Greetings Local Anesthesia Course Participant! We would like to take this opportunity to welcome you to “Local Anesthesia - For Dental Hygienists in the State of Connecticut”. It is an exciting time for our profession and we look forward to meeting you.

We are excited for you! You will learn more than just how to administer local anesthesia. You will learn (relearn) oral anatomy and physiology, pharmacology, medical assessment and client management related to pain management. As a class you will get to know each other well and will likely stay in touch after the course. In our previous LA courses participants have commented on how "nervous" they were to be back in a classroom atmosphere; relearn oral anatomy and be "tested". We recognize your feelings, so please feel comfortable with your decision to take this course; we look forward to working with you.

You will prepare for the on-site portion of the course by reading the Handbook of Local Anesthesia textbook. The book has a complementary DVD, however, there is no need to purchase the DVD. Selected videos will be presented during the on campus course. As you read the textbook, please note that there is no need to stress about memorizing the detailed information. Read for general content as the course topics will be presented in the classroom setting and you will receive a detailed course manual. You will not be learning all the injections in the textbook- only the injections necessary for treatment of your dental hygiene patient (PSA, MSA, ASA, LB, IA and Mental/Incisive). In addition to the textbook, read the supplemental journal articles noted in this document.

Our evaluation system leaves room for remediation, so relax about test taking. For the onsite portion - clinic setting you are asked to group in teams of 2 or 3. Each one in the team will be well prepared and comfortable with injection skills prior to actual insertion. Please go to the Course Documents area of this document to view details.

For those participants that need CPR certification or update course here is a link to Professional Learning Services http://www.pls.org/

Please submit upload copies of your license, CPR card, malpractice insurance and hepatitis B documentation at least one week before start of course to the registration website.

You will see the course schedule noted in this document.

Lastly, we are excited about the feeling you will have as you complete your first injection. You will be proud of your new knowledge and skills and the decision to advance your education and efforts to improve the quality of care of your patients. See you soon! Laura and Wendy
# LOCAL ANESTHESIA COURSE for THE DENTAL HYGIENIST

<table>
<thead>
<tr>
<th><strong>Course Coordinator:</strong></th>
<th><strong>Course Location:</strong></th>
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<tbody>
<tr>
<td>Laura J. Greco, RDH, MSEd</td>
<td>Fones School of Dental Hygiene</td>
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<tr>
<td>University of Bridgeport</td>
<td>University of Bridgeport</td>
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<tr>
<td>Fones School of Dental Hygiene</td>
<td>Health Science Center 4th and 5th floors</td>
</tr>
<tr>
<td>60 Lafayette Street</td>
<td>60 Lafayette Street</td>
</tr>
<tr>
<td>Bridgeport, CT 06604</td>
<td>Bridgeport, Connecticut 06604</td>
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<tr>
<td>Phone: 203/567-4138</td>
<td>Email: <a href="mailto:laurag@bridgeport.edu">laurag@bridgeport.edu</a></td>
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<tr>
<th><strong>Course Presenters</strong></th>
<th><strong>Clinical Instructors:</strong></th>
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<tbody>
<tr>
<td><strong>Laura J. Greco, RDH, MSEd</strong>, is an Associate Professor at the Fones School of Dental Hygiene, University of Bridgeport. Ms. Greco is the Director of Clinical Education at Fones School and has extensive experience as educator and clinician. Her lecture experience includes Periodontology, Clinical Practice, Advanced Clinical Concepts, and Medically Compromised Patients. Currently, Laura is the course coordinator and can be reached at <a href="mailto:laurag@bridgeport.edu">laurag@bridgeport.edu</a>.</td>
<td>Laura J. Greco, RDH, MSEd</td>
</tr>
<tr>
<td><strong>Wendy M. Garcia, RDH, MSEd, EdD</strong>, is an Associate Professor at the Fones School of Dental Hygiene, University of Bridgeport. Dr. Garcia is the BS and MS Degree Online Coordinator at Fones School and has extensive experience in private practice dental hygiene. Her lecture experience includes Pharmacology, Oral Embryology, Anatomy, Histology, Community Health, Leadership, Integrative Care and Evidence-Based Research. In addition, Wendy is past President of the Connecticut Dental Hygienists’ Association.</td>
<td>Wendy M. Garcia, RDH, MSEd, EdD</td>
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<tr>
<td></td>
<td>Fones Clinical Faculty</td>
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<thead>
<tr>
<th><strong>Clinical Dentist:</strong></th>
<th><strong>Clinical Ratio:</strong></th>
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</thead>
<tbody>
<tr>
<td>Dr. Jennifer Boyce</td>
<td>1 faculty to 5-student ratio</td>
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<tr>
<th><strong>Course Schedule and Hours:</strong></th>
<th><strong>Contact Hours:</strong></th>
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<tbody>
<tr>
<td>Day 1, Friday: 8:00 am to 5:00 pm</td>
<td>Didactic: 20 hours</td>
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<tr>
<td>Day 2, Saturday: 8:00 am to 5:00 pm</td>
<td>(8 self-study, 12 classroom)</td>
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<tr>
<td>Day 3, Sunday: 8:00 am to 12 pm</td>
<td>Clinical: 8 hours</td>
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LOCAL ANESTHESIA COURSE for THE DENTAL HYGIENIST

Academic and Clinical Policies

• Participants will be expected to follow infection control procedures while in the clinical setting as well as academic integrity, mandatory attendance, and professionalism.

• Participants will be required to participate as a clinical patient. If you are medically compromised or unwilling to participate, the course coordinator will need to be advised.

• Participants are expected to attend all sessions. Tardiness will not be accepted. Failure to attend complete sessions will result in the Coordinator’s decision to deny credit for the course.

• Failure to successfully complete all course requirements and competencies voids certification and refund. There is no credit for partial completion of course.

• Participants are expected to have completed course pre-requisites prior to the start of onsite course.

• This comprehensive course will cover the basic concepts of local anesthesia for the dental hygienist in the State of Connecticut. Upon completion of this course the participant will receive a Certification of Local Anesthesia acceptable in the State of Connecticut.

Course Description

This course is designed to prepare the dental hygienist for certification in local anesthesia. The participant will be introduced to safe, effective administration of local anesthesia through lecture, laboratory and clinical settings. The comprehensive content areas will include rational for pain management, client management, medical emergencies and review of essential anatomy, physiology, and pharmacology of pain control agents. In addition, the participant will perform efficient techniques of pain management through local anesthesia on clinical partners under the direct supervision of clinical faculty.

This course meets guidelines for the State of Connecticut including 20 hours of didactic study and 8 clinical hours under the direct supervision of clinical faculty. In addition, the participant will successfully complete a local anesthesia written examination, laboratory and clinical evaluations on the administration of dental local anesthesia: PSA, MSA, ASA, Mental/Incisive and Long Buccal infiltration and IA nerve block. Fones degree programs in Dental Hygiene are licensed and accredited by the State of Connecticut Department of Higher Education, the New England Association of Schools and Colleges, and the Commission on Dental Accreditation of the American Dental Association.
LOCAL ANESTHESIA COURSE for THE DENTAL HYGIENIST

Course Competencies

The participant will be able to:

- Define state regulations and discuss legal issues regarding the administration of local anesthesia
- Recognize the need for local anesthesia and understand its limitations
- Identify the anatomical landmarks associated with the safe and effective administration of local anesthesia
- Describe the physiological mechanism of nerve conduction, origin of pain and how local anesthetic agents prevent impulse transmission.
- Describe the pharmacology of commonly used anesthetic agents and vasoconstrictors
- Prepare resource material to use as a guide while in a clinical setting
- Review and evaluate the client’s medical history, vital signs and assess for appropriate pain control
- Prepare and then demonstrate the correct use of local anesthesia armamentarium
- Describe and perform safe and proficient techniques in administration of local anesthesia for all areas of the dentition
- Identify which nerve, teeth and soft tissue structures are anesthetized with each specific injection
- Identify and describe common complications and reactions, both local and systemic encountered in conjunction with administration of local anesthesia
- Assess and demonstrate protocol to manage such complications involving both the operator and the client
- Describe correct post-operative instructions for the local anesthesia procedure performed
- Document appropriate records describing pain control treatment for the client
- Assess varied case studies involving the administration of local anesthesia

Course Pre-requisites/Resource Materials

- Current CPR Certification for the Healthcare Provider
- Proof of Hepatitis B Vaccine
- Purchase Handbook of Local Anesthesia, 6th edition, by Stanley Malamed, Elsevier Mosby, 2012. You are not required to purchase the DVD.
- Read Handbook of Local Anesthesia textbook to complete self-study portion of course (8 hour/didactic) and supplemental articles prior to the start of the class.
Clinical Procedures and Required Supplies

- Participants are to group in 2 or 3’s (rotating as operator, patient, and assistant)
- Index Card Activity completed and ready to use as resource
- Please keep same partners and clinic unit each day
- Follow guidelines as noted in the armamentarium section of the manual
- Clinical Instructor will evaluate performance and complete competency evaluation form
- Clinic Attire Required for Day 2 and 3: Scrubs (suggested) flat/closed toed shoes, and Personal Protective Equipment (available or you may choose to bring your own)- safety glasses lab coat, gloves and masks available
- Blood pressure cuff and stethoscope (bring own or will be available)

Competency Assessment Overview

Knowledge:

1. Self-study – reading of textbook and supplemental articles prior to onsite coursework
2. Pre-test: Day 2, Pass with grade of 74 or higher; multiple choice questions, before clinical applications allowed
3. Case Studies Assignment and Index Card Activity (during onsite course)

Skills:

1. Successful completion (grade 74) of Laboratory Proficiencies  Pass/Fail skill evaluation
2. Successful completion (grade 74) of Clinical Proficiencies  Pass/Fail skill evaluation

Attitude and Values:

1. Attendance: Required for entire duration of course
2. Value information by demonstrating the importance of a safe environment during laboratory and clinical experiences
3. Maintain professional behavior during course
LOCAL ANESTHESIA COURSE for THE DENTAL HYGIENIST

Course Schedule

Didactic Self Study: 8 hours – Pre-requisites must be completed prior to start of onsite course: Read Textbook and assigned articles.

Day 1- Friday, 8:00am – 5:00pm

Didactic: 8:00am – 12:00pm, 4 hours
- Introduction to Local Anesthesia
- Anatomy, Neurophysiology, Pharmacology of Local Anesthetics, Pain Management
- Medical History, Emergency Protocol, Legal Considerations

12:00pm- 1:00pm Lunch- provided

Didactic and Activity: 1:00pm – 3:00pm, 2 hours
- Techniques of Regional Anesthesia Techniques of Maxillary Anesthesia
- Index Card Activity

Laboratory Demonstration: 3:00pm-5:00pm, 2 hours
- Medical History Review, Vitals, Armamentarium, Documentation
  o may wear clinical attire- working with disclosing solution

Day 2- Saturday, 8:00am – 5:00pm

Clinical Attire:

Didactic: 8:00am-10:00am, 2 hours
- Techniques of Mandibular Anesthesia
- Index Card Activity

Assessment: 10:00am-12:00pm, 2 hours
- Pre-test, Case Study Evaluation, and Class Review and Discussion

12:00pm- 1:00pm Lunch- provided

Clinic: 1:00pm - 5:00pm, 4 hours
- Maxillary Injections: PSA, MSA, ASA, GP & NP

Day 3- Sunday, 8:00am – 12:00pm

Clinical Attire:

Clinic: 8:00am-12:00pm, 4 hours
- Mandibular Injections: IA, LB & Incisive/mental
- Course Evaluation and Conclusion
Journal articles related to Local Anesthesia

Read as a supplement to the textbook reading assignment.


Textbook Information: Handbook of Local Anesthesia, 6th Edition

Note: you do not need to purchase the DVD package, just the textbook

By Stanley F. Malamed, DDS


A practical, "how-to" guide to safe anesthesia practices in dentistry, Handbook of Local Anesthesia, 6th Edition covers all the latest advances in science, instrumentation, and pain control techniques. From basic concepts to specific injection techniques, from dosage charts to the proper care and handling of equipment, this book provides in-depth, full-color coverage of key anesthesia topics, including specific hazards and errors in technique that may result in complications. Written by Dr. Stanley Malamed, the leading expert on anesthesia in dentistry, this manual will help students learn to prevent, recognize, and manage complications of local anesthesia administration.

Purchase from an online vendor and read textbook prior to on campus course- as self-study prerequisite.

Local Anesthesia and Connecticut State Licensing Information Area

This course is designed to prepare the dental hygienist in the State of Connecticut to administer local anesthesia. The following scope of practice information is from the CT Department of Public Health. Fones School of Dental Hygiene will provide documentation needed for another state's licensure process as requested, however, it is your responsibility to investigate the portability of this course to another state's licensing board.

“An Act Concerning Access to Oral Health Care”, Effective October 1, 2005

Sec. 7.section 20-126l

(d) A licensed dental hygienist may administer local anesthesia, limited to infiltration and mandibular blocks, under the indirect supervision of a licensed dentist, provided the dental hygienist can demonstrate successful completion of a course of instruction containing basic and current concepts of local anesthesia and pain control in a program accredited by the Commission on Dental Accreditation, or its successor organization, that includes:

(1) Twenty hours of didactic training, including, but not limited to, the psychology of pain management; a review of anatomy, physiology, pharmacology of anesthetic agents, emergency precautions and management, and client management; instruction of the safe and effective administration of anesthetic agents; and (2) eight hours of clinical training which includes the direct observation for the performance of procedures.

For the purposes of this subsection, "indirect supervision" means a licensed dentist authorizes and prescribes the use of local anesthesia for a patient and remains in the dental office or other location where the services are being performed by the dental hygienist.

LOCAL ANESTHESIA COURSE for THE DENTAL HYGIENIST

Blood Pressure Technique Review

If you need review of taking blood pressure, please go to the following websites to see information and view teaching video from the Aberdeen Medical faculty. This video represents one way to take BP. We will be reviewing the taking of blood pressure process in our laboratory portion of the course with manual and digital equipment. Please practice technique you are most comfortable with prior to the course.

http://www.abdn.ac.uk/medical/bhs/index.htm = information
http://www.abdn.ac.uk/medical/bhs/video/tutorial/bpmeas.mpg = Video

Index Card Activity

Note you do not need to complete the Index Card Activity prior to the onsite portion of the course; you will have ample time during the course. However, some participants may choose to view the injections that will be performed and start the activity early. Please note: Leave the depth of Penetration on your index card blank. The depth of penetration of some of the infiltration injections presented during the course will vary from the textbook information. The injections you will learn are focused on the need for dental hygiene pain management rather than dental procedure pain management. During the course you will be able to note on your index cards the preferred depth of penetration.

Index Card Activity: Use the following guide to make reference index cards. Each injection will have its own card. 8 cards are to be made and presented to your clinical instructor during the local anesthesia clinical portion of the course. You may “cut and paste” portions of this document, add information and print.

Maxillary Injections

PSA (Posterior Superior Alveolar)

- Nerve Anesthetized:
- Operator positioning:
- Patient positioning:
- Syringe positioning:
- Landmarks:
- Depth of penetration:
- Length of dispense:
- VRS:
- Other:
MSA (Middle Superior Alveolar)
- Nerve Anesthetized:
- Operator positioning:
- Patient positioning:
- Syringe positioning:
- Landmarks:
- Depth of penetration:
- Length of dispense:
- VRS:
- Other:

ASA (Anterior Superior Alveolar)
- Nerve Anesthetized:
- Operator positioning:
- Patient positioning:
- Syringe positioning:
- Landmarks:
- Depth of penetration:
- Length of dispense:
- VRS:
- Other:

GP (Greater Palatine)
- Nerve Anesthetized:
- Operator positioning:
- Patient positioning:
- Syringe positioning:
- Landmarks:
- Depth of penetration:
- Length of dispense:
- VRS:
- Other:

NP (Nasopalatine)
- Nerve Anesthetized:
- Operator positioning:
- Patient positioning:
Mandibular Injections

IA (Inferior Alveolar Nerve Block)

- **Nerve Anesthetized:**
- **Operator positioning:**
- **Patient positioning:**
- **Syringe positioning:**
- **Landmarks:**
- **Depth of penetration:**
- **Length of dispense:**
- **VRS:**
- **Other:**

Buccal Nerve Block

- **Nerve Anesthetized:**
- **Operator positioning:**
- **Patient positioning:**
- **Syringe positioning:**
- **Landmarks:**
- **Depth of penetration:**
- **Length of dispense:**
- **VRS:**
- **Other:**

Incisive Nerve Block

- **Nerve Anesthetized:**
- **Operator positioning:**
- **Patient positioning:**
- **Syringe positioning:**
- **Landmarks:**
Hotels in the Bridgeport Area

Trumbull Marriott Merritt Parkway

180 Hawley Lane
Trumbull, CT
203 378-1400
(8 - 10 Min.)

Holiday Inn of Bridgeport

1070 Main Street
Bridgeport, CT
203 334-1234
(5 Min.)