

Course discipline/number/title: DA 1210: Dental Science I

A. CATALOG DESCRIPTION

1. Credits: 3
2. Hours/Week: 2 lecture, 2 lab
3. Prerequisites (Course discipline/number): None
4. Other requirements: DA Program Admission is required
5. MnTC Goals (if any): NA

B. COURSE DESCRIPTION: Dental Science I covers anatomy and physiology of the teeth, the oral structures, and structures of the head and neck. Emphasis will be given to their anatomical parts, shape and form, clinical characteristics, development, and physiology. Dental Science I provides the student with foundation information required to effectively communicate and perform in a dental setting. This course is a prerequisite to all clinical courses in dental assisting and a prerequisite to Dental Science II. (DA Program Admission is required.)

C. DATE LAST REVISED (Month, year): September, 2021

D. OUTLINE OF MAJOR CONTENT AREAS:

1. Introduction to Dental Science and Definitions
2. Types of Teeth, Dentitions, Dental Eruption, Numbering Systems
3. Tooth Surfaces, Anatomical Parts of the Tooth, Line Angles and Point Angles, Tooth Divisions
4. Dental Histology (Study of Tooth Tissues)
5. The Periodontium and Structures of the Oral Cavity
6. Crown Elevations and Depressions
7. Dental Morphology
8. Occlusion
9. Functional Tooth Form
10. Dental Development
11. Bones of the Skull
12. The Maxillae, Mandible, TMJ, Hyoid Bone, and Tongue
13. Muscles of the Head and Neck
14. The Sinuses, Salivary Glands and Lymphatic System
15. Nerve/Blood Supply of the Head and Neck

E. LEARNING OUTCOMES (GENERAL): The student will be able to:

1. Define dental anatomy terms.
2. Name and locate all deciduous and permanent teeth.
3. Define and describe dental eruption, resorption, and exfoliation and sequencing of eruption.
4. Name and locate anatomical parts of the teeth and dental morphology of deciduous and permanent dentition.
5. Examine and locate structures of the oral cavity and state their function.
6. Describe the structure and function of periodontal tissues.
7. Name and locate anatomical parts of the periodontium
8. Name teeth using the Universal, Palmer and International numbering systems.
9. Identify crown elevations and depressions
10. Identify and describe classifications of occlusion and tooth position deviations.
11. Describe facial, palatal, and tooth development and anomalies.
12. Describe the structure and function of the of the skull.
13. Identify and locate the bones of the cranium and face.
14. Identify the regions of the head and neck.
15. Describe the structure and function of the temporomandibular joint, tongue, and hyoid bone.
16. Identify/locate and describe the muscles of the oral cavity, face, floor of mouth, tongue, soft palate, and neck.
17. Identify and locate the salivary glands and their function.
18. Describe the structure and function of the lymph organs of the head and neck.
19. Describe nerve innervation to the head and neck.
20. Describe blood supply to the teeth and structures of the head and neck.
21. Identify and locate veins and arteries of the head and neck.

- F. LEARNING OUTCOMES (MNTC): NA
- G. METHODS FOR EVALUATION OF STUDENT LEARNING: Methods may include but are not limited to:
  - 1. Weekly written quizzes.
  - 2. Laboratory identification quizzes.
  - 3. Comprehensive Final Examination
- H. RCTC CORE OUTCOME(S): This course contributes to meeting the following RCTC Core Outcome(s): Critical Thinking. Students will think systematically by integrating skills and using a variety of appropriate resources and methods.
- I. SPECIAL INFORMATION (if any): None