

J. Sargeant Reynolds Community College
Course Content Summary

Course Prefix and Number: DNA 108

Credits: 3

Course Title: Dental Science

Course Description: Studies head and neck anatomy, tooth morphology, pathological conditions of the oral cavity, disease processes, and microbiology. Prerequisite: Completion of courses in the Pre-Dental Assisting Career Studies Certificate. Prerequisites or Co-requisites: DNA 100 and DNA 103. 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 and Co-requisites:

Prerequisite: Completion of courses in the Pre-Dental Assisting Career Studies Certificate

Prerequisites or Co-requisites: 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; and
- o. Identify and locate the paranasal sinuses.

Major Topics to Be Included:

- a. Anatomic reference systems
- b. Body systems, structural units
- c. Digestive system
- d. Nervous system
- e. Cardiovascular system
- f. Lymphatic system
- g. Muscular system
- h. Skeletal system
- i. Endocrine system
- j. Respiratory system
- k. Urinary system

- l. Integumentary system
- m. Reproductive system
- n. Body cavities
- o. Head and neck anatomy
- p. Bones of the skull
- q. Cranial bones
- r. Facial bones
- s. Mandible, Temporomandibular Joint
- t. Head and neck muscles
- u. Blood supply of the face and mouth
- v. Cranial nerves
- w. Innervation of the oral cavity
- x. Paranasal sinuses
- y. Embryology and histology
- z. Tooth eruption, tooth exfoliation, tooth developmental disturbances

Effective Date of Course Content Summary: February 12, 2009