# ADED246C: Pain Management for the Dental Hygienist II

This course is designed to provide didactic and lab instruction in nitrous oxide/oxygen analgesia in accordance with American Dental Association Guidelines. The dental hygiene student will acquire comprehensive knowledge and skills necessary to safely and effectively administer nitrous oxide and oxygen sedation with local anesthesia injections. On completion of this course and graduation from the Dental Hygiene program, students will have completed the educational requirements for nitrous oxide administration and monitoring for certification by the state of N.H. All students enrolled in this course will be charged a pain management supplies fee.

#### Credits 1

Lab/Practicum/Clinical Hours 4

**Lecture Hours** 0

### **Prerequisites**

Students are required to pass prerequisite courses with a grade of C or higher. Exceptions apply; please consult your department chair.

ADED212C

ADFD244C

## **Corequisite Courses**

ADED221C

ADED225C

ADED227C

ADED243C

**Learning Outcomes** 

### Student Learning Outcomes

- 1. Explain the physiological and psychological aspects of fear and anxiety.
- 2. Formulate concepts and methods to help in the management of pain, anxiety and fear in a variety of dental settings.
- 3. Describe the states of consciousness and the levels of anesthesia.
- 4. Evaluate the patient's medical history and physical status to determine the armamentarium, treatment modifications and potential for emergency situations in the administration of local anesthesia and nitrous oxide and oxygen sedation.
- 5. Summarize the pharmacokinetic and pharmacodynamics of nitrous oxide on the human body.
- 6. Identify the advantages/disadvantages and indications/contraindication of nitrous oxide and oxygen sedation.
- 7. Summarize the importance of anatomy and physiology of the respiratory, circulatory, and central nervous systems in nitrous oxide and oxygen sedation.
- 8. Explain effects and sensations the patient is likely to experience as well as providing verbal and non-verbal reassurance during the nitrous oxide and oxygen sedation and the injection process.
- 9. Accurately document information regarding local anesthesia and nitrous oxide and oxygen sedation in the patient's record.
- 10. Proficiently demonstrate effective techniques for administration and monitoring for signs and symptoms of nitrous oxide and oxygen sedation.
- 11. Summarize potential biohazards associated with chronic exposure to nitrous oxide.
- 12. Demonstrate knowledge of nitrous oxide abuse, and the psychological effects of nitrous oxide abuse.
- 13. Demonstrate knowledge of the management and complications related to nitrous oxide and oxygen sedation.
- 14. Demonstrate the proper maintenance of N2O-O2 equipment to include infection control procedures, common malfunction, required maintenance, appropriate correction, precautions for safe use.
- 15. Demonstrate the steps in the administration and monitoring N2O-O2 sedation including: a) patient assessment, indications, contraindications, and potential adverse reaction, b) preparation, care planning and consent, c) observation and monitoring for response to signs and symptoms, d) recovery period, e) recording accurate percentage of N2O and additional documentation, and f) recovery period.
- 16. Discuss national and state laws and statues in the legal and ethical of practice administrating and monitoring of N20-02 sedation.

1 NHTI Catalog