## D H 328A: CLINICAL DENTAL HYGIENE THEORY I

#### **Foothill College Course Outline of Record**

Heading	Value
Effective Term:	Summer 2024
Units:	2
Hours:	1 lecture, 3 laboratory per week (48 total per quarter)
Advisory:	Not open to students with credit in D H 75A.
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

#### **Student Learning Outcomes**

- The student will assess anatomical features of the teeth and apply appropriate advanced instrumetation techniques for effective root surface debridement.
- The student will evaluate gingival health and assimilate soft tissue curettage into dental hygiene treatment plan. (This will be evaluated with a written exam.)

#### **Description**

Discussion and demonstration of advanced and supplemental dental hygiene functions: digital intraoral photography, advanced dental hygiene instrumentation, advanced patient-operator positioning, and soft tissue curettage. Supportive course to reinforce and amplify the knowledge and skills needed to perform dental hygiene procedures in the clinical setting for D H 320B. Intended for students in the Dental Hygiene Baccalaureate Degree Program; enrollment is limited to students accepted in the program.

#### **Course Objectives**

The student will be able to:

- Integrate the technique of digital intraoral imaging into dental hygiene practice.
- Assess patient oral conditions and determine appropriate instruments, advanced fulcrums, and patient-operator positioning for effective advanced dental hygiene instrumentation.
- 3. Analyze gingival health and integrate soft tissue curettage into dental hygiene treatment and post-operative instructions as needed.
- Adhere to standard infection and hazard control protocols during all procedures.
- Apply the principles of law and ethics to the practice of dental hygiene.

#### **Course Content**

- 1. Digital intraoral imaging (Lec, Lab)
  - a. Armamentarium
    - Digital camera
    - ii. Intraoral camera
    - iii. Computer and printer
    - iv. Mouth retractors, mirrors, contrastors
  - b. Digital intraoral imaging technique
    - i. Use of cameras
    - ii. Views of teeth and structures
      - 1. Anterior view normal bite
      - 2. Anterior view edge to edge
      - 3. Maxillary occlusal
      - 4. Mandibular occlusal
      - 5. Right lateral
      - 6. Left lateral
      - 7. Lower anterior lingual
  - c. Rationale for taking intraoral photographs
    - i. Case presentation
    - ii. Legal purposes
    - iii. Treatment planning
    - iv. Case documentation
    - v. Patient education
    - vi. Diagnosis
  - d. Advanced patient-operator positioning techniques (Lec, Lab)
    - i. Alternative fulcrums
    - ii. Extraoral fulcrums
    - iii. Intraoral opposite arch fulcrums
    - iv. Intraoral cross arch fulcrums
    - v. Finger on finger fulcrums
    - vi. Assisted fulcrums
    - vii. Alternative patient/operator positioning
    - viii. Around the clock positioning
    - ix. Standing while scaling techniques
    - x. Ergonomics
- 2. Advanced instrumentation (Lec, Lab)
  - a. Dental root morphology
  - b. Clinical vs. therapeutic endpoints for treatment
  - c. Root debridement techniques
    - i. Vertical, horizontal, and oblique strokes
    - ii. Exploring, scaling, and root debridement strokes
  - d. Instruments
    - i. Type of instruments
      - 1. After Five Gracey curets
      - 2. After Five Mini Gracey curets
      - 3. Nevi anterior sickle scaler
      - 4. Nevi posterior sickle scaler
      - 5. Langer curet
      - 6. Younger Good curet
      - 7. After Five 11/12 explorer
      - 8. UNC periodontal probe
    - ii. Design and functions
    - iii. Advantages and disadvantages

- iv. Rationale for use
  - 1. Deep, narrow pockets
  - 2. Line angles
  - 3. Root concavities
  - 4. Furcations
- e. Advanced dental hygiene techniques
  - i. Horizontal strokes in root concavities
  - ii. Accessing furcations
  - iii. Horizontal strokes at line angles
  - iv. Advanced strokes for contact areas
- f. Soft tissue trauma
  - i. Types
  - ii. Causes
  - iii. Techniques to prevent trauma
    - 1. Adaptation of working end
- 3. Soft tissue curettage (Lec, Lab)
  - a. Histology
    - i. Epithelial tissue
      - 1. Oral epithelium
      - 2. Sulcular epithelium
      - 3. Junctional epithelium
    - ii. Connective tissue
    - iii. Gingival curettage theory
  - b. Rationale for use
    - i. Removal of diseased tissue
    - ii. Promote formation of new epithelial tissue
  - c. Indications and contraindications
    - i. Periodontal pocket depth
    - ii. Architecture of the periodontium
    - iii. Health status of the patient
  - d. Armamentarium
    - i. Sharp universal curet
    - ii. Cotton tip applicator
    - iii. Gauze
    - iv. Mouth mirror
    - v. Periodontal probe
  - e. Technique
    - i. Adaptation of the cutting edge
    - ii. Lateral pressure
    - iii. Removal of tissue tags
    - iv. Use of cotton applicator for control
    - v. Control of post-operative bleeding
  - f. Post-operative healing process
    - i. Epithelial wound healing
    - ii. Connective tissue formation
    - iii. Post-operative instructions
    - iv. Local anesthesia
    - v. Bleeding
    - vi. Tobacco use
    - vii. Rinsing
    - viii. Brushing
    - ix. Diet recommendations
    - x. Use of straws
    - xi. Periodontal dressing

- 4. Infection and hazard control protocols (Lec, Lab)
  - Follow program guidelines for infection control when handling instruments and setting up units
  - b. Prevention of cross-contamination
- 5. Principles of law and ethics (Lec, Lab)
  - a. Legal duties and supervision levels of California dental hygienists
    - i. Locally delivered antimicrobials
    - ii. Soft tissue curettage
  - b. Informed consent
  - c. Accurate patient records
  - d. Patient's right to privacy
  - e. Professional interactions with faculty and peers
  - f. Cultural competency

#### **Lab Content**

Practice techniques for clinical procedures: advanced dental hygiene instrumentation, digital intraoral photography, and soft tissue curettage.

#### **Special Facilities and/or Equipment**

- 1. Multimedia classroom, dental hygiene clinic.
- 2. Personal protection barriers, instrument kit, expendable supplies kit.
- 3. When taught as an online/hybrid course, access to computer with email software and hardware; email address.

#### Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

#### **Examinations:**

- 1. Complete written examinations on subject areas to a level of 75%
- 2. Complete final written examination to a level of 75% Clinical proficiencies:
- 1. As recorded on a process evaluation, complete clinical proficiencies on ultrasonic instrumentation to a level of 75%
- 2. As recorded on a process evaluation, complete instrumentation proficiencies on advanced dental hygiene instruments to a level of 75% Project requirements:
- 1. As recorded on a digital photography evaluation, complete a digital series to a level of 75% and include a self-evaluation Class participation:
- Students must prepare for all classes as demonstrated by having all necessary supplies and equipment in lecture and lab and by participating in class discussions

#### **Method(s) of Instruction**

Methods of Instruction may include but are not limited to the following:

Lecture Laboratory

### Representative Text(s) and Other Materials

Bowen, D., and J. Pieren. <u>Darby and Walsh Dental Hygiene Theory and Practice, 5th ed.</u>. 2019.

Nield-Gehrig. <u>Fundamentals of Periodontal Instrumentation, 8th ed.</u> 2019.

Nield-Gehrig, J., D. Shin, and D. Willman. <u>Foundations of Periodontics for the Dental Hygienist</u>, 5th ed.. 2018.

Hoang, L.. Clinical Dental Hygiene Theory Manual I. 2024.

# Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

- 1. Read 20 page chapter on advanced instruments in textbook
- 2. Practice advanced clinical techniques on typodont including the use of the After Five Gracey curets in root concavities
- 3. Complete digital intraoral photography assignment including a selfevaluation of photographs using the grading rubric

#### Discipline(s)

Dental Technology