

## Master Syllabus

### DEH 2503 - Pain Control in the Dental Practice

**Division:** Health Sciences

**Department:** Dental Health Sciences

**Credit Hour Total:** 1.0

**Lab Hrs:** 2.0

**Prerequisite(s):** DEH 2402AND DEH 2403

**Other Prerequisite(s):** Restricted to Majors

**Date Revised:** February 2014

---

#### Course Description:

Laboratory and clinical training in the administration of local anesthesia and nitrous oxide sedation.

#### General Education Outcomes:

- Critical Thinking/Problem Solving Competency

#### Course Outcomes:

##### Local Anesthetic Selection

Discuss the criteria involved in the selection of an appropriate anesthetic agent including a patient's medical history, the procedure to be performed and the desired duration of anesthesia.

**Assessment Method:** Simulations

**Performance Criteria:**

80% or higher achieved

##### Anesthesia Competencies

Demonstrate clinical competency for outcomes one, three and four and correctly and safely administer each of the required injections on human subjects.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% or higher

**Assessment Method:** Performance appraisals

**Performance Criteria:**

80% or higher achieved

##### Physiology and Perception of Pain

Describe the theory of pain and delineate the physiological and psychological aspects of pain sensation and its treatment.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% or higher

**Assessment Method:** Performance appraisals

**Performance Criteria:**

80% or higher

##### Infection Control

Identify and apply appropriate infection control standards in the preparation, delivery, disposal and sterilization of local anesthesia and nitrous oxide armamentaria and supplies.

**Assessment Method:** Locally developed exams

**Performance Criteria:**

70% or higher achieved

**Assessment Method:** Performance appraisals

**Performance Criteria:**

80% or higher achieved

##### Armamentarium and Protocol for Local Anesthetic Delivery

Assemble the armamentarium appropriate for local anesthetic delivery and demonstrate accepted techniques in local anesthetic administration.

**Assessment Method:** Performance appraisals

**Performance Criteria:**

80% or higher achieved

##### Nitrous Oxide Competency

Identify the various components of the nitrous oxide sedation unit and demonstrate the protocol for the induction, maintenance and discontinuation of nitrous oxide sedation on a human subject.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

75% or higher achieved

**Assessment Method:** Performance appraisals  
**Performance Criteria:**

80% or higher achieved

#### **Anatomical considerations for Local Anesthesia**

Outline the gross anatomy of the maxilla, mandible and closely associated structures and relate this information to the administration of local anesthesia in the oral cavity.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

70% or higher

**Assessment Method:** Performance appraisals  
**Performance Criteria:**

80% or higher

#### **Patient Evaluation**

Summarize the evaluation criteria for the local anesthetic candidate and address potential concerns revealed by physical evaluation and the medical history questionnaire.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

70% or higher

**Assessment Method:** Performance appraisals  
**Performance Criteria:**

80% or higher

#### **Etiology, Diagnosis and Management of Complication**

Delineate potential adverse local and systemic outcomes associated with the administration of local anesthetics and nitrous oxide and discuss the management of patients displaying complications and/or emergencies associated with these agents.

**Assessment Method:** Locally developed exams  
**Performance Criteria:**

70% or higher

**Assessment Method:** Performance appraisals  
**Performance Criteria:**

80% or higher

#### **Outline:**

Local Anesthesia and Nitrous Oxide Sedation Armamentaria

Anatomical Considerations of Local Anesthesia Delivery

Infection Control Modalities

Clinical Administration of Local Anesthetics and Nitrous Oxide