Course Number and Name: 7230/DH 4810 - Local Anesthesia and Nitrous Oxide/Conscious Sedation

Course Type (underline one): Lecture Laboratory Clinical Seminar Selective

Academic Year/Semester Offered: ___ Fall _X_ Spring Semester ___ Summer Session

Course Director (include degrees): Dr. David M. Grogan, DDS, MSD

Other Participating Faculty: N/A

Course Description:
The primary method of presentation is lecture with a detailed outline provided to each student to facilitate addition of lecture or textbook notes to supplement the outline. Students are given outside assignments to practice dose calculations for each local anesthetic and for a variety of patients including size and medical complications. The lecture material is supplemental with videotapes designed to show the correct administration techniques, the neural innervations of each area of the oral cavity and the area anesthetized.

Course Objectives:
At the completion of this course the student should be able to:
1. Discuss the historical development of local anesthesia and the modern implication of local anesthesia in dental practice.
2. Describe, define and demonstrate the armamentarium used in local anesthesia procedures.
3. Discuss and define the basic terminology used in dentistry to describe injection techniques and responses to local anesthetic injections.
4. Discuss and recognize the fundamental anatomy, physiology and pharmacology involved in the skillful implementation of local anesthetics.
5. Describe and discuss the foundational information necessary to becoming competent in the evaluation of the psychological and physical status of the patient before, during and after the administration of local anesthesia.
6. Develop an understanding for the need for adjustment of local anesthetic and vasoconstrictor doses for healthy and medically compromised patients.
7. Learn the foundational information necessary to develop competency in the prevention, recognition and initial management procedures to the adverse effects of local anesthetics or complications following local anesthetic administration.
8. Describe, discuss and recognize the fundamental techniques to develop competency required for the administration of both mandibular and maxillary local anesthetics.
9. Recognize and discuss local anesthetic failures and corrective measures.
10. Learn the foundational information necessary for the development of competency in the maintenance of proper records with accurate entries to reflect any medical, drug or complications associated with local anesthetic administration.

Related Competencies:
1.2 Provide humane and compassionate patient care for a diverse patient population.
2.1 Use oral, written and electronic information resources in contemporary practice as an aid for self-assessment and lifelong learning.
3.2 Advocate, plan and participate in institutional and community-based programs for improving, promoting and protecting oral health and expanding access to oral health services.
4.1 Obtain a diagnostic database including the patient’s chief complaint, the dental, medical and psychosocial histories.

4.2 Perform a physical intra-oral and extra-oral examination of the patient including assessment of vital signs, radiological examination and supporting diagnostic aids and laboratory tests.

5.2 Recognize the presence and oral manifestations of systemic disease and how the disease and its treatment affect the delivery of dental care.

6.1 Develop a comprehensive, properly sequenced treatment plan based on diagnostic data with alternative treatment options sensitive to patient priorities.

6.2 Communicate with other health care professionals to obtain additional information for evaluation and treatment.

6.3 Obtain and informed consent for dental treatment from the patient or responsible person.

7.1 Prevent, recognize, and manage dental and medical emergencies encountered in the practice of general dentistry.

**Evaluation Criteria/Methods:**
Student performance is evaluated by objective examination with an average score of 70 required for satisfactory achievement. Students are also required to complete the dose calculation chart.

**Attendance Policy:**
The course in local anesthesia is fundamental to the practice of dentistry. Dentists are expected to be highly competent in providing pain control for minor to complex procedures. Therefore, attendance in this course is mandatory. Excused absences will be verified and granted by the Course Director or Director of Student Affairs, in accordance with the College’s published attendance policy. It is your responsibility to convert unexcused absences into excused absences. **Important:** Any student who accumulates more than 2 unexcused absences in any single quarter, as determined by the Course Director, will receive one full grade deduction on their final grade for each unexcused absence over two. All assignments must be completed in order to receive a final course grade.

**Laboratory/Clinic Policies and Procedures:**
N/A

**Learning Materials:**
Patient evaluations are assisted with the use of Mosby’s Dental Drug Reference by Gage TW and Picket FA, 6th Ed.

**Remediation Policy:** None