

**J. Sargeant Reynolds Community College
Course Content Summary**

Course Prefix and Number: DNA 119

Credits: 1

Course Title: Dental Therapeutics

Course Description: Exposes students to concepts and terminology related to pharmacology, pain control, and dental medicinal agents. Emphasizes use of materials in patient treatment. Prerequisites: DNA 100, DNA109, DNA 103, DNA 108, DNA 113, and DNA 120. Lecture 1 hour per week.

General Course Purpose: DNA 119 will prepare the student with the terminology and procedures concerning anesthesia, medications, and syringe preparation.

Course Prerequisites and Co-requisites:

Prerequisites: DNA 100, DNA109, DNA 103, DNA 108, DNA 113, and DNA 120

Student Learning Outcomes:

Upon completing the course, the student will be able to

- a. Define pharmacology;
- b. Define its importance in dentistry;
- c. Describe the difference between brand name drugs and generic names;
- d. List methods of drug administration;
- e. Describe methods of determining drug dosages;
- f. Discuss nitrous oxide/oxygen administration;
- g. Discuss IV drug sedation;
- h. Discuss general anesthesia;
- i. Describe the chemical make-up of topical and local anesthetics;
- j. Demonstrate the application of topical anesthetics;
- k. Demonstrate the preparation of anesthetic syringes, application, and disposal;
- l. Describe the parts of a prescription and the legal aspects of prescription writing;
- m. Identify the different medical emergencies that could occur in dental offices; and
- n. Demonstrate taking and recording blood pressure and pulse.

Major Topics to Be Included:

- a. Introduction to pharmacology
- b. Types of drugs and what they are used for
- c. Stages of anesthesia
- d. IV sedation
- e. General anesthesia
- f. Pain control in dentistry
- g. Local anesthetic agents
- h. Application of topical anesthetics
- i. Local anesthetic duration
- j. Maxillary and mandibular local anesthesia
- k. Assembling armamentarium and assisting with local anesthetic administration
- l. Medical emergencies in the dental office

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