections for difficult side (Especially PSA, IO, IA & Gow)	
9 4/15/15	Review of Quiz, Review of written exam Clinical Tips of Local Anesthesia	Mock Exam on selected injection techniques. (Especially PSA, IO, IA & Gow)	
10 4/22/15	Comprehensive Written Exam (Multiple Choice Questions)	Anesthesia Practical Exam	Review Everything!!
11 4/29/15	Introduction to Nitrous Oxide/Oxygen Sedation and Demonstration	Nitrous oxide/oxygen sedation set up and armamentarium	Clark: Chapters 1-7
12 5/6/15	Anatomy, Physiology, and Administration of Nitrous Oxide Sedation	Practice nitrous oxide sedation techniques	Clark: Chapters 8-16
13 5/13/15	Issue of Special Consideration of Nitrous Oxide Sedation	Problem solving with equipment and sedation techniques	Clark: Chapters 17- 21
14 5/20/15	Nitrous Oxide Sedation Multiple choice/ written Exam	Nitrous Oxide Sedation Competency Exam	
15 5/27/15	Review of the course and any catch ups	Nitrous Oxide Sedation Competency Exam	
Final Week	Any Make Up Exam	Any Make Up Exam	

NOTE:

Students' partner assignment will be randomly assigned by the course instructors.

Students must wear clinic attire and clinic hygiene code must be followed.

Students must stay in the clinic for entire lab time in order to learn the materials from each other and other sources.