

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

Course Prefix and Number: DNA 119

Credits: 1

Course Title: Dental Therapeutics

Course Description (including lecture hours, lab hours, total contacts)

Exposes students to concepts and terminology related to pharmacology, pain control, and dental medicinal agents. Emphasizes use of materials in patient treatment. 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/Corequisites

Prerequisites: DNA 100 and DNA109; Corequisites: DNA 110 and DNA 140

Course Objectives

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
- 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

Effective Date of Course Content Summary (Month, Date Year): February 12, 2009