

# College of San Mateo Course Outline

---

- New Course
- Update/No change
- Course Revision (Minor)
- Course Revision (Major)

Date: March 2009

---

**Department:** DENT                                      **Number:** 732  
**Course Title:** Dental Science II                **Units:** 3.0  
**Total Semester Hours:**    **Lecture:** 48      **Lab:** 0      **Homework:** 96      **By Arrangement:** 0

**Length of Course**

- Semester-long
- Short course (Number of weeks \_\_\_\_\_)
- Open entry/Open exit

**Grading**

- Letter
  - Pass/No Pass
  - Grade Option (letter or Pass/No Pass)
- 

**1. Prerequisite (Attach Enrollment Limitation Validation Form.)**

None

**2. Corequisite (Attach Enrollment Limitation Validation Form.)**

None

**3. Recommended Preparation (Attach Enrollment Validation Form.)**

None

**4. Catalog Description (Include prerequisites/corequisites/recommended preparation.)**

Minimum of forty-eight hours lecture hours per term. This course offers a presentation of the three dental numbering systems, oral landmarks, and the periodontal and caries disease processes. 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 innervations of the teeth. This course is open to new and returning part time Dental Assisting Students. This course may be taken prior to DENT 731. Extra Supplies may be required. A materials fee as shown in the schedule of classes is payable upon registration. (This course is offered in the Spring only.) (AA)

**5. Class Schedule Description (Include prerequisites/corequisites/recommended preparation.)**

This course offers a presentation of the three dental numbering systems, oral landmarks, and the periodontal and caries disease processes. 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 innervations of the teeth. This course is open to new and returning part time Dental Assisting Students. This course may be taken prior to DENT 731. Extra Supplies may be required. A materials fee of \$\_\_\_\_\_ is payable upon registration. (This course is offered in the Spring only.)

6. **Student Learning Outcomes** (Identify 1-6 expected learner outcomes using active verbs.)

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

1. Demonstrate the ability to use the three dental numbering systems.
2. Locate the major salivary glands, paranasal sinuses, & major lymph nodes of the body.
3. Identify and define the 4 levels of organization in the human body.
4. Describe the planes of the body & body directions.
5. Identify the four types of tissue in the human body.
6. Identify the functions and purpose of each of the 10 body systems.
7. Demonstrate the ability to locate and identify the bones of the skull.

7. **Course Objectives** (Identify specific teaching objectives detailing course content and activities. *For some courses, the course objectives will be the same as the student learning outcomes. If this is the case, please simply indicate this in this section).*)

Same as the SLO's.

8. **Course Content** (Brief but complete topical outline of the course that includes major subject areas [1-2 pages]. Should reflect all course objectives listed above. In addition, you may attach a sample course syllabus with a timeline.)

- I. Dental Numbering Systems (Review)
  - a. Universal
  - b. Palmers
  - c. ISO (International Standards Organization)
- II. Salivary glands/Paranasal Sinuses/Major Lymph Nodes (Review)
  - a. 3 major glands
    1. Parotid Salivary Gland
    2. Submandibular Salivary Gland
    3. Sublingual Salivary Gland
  - b. Minor salivary glands
    1. Locations
  - c. Paranasal Sinuses
    1. Locations
    2. Functions
  - d. 3 major Lymph nodes
    1. Cervical nodes
    2. Auxillary nodes
    3. Inguinal nodes
- III. Planes of the Body
  - a. Midsagittal plane
  - b. Horizontal plane
  - c. Frontal plane
  - d. Anatomical position

- IV. 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
  
- V. Structural Units
  - a. Cells
    - 1. Cell membrane
    - 2. Differentiation
    - 3. Cytoplasm
    - 4. Nucleus
  - b. Tissues
    - 1. Epithelial tissue
    - 2. Muscle tissue
    - 3. Nerve tissue
    - 4. Connective tissue
  
- VI. Body Systems
  - a. Skeletal system
    - 1. Bone
    - 2. Cartilage
    - 3. Joints
  - b. Muscular system
    - 1. Striated muscle
    - 2. Smooth muscle
    - 3. Cardiac muscle
    - 4. Muscle function
  - c. Cardiovascular system
    - 1. Circulatory system
    - 2. Heart
    - 3. Lymphatic system
  - d. Nervous system
    - 1. Neurons
    - 2. Central Nervous system
    - 3. Peripheral Nervous system
  - e. Respiratory system
    - 1. Structures
  - f. Digestive system
    - 1. Digestive Process
    - 2. Structures
  - g. Endocrine system
  - h. Urinary system
  - i. Integumentary system
    - 1. Skin Structures
    - 2. Skin appendages
  - j. Reproductive system
    - 1. Female
    - 2. Male

VII. Regions of the Head

- a. 11 areas
  1. Frontal
  2. Parietal
  3. Occipital
  4. Temporal
  5. Orbital
  6. Nasal
  7. Infraorbital
  8. Zygomatic
  9. Buccal
  10. Oral
  11. Mental
- b. Bones of the skull
  1. 8 bones of the cranium
  2. 14 bones of the face
  3. 6 auditory ossicles
- c. TMJ (Temporomandibular Joint)
  1. Disorders
  2. Symptoms
  3. Causes
- d. Muscles of the Head and Neck
  1. 7 main groups of muscles
  2. Muscles of facial expression
  3. Muscles of mastication
  4. Muscles of the floor of the mouth
  5. Extrinsic muscles of the tongue
  6. Muscles of the soft palate
- e. Blood supply and Nerves of the Head and Neck
  1. Major arteries of the face and oral cavity
  2. Major arteries to the face and mouth
  3. Major veins of the face and mouth
  4. Cranial nerves
  5. Trigeminal nerve innervations
  6. Facial paralysis (parathesia)

9. **Representative Instructional Methods** (Describe instructor-initiated teaching strategies that will assist students in meeting course objectives. Include examples of out-of-class assignments, required reading and writing assignments, and methods for teaching critical thinking skills.) **If hours by arrangement are required by this course, indicate the additional instructional activity which will be provided during this time.**

Instructor will use a variety of instructional methods: lectures, worksheets to compliment 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.

10. **Representative Methods of Evaluation** (Describe measurement of student progress toward course objectives. Courses with required writing component and/or problem-solving emphasis must reflect critical thinking component. If skills class, then applied skills.)

Students will be evaluated based on participation in class discussions, completion of written homework assignments, lecture review quizzes, participation in group presentation and assignments, and final examinations.

11. **Representative Text Materials** (With few exceptions, texts need to be current. Include publication dates.)

Modern Dental Assisting 9th Edition by Torres and Ehrlich, Doni L. Bird, Debbie S. Robinson.  
Textbook, 2009

Modern Dental Assisting 9th Edition by Torres and Ehrlich, Doni L. Bird, Debbie S. Robinson.  
Workbook, 2009

Prepared by: \_\_\_\_\_  
(Signature)

Email address: kirbyc@smccd.edu

Submission Date: \_\_\_\_\_