

# COURSE SYLLABUS

<b>Course Title:</b>	Pain Control and Local Anesthesia for the Dental Hygienist	<b>Date submitted:</b>	March 2022 (AAC: 22-13)	
<b>Department:</b>	Biology, Chemistry, Allied Health			
<b>Curriculum:</b>	Dental Hygiene			
<b>Course Descriptors:</b> Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	<b>Course Code:</b> (eg. ACC 101)	DHY*275		
	<b>Course Type:</b>	Y & D		
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: M: Seminar Internship P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/ Clinical/Lab Z: Combined Lecture/Studio			
	<b>Elective Type:</b>	G		
	E: English FA: Fine Arts G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences FL: Foreign Language M: Math S: Science SS: Social Science			
	<b>Credit Hours:</b>	3		
	<b>Developmental:</b> (yes/no)	No		
	<b>Contact Hours:</b>	Lecture:	2	
		Clinical:	1	
		Lab:	0	
		Studio	0	
		Other:	0	
TOTAL:		3		
<b>Class Maximum:</b>	24			
<b>Semesters Offered:</b>	S			
<b>Prerequisites:</b>				
Matriculating 2 <sup>nd</sup> year dental hygiene student				
<b>Corequisites:</b>				
Matriculating 2 <sup>nd</sup> year DH Student				
<b>Other Requirements:</b>				
Each student <b>must</b> serve as a client for another student. Attendance at all clinical sessions is mandatory. Total contact hours: 30 lecture and 16 clinic. Student to faculty ratio is 5:1. <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <b>Students must complete online and pass with 80% in order to continue into clinical sessions</b>				
<b>Catalog Course Description:</b>	Presents the basic science and dental science foundations of clinical local anesthesia 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 a student partner. Emphasis is placed on client evaluation for predicting and preventing complications.			
<b>Topical Outline:</b> List course content in outline format.	<ol style="list-style-type: none"> <li>1. Anatomical considerations for dental local anesthesia</li> <li>2. Neuroanatomy</li> <li>3. Physiology of pain</li> <li>4. Neurophysiology</li> </ol>			

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	<ol style="list-style-type: none"> <li>5. Pharmacology of pain control utilizing local anesthetics and vasoconstrictors</li> <li>6. Pharmacological agents used for local anesthesia</li> <li>7. Armamentarium for local injections</li> <li>8. Infection Control and proper disposal of needles</li> <li>9. Prevention, recognition and management of complications of local anesthetics in the dental setting</li> <li>10. Client evaluation for administration of anesthetics</li> <li>11. Legal management of complications</li> <li>12. Basic injection techniques for mandibular block</li> <li>13. Basic injection techniques for infiltration anesthesia</li> <li>14. Current topical anesthesia techniques</li> <li>15. Postoperative instructions, record keeping and risk management</li> <li>16. Connecticut State laws, rules and regulation of local dental anesthesia for the dental hygienist</li> <li>17. Ethical considerations for administration of local anesthesia</li> <li>18. Clinical student client experience in mandibular block and maxillary/ mandibular infiltration injections</li> </ol>
<p><b>Outcomes:</b> Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>Upon successful completion of this course, the student will be able to do the following:</p> <ol style="list-style-type: none"> <li>1. identify anatomical landmarks important to the safe and effective administration of intraoral local anesthetic</li> <li>2. utilize the concepts of the physiology of pain to reduce or eliminate pain</li> <li>3. identify the tissues innervated by each of the sensory nerves serving the oral cavity</li> <li>4. describe the physiology of the peripheral nervous system and the effects of local anesthesia on neurotransmission</li> <li>5. describe the pharmacology of local anesthetic and vasoconstrictor solutions and apply this knowledge to the clinical administration of local anesthetics</li> <li>6. compare, describe and evaluate various agents used intraorally for local anesthesia</li> <li>7. describe and evaluate various agents used in the management of dental pain during treatment</li> <li>8. assemble, describe, evaluate, maintain and utilize the armamentaria for intraoral local anesthesia infiltration and block</li> <li>9. maintain infection control and properly dispose of sharps</li> <li>10. perform preoperative evaluation of a client for indications, contraindications, or modifications to the use of pain control in the administration of local dental anesthetics</li> <li>11. list potential complications associated with local anesthesia, steps to reduce such complications and management protocols for complications</li> <li>12. describe the legal management of complications for local dental anesthesia</li> <li>13. list the steps in basic infiltration and mandibular block local anesthetic injection technique and describe the rationale for each</li> </ol> <p><b>PROGRAM:</b> <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i></p>
<p><b>Evaluation:</b> List how the above outcomes will be assessed.</p>	<p><b>Assessment will be based on the following criteria:</b></p> <p>Quizzes Exam Homework Clinical Evaluation</p>

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<p><b>Instructional Resources:</b></p> <p>List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities) required and desired to teach this course.</p>	<p><b>Required: [No special facilities are required. Or list what is required.]</b></p> <p>12 dental clinic units</p> <p>Syringes</p> <p>Needles</p> <p>Cartridges</p> <p>Hemostats</p> <p>Recapping device</p> <p>Sharps container</p> <p>Emergency drug kit</p> <p>Course management system</p> <p><b>Desired:</b></p>
<p><b>Textbook(s)</b></p>	<p>Handbook of Local Anesthesia, Stanley F. Malamed, 6<sup>th</sup> (or latest edition).</p>