

College of San Mateo Course Outline

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

Date: March 2009

Department: DENT Number: 731
Course Title: Dental Science I 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 full time and part time dental assisting students an introduction to the basics of dentistry. This course covers subjects of importance to the dental assisting student, including tooth numbering systems, oral anatomy, tooth morphology, tooth structures, oral embryology, oral histology, dental caries, periodontal diseases, oral pathology, disease prevention techniques and nutrition as it affects the oral cavity. A materials fee as shown in the schedule of classes is payable upon registration. (This course is offered in the Fall only.) (AA)

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

This course offers full time and part time dental assisting students an introduction to the basics of dentistry. This course covers subjects of importance to the dental assisting student, including tooth numbering systems, oral anatomy, tooth morphology, tooth structures, oral embryology, oral histology, dental caries, periodontal diseases, oral pathology, disease prevention techniques and nutrition as it affects the oral cavity. A materials fee of \$_____ is payable upon registration. (This course is offered in the Fall 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. Define & label the landmarks of the face and oral cavity.
2. Describe the processes of Oral Embryology & Oral Histology.
3. Identify the causes of periodontal disease and its progressive process.
4. Identify the causes of dental caries and the caries process.
5. Demonstrate why nutrition is an important part of oral hygiene.
6. Identify the importance of, causes of, and conditions of oral pathology.

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 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. Landmarks of the Face and Oral Cavity

- a. Regions and features of the face
- b. identification & landmarks of & within the oral cavity
- c. Dentitions
 1. Permanent/Adult
 2. Deciduous/Baby
- d. Names, sizes, surfaces, locations, and types of teeth
- e. Tooth numbering systems
 1. Adult = numbers
 2. Children = letters
 3. Three systems: Universal, Palmer, & ISO
- f. Anatomic Features of the teeth
 - a. Embrasures
 - b. Contacts
 - c. Angles and Divisions of the teeth
 - d. Occlusion and Malocclusions

II. Oral Embryology and Oral Histology

- a. Prenatal development of the teeth
- b. embryonic development of the face and oral cavity
- c. Structures formed by specialized cells at specific weeks of development
- d. Genetic factors vs. environmental factors
- e. Growth periods of a tooth
- f. Eruption cycle of teeth, permanent and primary
- g. Layers of a tooth
 1. enamel
 2. dentin

- 3. cementum
 - 4. Pulp
 - 5. Root
 - 6. Crown
 - a. Clinical crown
 - b. Anatomical crown
 - h. Periodontium
 - a. periodontal ligaments
 - b. alveolar bone
 - c. cementum
 - d. Attachment apparatus
 - e. gingival unit
- III. Dental Caries
- a. caries process
 - b. progress of decay
 - c. causes
 - d. treatments
 - e. Tooth brushing and flossing techniques
 - f. Oral Hygiene instructions
 - g. prevalence in children
 - h. prevalence in adults
 - i. access to care
- IV. Periodontal Disease
- a. identification of this disease
 - b. causes
 - c. progression of periodontal disease
 - 1. Type I: Gingivitis
 - 2. Type II: Early Perio Disease
 - 3. Type III: Mod Perio Disease
 - 4. Type IV: Advanced Perio Disease
 - 5. Type V: Refractory Perio Disease
 - d. Non-surgical treatments
 - e. Surgical treatments
 - f. Increased oral hygiene techniques at home
 - g. more frequent cleanings at the dental office
 - h. referral to periodontist
- V. Nutrition
- a. Food Guide Pyramid
 - b. Carbohydrates
 - c. Fats
 - d. Proteins
 - e. Recommended Dietary Allowances (RDA's)
 - f. Water
 - g. Vitamins
 - h. Minerals
 - i. Diet Modification
 - j. reading food labels
 - k. eating disorders
 - l. healthy habits
- VI. Oral Pathology
- a. Oral Lesions

1. Extending above the surface
2. Extending below the surface
3. Even with the surface
4. Raised or flat lesions
- b. Diseases of the oral soft tissues
 1. Lichen Planus
 2. Candidiasis
 3. Aphthous Ulcers
 4. Cellulitis
- c. Oral Cancer
 1. appearance
 2. biopsy
 3. warning signs
 4. dental implications of chemotherapy
 5. treatment of oral cancer
- d. HIV in relation to Oral pathological conditions in the mouth

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 utilize a variety of instructional methods: lectures, worksheets that compliment the lectures, power point presentations with accompanying handouts, videos, labeling assignments, color coding assignments, group work, and workbook assignments. Students will be assigned chapter readings from the textbook which correlate with the subject being discussed.

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 and scoring on written homework assignments, lecture review quizzes, participation in group work and group assignments, tests, 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)

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Submission Date: _____