

**College of San Mateo**  
**Official Course Outline**

1. **COURSE ID:** DENT 702    **TITLE:** Dental Science II  
**Units:** 3.0 units    **Hours/Semester:** 48.0-54.0 Lecture hours; and 96.0-108.0 Homework hours  
**Method of Grading:** Letter Grade Only  
**Prerequisite:** DENT 701  
**Recommended Preparation:**  
    BIOL 130, and Eligibility for ENGL 100 or ENGL 105
2. **COURSE DESIGNATION:**  
**Degree Credit**  
**Transfer credit:** none
3. **COURSE DESCRIPTIONS:**  
**Catalog Description:**  
    A complete study in the hard and soft tissues of the oral cavity and anatomy of the head and neck. Introduction to the body systems, blood supply of the head and neck, and innervation of the teeth. Open to current or potential Dental Assisting Students. (Spring only.)
4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**  
    Upon successful completion of this course, a student will meet the following outcomes:
  1. Locate the major salivary glands, paranasal sinuses, & major lymph nodes of the body.
  2. Identify and define the 4 levels of organization in the human body.
  3. Identify the four types of tissue in the human body.
5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**  
    Upon successful completion of this course, a student will be able to:
  1. Locate the major salivary glands, paranasal sinuses, & major lymph nodes of the body.
  2. Identify and define the 4 levels of organization in the human body.
  3. Identify the four types of tissue in the human body.
6. **COURSE CONTENT:**  
**Lecture Content:**
  1. Dental Numbering Systems (Review)
    - A. Universal
    - B. Palmers
    - C. ISO (International Standards Organization)
  2. Salivary glands/Paranasal Sinuses/Major Lymph Nodes (Review)
    - A. 3 major glands
      - a. Parotid Salivary Gland
      - b. Submandibular Salivary Gland
      - c. Sublingual Salivary Gland
    - B. Minor salivary glands
      - a. Locations
    - C. Paranasal Sinuses
      - a. Locations
      - b. Functions
    - D. 3 major Lymph nodes
      - a. Cervical nodes
      - b. Auxiliary nodes
      - c. Inguinal nodes
  3. Planes of the Body
    - A. Midsagittal plane
    - B. Horizontal plane
    - C. Frontal plane
    - D. Anatomical position
  4. Body Cavities/Body Regions
    - A. Dorsal cavity

- B. Ventral cavity
  - C. Parietal cavity
  - D. Cranial cavity
  - E. Spinal cavity
  - F. Thoracic cavity
  - G. Abdominopelvic cavity
  - H. Axial body region
  - I. Appendicular body region
5. Structural Units
- A. Cells
    - a. Cell membrane
    - b. Differentiation
    - c. Cytoplasm
    - d. Nucleus
  - B. Tissues
    - a. Epithelial tissue
    - b. Muscle tissue
    - c. Nerve tissue
    - d. Connective tissue
6. Body Systems
- A. Skeletal system
    - a. Bone
    - b. Cartilage
    - c. Joints
    - d. Muscular system
      - i. Striated muscle
      - ii. Smooth muscle
      - iii. Cardiac muscle
  - B. Muscle function
  - C. Cardiovascular system
    - a. Circulatory system
    - b. Heart
    - c. Lymphatic system
  - D. Nervous system
    - a. Neurons
    - b. Central Nervous system
    - c. Peripheral Nervous system
  - E. Respiratory system
    - a. Structures
  - F. Digestive system
    - a. Digestive Process
    - b. Structures
  - G. Endocrine system
  - H. Urinary system
  - I. Integumentary system
    - a. Skin Structures
    - b. Skin appendages
  - J. Reproductive system
    - a. Female
    - b. Male
7. Regions of the Head
- A. 11 areas
    - a. Frontal
    - b. Parietal
    - c. Occipital
    - d. Temporal
    - e. Orbital
    - f. Nasal
    - g. Infraorbital
    - h. Zygomatic

- i. Buccal
- j. Oral
- k. Mental
- B. Bones of the skull
  - a. 8 bones of the cranium
  - b. 14 bones of the face
  - c. 6 auditory ossicles
- C. TMJ (Temporomandibular Joint)
  - a. Disorders
  - b. Symptoms
  - c. Causes
- D. Muscles of the Head and Neck
  - a. 7 main groups of muscles
  - b. Muscles of facial expression
  - c. Muscles of mastication
  - d. Muscles of the floor of the mouth
  - e. Extrinsic muscles of the tongue
  - f. Muscles of the soft palate
- E. Blood supply and Nerves of the Head and Neck
  - a. Major arteries of the face and oral cavity
  - b. Major arteries to the face and mouth
  - c. Major veins of the face and mouth
  - d. Cranial nerves
  - e. Trigeminal nerve innervations
  - f. Facial paralysis (parenthesis)

#### 7. REPRESENTATIVE METHODS OF INSTRUCTION:

Typical methods of instruction may include:

- A. Other (Specify): Worksheets to complement the lectures, videos, power point presentations, group work with body systems, and workbook assignments. Students will be assigned readings from the textbook. Students will make visual aids for their presentations during the body systems section.

#### 8. REPRESENTATIVE ASSIGNMENTS

Representative assignments in this course may include, but are not limited to the following:

##### **Writing Assignments:**

Workbook assignments and worksheets are assigned that relate to the topic being discussed.

##### **Reading Assignments:**

Students will be assigned readings from the textbook. Group presentation and assignments.

#### 9. REPRESENTATIVE METHODS OF EVALUATION

Representative methods of evaluation may include:

- A. Class Participation
- B. Group Projects
- C. Homework
- D. Quizzes
- E. Written examination
- F. Completion of written homework assignments, lecture review quizzes, participation in group presentation and assignments, and final examinations.

#### 10. REPRESENTATIVE TEXT(S):

Possible textbooks include:

- A. Bird, D. and Robinson, D.. *Modern Dental Assisting textbook and workbook*, 13th ed. Elsevier, 2021

**Origination Date:** November 2021

**Curriculum Committee Approval Date:** March 2022

**Effective Term:** Fall 2022

**Course Originator:** Beth LaRochelle