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Dental Hygiene (DNLT) 1512 Head and Neck Anatomy (3 Units) CSU  
[formerly Dental Hygiene 12]

Prerequisite: Acceptance into Dental Hygiene Program and successful completion of Biology 2250, 2255, and 2256 with a grade of “C” or better

Prerequisite knowledge/skills:

Before entering the course, the student should be able to:

1. identify and explain the function of the major structural components of the human body at microscopic and macroscopic levels,
2. demonstrate the skill of careful dissection,
3. compare and contrast human and cat anatomy,
4. demonstrate the construction of a correctly spelled list of 200 human surface anatomy features,
5. explain the general function of the human body systems,
6. explain basic facts of physical and chemical principles of physiology,
7. employ the scientific method, and
8. move on to more advanced work in physiology and related fields.

Total Hours: 48 hours lecture

Catalog Description: This course studies the anatomical structures of the head and neck regions and relates these structures to the clinical practice of dental hygiene.

Type of Class/Course: Degree Credit

Text: Fehrenbach, Margaret and Susan Herring. *Illustrated Anatomy of the Head and Neck*. 5<sup>th</sup> ed. Philadelphia: W. B. Saunders Company, 2016. Print.

Additional Instructional Materials: Learning Resource Center (LRC) - Netter, Frank. CD-ROM "Interactive Atlas of Human Anatomy".

Course Objectives:

By the end of the course, a successful student will be able to:

1. be fully apprised of anatomical nomenclature,
2. describe the anatomical structures of the head and neck and their physiological role, to include skeletal anatomy, muscles, nerves and vascular and lymphatic systems, and
3. explain how these structures relate to the clinical practice of dental hygiene.

Course Scope and Content:

- Unit I Introduction and Head and Neck Anatomy
  - A. Nomenclature
  
- Unit II Surface Anatomy
  - A. Landmarks of the Head and Neck
  - B. Anatomic Variation
  
- Unit III Skeletal System
  - A. Skull and Cervical Vertebrae
  - B. Mandible
  - C. Maxilla
  - D. Abnormalities
  
- Unit IV Muscular System
  - A. Muscles of the Head and Neck
  - B. Muscles of Mastication
  - C. Muscles of Facial Expression
  
- Unit V Temporomandibular Joint
  - A. Joint Anatomy
  - B. Types of Movement
  - C. Clinical Considerations
  
- Unit VI Vascular System
  - A. Vascular Supply to the Head and Neck
  - B. Common Carotid Artery
  - C. Subclavian Artery
  - D. Veins of the Head and Neck
  
- Unit VII Glandular Tissue
  - A. Salivary Glands
  
- Unit VIII Nervous System
  - A. Brain and Spinal Cord
  - B. Meninges
  - C. Cranial Nerves

Unit IX           Lymphatics

- A.     Anatomical Landmarks
- B.     Trigeminal Nerve
- C.     Maxillary Anesthesia
- D.     Mandibular Anesthesia

Unit X            Lymphatic System

- A.     Lymph Nodes of the Head and Neck
- B.     Lymphatic Drainage of the Head and Neck
- A.     Clinical Considerations

Unit XI           Fascia and Spaces

- A.     Cervical Fascia
- B.     Cervical Fascial Spaces
- C.     Fasciae of the Face and Deep Face

Unit XII          Spread of Dental Infection

- A.     Spread of Infection in the Head and Neck
- B.     Complications of Infection
- C.     Prevention
- D.     Clinical Considerations

Learning Activities Required Outside of Class:

The students in this class will spend a minimum of 6 hours per week outside of the regular class time doing the following:

- 1.     Independent reading
- 2.     Studying

Methods of Instruction:

- 1.     Lecture
- 2.     Class discussions
- 3.     Audio-visual presentations
- 4.     Learning activities using human skulls
- 5.     Outlines
- 6.     Power Point

Methods of Evaluation:

- 1.     Examinations and quizzes, including:
  - a.     multiple choice items
  - b.     matching items
  - c.     true/false items



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- d. practical demonstration
- e. labeling items