

NorthWest Arkansas Community College
Standard Course Outline / Division of Health Professions

Course Number and Title

DNTA 1014: Dental Science I

Course Description:

This course reviews anatomy and physiology, with a comprehensive study of the head and neck. The student's understanding of the morphological and functional interrelationships of the anatomical structures is vital to their ability to logically apply solutions to clinical problems. This course is designed to give the student information on dental morphology, oral histology, oral embryology, dental anatomical structures, as well as the functional relationship of the teeth within the dentition. A unit on microbiology/oral pathology includes historical contributions to the study of microbiology, recognition of growth patterns, and means of destruction. Body defenses to inflammation, healing and repair, various types of lesions of the oral cavity, including cancer, and secondary oral disorders are also included. A unit on disease transmission and infection control provides the student with the knowledge and skills necessary to implement infection control procedures.

Prerequisite:

Students must be enrolled as a student at NWACC. English and Math ACT score of 19 or equivalent. Students must be currently enrolled in Dental Assisting Program. Prior coursework in anatomy and physiology and medical terminology is suggested but not required. Interview and permission of Dental Assisting Program Director is required.

Credit Hours

Four (4) credit hours that may not be transferable to other institutions.

Target Audience

Adult and High School students admitted to the Dental Assisting Program

Student Learning Objectives:

Upon successful completion of this course the student will be able to:

- Analyze general anatomy and physiology
- Identify head and neck anatomy as it relates to dentistry
- Differentiate dental morphology
- Recognize oral histology and oral embryology
- Identify specific dental anatomical structures
- Identify landmarks of the face and oral cavity
- Identify the dentitions, teeth, tooth surfaces, and occlusions
- Identify disease processes
- Identify processes of disease transmission

- Demonstrate effective means of infection control
- Differentiate between disinfection and sterilization
- Recognize lesions of the oral cavity

Topics:

- General Anatomy and Physiology
- Head and Neck Anatomy
- Oral Embryology and Histology
- Landmarks of the Face and Oral Cavity
- Overview of the Dentitions
- Tooth Morphology
- Microbiology in a Dental Setting
- Disease Transmission and Infection Control
- Principles of Infection Control in a Dental Setting
- Principles and Techniques of Instrument Processing and Sterilization

Required assessment:

- Observation with instructor evaluation in lab setting
- Observation with instructor evaluation in clinical setting
- Unit exams
- Comprehensive final exam