

Common Course Outline
DNHY 130
Dental Hygiene Pain Management
1 Credit

The Community College of Baltimore County

Description

DNHY 130 – 1 Credit – Dental Hygiene Pain Management examines the application of various physical, chemical and psychological modalities to increase client comfort and control pain when providing dental hygiene therapeutic services. Emphasis is placed on dental hygiene administration of local dental anesthetics.

1 credit; 4 clinical hours per week

Co-requisites: DNHY 131

Overall Course Objectives

Upon completion of this course the student will be able to:

1. describe the physiology of the peripheral nervous system and the effects of local anesthesia on neurotransmission;
2. describe the pharmacology of local anesthetic and vasoconstrictor solutions, and apply this knowledge clinically;
3. identify the types of pain control available to the clients;
4. perform preoperative evaluation of a client, deriving indications or contraindications to local anesthetic use and predicting potential complications;
5. list potential complications associated with local anesthesia use;
6. describe in detail the equipment used in dental local anesthesia and the purpose of each component;
7. identify the tissues innervated by each of the sensory nerves serving the oral cavity;
8. develop a plan for anesthetizing any region of the oral cavity for a dental hygiene procedure;
9. properly apply a topical anesthetic;
10. anesthetize areas of the oral cavity using the correct technique;
11. critically evaluate reported advances and research on local anesthetic agents and techniques;
12. develop an approach to helping clients cope with pain that may accompany dental hygiene treatment;
13. explain the relevance of behavioral management and topical or local anesthesia to the dental hygiene practice;
14. demonstrate the ability to handle medical emergencies associated with the administration of local anesthesia; and

15. practice in accordance with the Maryland State Board of Dental Examination rules and regulations governing the administration of local anesthesia.

Major Topics

- I. Local Anesthesia in Dental Hygiene Practice
- II. Neurophysiology
- III. Pharmacology of Local Anesthetic Agents
- IV. Pharmacology of Vasoconstrictors
- V. Local Anesthetic Agents
- VI. Topical Anesthetic Agents
- VII. Patient Assessment
- VIII. Local Anesthetic Techniques
 - a. Armamentarium/Syringe Preparation
 - b. Anatomic Considerations
 - c. Basic Injection Techniques
 - d. Maxillary Nerve Anesthesia
 - e. Mandibular Nerve Anesthesia
- IX. Complications, Legal Considerations and Risk Management

Course Requirements

Grading procedures will be determined by the individual faculty member but will include the following:

Grading/exams: successfully complete a minimum of eight clinical competency assessments and one final examination.

Writing: Students are required to utilize appropriate academic resources.

Other Course Information

This course is a required course in the dental hygiene degree program. This course is a clinical course. A grade of "C" or better is required for all dental hygiene courses in order to progress within the program.