

# Northwest Arkansas Community College

## Health Professions Division

### **Discipline Code**

DNTA

### **Course Number**

1014

### **Course Title**

Dental Science I

### **Catalog Description**

This course reviews anatomy and physiology, with a comprehensive study of the head and neck. The student's understanding of morphological and functional interrelationships of the 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 student 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.

### **Prerequisites**

Acceptance into program by interview

### **Credit Hours**

4 credit hours

### **Contact hours**

45 lecture contact hours; 45 lab contact hours

### **Load hours**

4 load hours

### **Semesters Offered**

Fall

### **ACTS Equivalent**

None

### **Grade Mode**

A-F

### **Learning Outcomes**

Students completing this course will:

- 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

## **General Education Outcomes Supported**

- Students develop higher order thinking skills.
- Students develop information literacy.

## **Standard Practices**

### **Topics list**

- Review General Anatomy and Physiology
- Detailed Head and Neck Anatomy
- Tooth Morphology and Surfaces
- Structures of the Oral Cavity
- Basic Histology and Embryology
- Oral Histology
- Oral Embryology
- Dental Anatomic Structures
- Dentitions
- Odontology
- Structural Odontology
- Lesions of the Oral Cavity
- General Disease Processes
- Disease Transmission
- Infection Prevention Protocols
- Disinfection Standards
- Sterilization Standards

### **Learning activities**

- Didactic instruction will be delivered either in the classroom setting or through virtual systems.
- Didactic instruction will include models, manikins, videos, and diagrams to reinforce topics discussed.
- Laboratory exercises will align with the didactic portion of the course.
- Infection Prevention Protocols will be of primary importance and will be integrated into each and every lab process.
- Laboratory exercises will utilize models, manikins, and classmates to locate and identify oral and dental structures.
- Disinfection and sterilization laboratories will utilize standard dental equipment for training and will include equipment safety training.
- Students will learn new terminology and experience varied learning methods to reinforce the General Education outcomes of higher order thinking skills and information literacy.

## **Assessments**

- Final grade will be based on the average of all exams, quizzes, homework, and labs.
- Examinations: Final written exam is comprehensive and scored on a percentage basis. Final Practical exam is comprehensive of all skills/topics covered during course.
- Quizzes: A quiz may be given at any time during the course. Make-up quizzes are at the instructor's discretion.
- Homework: Assignments may be given at any time during the course and will be due when designated by the instructor. Material turned in after designated time/date will not be accepted and will result in a grade of "0".
- Labs: Designed for student to gain skill with new procedures. Labs are scored on a Pass/Fail basis. Students must achieve a Pass in order to advance in course.

## **Grading guidelines**

- A=90-100%
- B=80-89%
- C=70-79%

\*You must maintain a grade of C or higher to progress in the Dental Assisting Program.