**Course Title:** Special Topics: Pain Control and Local Anesthesia for the Dental Hygienist  

**Department:** Allied Health  

**Curriculum:** Dental Hygiene  

**Course Code:** (eg. ACC 101)  

**Course Type:** D/X  

L: Lecture  
B: Lab  
U: Studio  
N: Internship  
P: Practicum  
D: Distance Learning  
I: Individual / Independent  

**Credit Hours:** 3  

**Developmental:** (yes/no) No  

Lecture: 30  

Lab:  

**Contact Hours:**  

Clinical: 15  

6:1 ratio  

TOTAL: 45  

**Class Maximum:** 18  

**Semesters Offered:** Su  

**Date of last update:** October 2005 (05-49)  

**Catalog Course Description:**  
This course presents the basic science and dental science foundations of clinical local anesthetics, in preparation for Connecticut State Certification for administration of local anesthesia by dental hygienists. Students will learn to perform safe, effective and proper techniques of intraoral pain control utilizing local anesthetic administration on student—client partner. Emphasis is placed on client evaluation for predicting and preventing complications. Prerequisites: Graduation from an ADA Accredited School of Dental Hygiene or Proof of graduation within 30 days and passing Dental Hygiene National Boards; Current certification in CPR for the Professional Rescuer/Health Care Provider and AED from the Red Cross or American Heart Association; Completion of home study prerequisites; Current license to practice dental hygiene and proof of malpractice insurance; Proof of Hepatitis B vaccination, TB antigen test within 1 year (PPD).  

**Course Objectives & Their Evaluation:**  
Safely and effectively administer intraoral infiltration, block and topical anesthesia on a student client for the purpose of pain-free dental hygiene services as specified by the Connecticut State Statutes. The evaluation of these skills will be through instructor generated online exams and clinical competency assessments.  

**Specific Outcomes:**  
The student will be able to complete the following outcomes to at least 80% competency in both Didactic and Clinical by the end of the course:

**Prerequisites:**  
- Graduation from an ADA Accredited School of Dental Hygiene or Proof of graduation within 30 days and passing Dental Hygiene National Boards  
- Current certification in CPR for the Professional Rescuer/Health Care Provider and AED from the Red Cross or American Heart Association  
- Completion of home study prerequisites  
- Current license to practice dental hygiene and proof of malpractice insurance  
- Proof of Hepatitis B vaccination, TB antigen test within 1 year (PPD).  

**Corequisites:**  

**Other Requirements:**  
Each student must serve as a client for another student. Student must purchase and read text prior to the beginning of the course. Student must be proficient with online format for the didactic component of the curriculum. Attendance at all sessions is mandatory. Students must complete online and pass with 80% in order to continue into clinical sessions.
### Course Syllabus — page 2

**Topical Outline:**

1. Anatomical considerations for dental local anesthesia
2. Neuroanatomy
3. Physiology of pain
4. Neurophysiology
5. Pharmacology of pain control utilizing local anesthetics and vasoconstrictors
6. Pharmacological agents used for local anesthesia
7. Armamentarium for local injections
8. Infection Control and proper disposal of needles
9. Prevention, recognition and management of complications of local anesthetics in the dental setting
10. Client evaluation for administration of anesthetics
11. Legal management of complications
12. Basic injection techniques for mandibular block
13. Basic injection techniques for infiltration anesthesia
14. Current topical anesthesia techniques
15. Post operative instructions, record keeping and risk management
16. Connecticut State laws, rules and regulation of local dental anesthesia for the dental hygienist
17. Ethical considerations for administration of local anesthesia
18. Clinical student client experience in mandibular block and maxillary/mandibular infiltration injections

**Suggested Instructional Materials**


Online (VISTA) capabilities for didactic portion of the curriculum.
<table>
<thead>
<tr>
<th>Resources, Equipment, &amp; Special Facilities Required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>dental clinic units UCHC contract</td>
</tr>
<tr>
<td>syringes, needles, carpules, hemostats, recapping device UCHC contract</td>
</tr>
<tr>
<td>6:1 ratio for clinical setting</td>
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