

**College of San Mateo  
Official Course Outline**

1. **COURSE ID:** DENT 744    **TITLE:** Dental Sealants  
**Units:** 0.5 units    **Hours/Semester:** 4.0-4.5 Lecture hours; and 12.0-13.5 Lab hours  
**Method of Grading:** Letter Grade Only  
**Prerequisite:** DENT 721, DENT 751
  
2. **COURSE DESIGNATION:**  
**Degree Credit**  
**Transfer credit:** none
  
3. **COURSE DESCRIPTIONS:**  
**Catalog Description:**  
This course is designed to meet the requirements of the California State Board of Dental Examiners in pit and fissure sealants.
  
4. **STUDENT LEARNING OUTCOME(S) (SLO'S):**  
Upon successful completion of this course, a student will meet the following outcomes:
  1. Describe and demonstrate the proper sequence of sealant placement.
  2. Describe the purpose, types, and indications and contraindications of dental sealants.
  3. Demonstrate the technique for dental sealant placement utilizing proper safety measures and infection control procedures
  
5. **SPECIFIC INSTRUCTIONAL OBJECTIVES:**  
Upon successful completion of this course, a student will be able to:
  1. Correctly place a sealant on virgin tooth structure with prior approval.
  2. Describe and demonstrate the proper sequence of sealant placement.
  3. Demonstrate proper isolation and moisture control techniques prior to sealant placement.
  4. Demonstrate proper operator and patient positioning for access to all areas of the mouth while preparing the patient for sealant placement.
  
6. **COURSE CONTENT:**  
**Lecture Content:**
  1. Dental Science - Oral Anatomy, Histology, Physiology, Oral Pathology, Normal/Abnormal Anatomical and Physiological Tooth Descriptions (Review)
  2. Morphology and Microbiology (Review); Infection control review
  3. Dental Materials and Pharmacology (Review)
  4. Sealant Basics
    - A. Legal requirements
    - B. Description and goals of sealants
    - C. Indications and contraindications
    - D. Role in preventive programs
  5. Sealant Materials
    - A. Etchant and/or etchant bond combination material composition, process, storage and handling
    - B. Sealant material composition, polymerization type, process, storage and handling
    - C. Armamentarium for etching and sealant application
    - D. Problem solving for etchant and sealant material placement manipulation
  6. Sealant Criteria
    - A. Areas of application
    - B. Patient selection factors
    - C. Other indication factors
  7. Preparation Factors
    - A. Moisture control protocol
    - B. Tooth/teeth preparation procedures prior to etching or etchant bond
  8. Acid Etching or Etchant Bond Combination
    - A. Material preparation
    - B. Application areas
    - C. Application time factors

- D. Armamentarium
  - E. Procedure
  - F. Etchant or etchant bond evaluation criteria
9. Sealant Application
- A. Application areas
  - B. Application time factors
  - C. Armamentarium
  - D. Procedure for chemical cure and light cure techniques
  - E. Sealant evaluation criteria
  - F. Sealant adjustment techniques
10. Infection control protocol
11. Clinical re-call re-evaluation protocols

**Lab Content:**

1. Infection control review
2. Sealant Basics
  - A. Indications and contraindications
3. Role in preventive programs
  - A. Sealant Materials
  - B. Etchant and/or etchant bond combination material composition, process, storage and handling
  - C. Sealant material composition, polymerization type, process, storage and handling
  - D. Armamentarium for etching and sealant application
  - E. Areas of application
  - F. Patient selection factors
  - G. Other indication factors
    - a. Preparation Factors
    - b. Moisture control protocol
  - H. Tooth/teeth preparation procedures prior to etching or etchant bond
    - a. Acid Etching or Etchant Bond Combination
    - b. Application areas
    - c. Application time factors
    - d. Procedure
  - I. Etchant or etchant bond evaluation criteria
    - a. Sealant Application
    - b. Application areas
    - c. Application time factors
    - d. Armamentarium
    - e. Procedure for chemical cure and light cure techniques
    - f. Sealant evaluation criteria
    - g. Sealant adjustment techniques

**7. REPRESENTATIVE METHODS OF INSTRUCTION:**

Typical methods of instruction may include:

- A. Lecture
- B. Other (Specify): Instructor will utilize a variety of instructional methods including: Lectures with a power point presentation combo, demonstrational DVD's, applying of learned skills with a partner and on a typodont and extracted teeth, reading assignments from textbook, workbook assignment, and instructor demonstrations.

**8. REPRESENTATIVE ASSIGNMENTS**

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

**Writing Assignments:**

None

**Other Outside Assignments:**

Clinical competencies on lab skills and outside patients

**To be Arranged Assignments:**

None

**9. REPRESENTATIVE METHODS OF EVALUATION**

Representative methods of evaluation may include:

- A. Lab Activities

B. Students will be evaluated as follows: 4 successful competencies on lab/clinical skills on 4 patients, homework assignments, attendance, participation in lecture, and written final examination.

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

Possible textbooks include:

A. Bird, D. and Robinson, D. . *Modern Dental Assisting Textbook and workbook*, 11th ed. Elsevier, 2015

**Origination Date:** October 2015

**Curriculum Committee Approval Date:** January 2016

**Effective Term:** Fall 2016

**Course Originator:** Beth LaRochelle