

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

Course Prefix and Number: DNA 108

Credits: 3

Course Title: Dental Science

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

Studies head and neck anatomy, tooth morphology, pathological conditions of the oral cavity, disease processes, and microbiology. Lecture 2 hours. Laboratory 3 hours. Total 5 hours per week.

General Course Purpose

DNA 108 introduces the student to the names, terminology, and structures of the oral cavity so they can apply this knowledge to future courses. Students will receive information on pathological conditions and associated terminology as well as microbiology and diseases.

Course Prerequisites/Corequisites:

Prerequisite: Completion of Pre-Dental Assisting Career Studies Certificate,
Prerequisite or corequisite: DNA 100, DNA 103

Course Objectives

Upon completing the course, the student will be able to:

- a. Identify the four levels of organization in the human body
- b. Identify the two body cavities and describe their purpose
- c. Identify the various imaginary planes that divide the body into sections
- d. Name and describe the functions of the body systems
- e. Describe the various types of muscle tissue
- f. Describe and explain the functions of each type of body tissue
- g. Locate the various regions on the head
- h. Identify the bones of the head
- i. Identify the parts of the temporomandibular joint
- j. Identify the muscles of facial expression
- k. Identify the muscles of the floor of the mouth
- l. Identify the blood vessels of the face and mouth
- m. Identify the nerves of the head
- n. Identify the cranial nerves
- o. Identify and locate the paranasal sinuses

Major Topics to be Included:

- a. Anatomic reference systems
- b. Body systems, structural units
- c. The digestive system
- d. The nervous system
- e. The cardiovascular system
- f. The Lymphatic system
- g. The muscular system
- h. The skeletal system
- i. The endocrine system

- j. The respiratory system
- k. The urinary system
- l. The integumentary system
- m. The reproductive system
- n. The body cavities
- o. Head and neck anatomy
- p. Bones of the skull
- q. Cranial bones
- r. Facial bones
- s. The mandible, Temporomandibular Joint
- t. Head and neck muscles
- u. Blood supply of the face and mouth
- v. The cranial nerves
- w. Innervation of the oral cavity
- x. The paranasal sinuses
- y. Embryology and histology
- z. Tooth eruption, tooth exfoliation, tooth developmental disturbances

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