

# DENT-1320: DENTAL HYGIENE FUNDAMENTALS

## Cuyahoga Community College

### Viewing: DENT-1320 : Dental Hygiene Fundamentals

**Board of Trustees:**

1/30/2025

**Academic Term:**

Fall 2025

**Subject Code**

DENT - Dental Hygiene

**Course Number:**

1320

**Title:**

Dental Hygiene Fundamentals

#### Catalog Description:

Reinforcement of first term clinical skills with an emphasis on radiographic imaging techniques, principles of instrumentation, occlusion and patient assessment.

**Credit Hour(s):**

1

**Lecture Hour(s):**

0

**Lab Hour(s):**

3

### Requisites

#### Prerequisite and Corequisite

Concurrent enrollment in DENT-1300 Preventive Oral Health Services I; and concurrent enrollment in DENT-1331 Dental Imaging; and concurrent enrollment in DENT-1311 Dental Anatomy, Histology & Embryology; and departmental approval.

### Outcomes

#### Course Outcome(s):

Demonstrates techniques necessary to produce diagnostically acceptable radiographic images.

#### Objective(s):

1. Practice image receptor placement for bite wing and periapical images.
2. Assemble the image receptor apparatus.
3. Mount a complete series of radiographic images.
4. Identify the components of an x-ray machine.
5. Explain the function of the components of an x-ray machine.
6. Solve math problems associated with radiographic mathematical concepts.
7. Document specific imaging series in note history.

---

#### Course Outcome(s):

Demonstrate proper techniques of instrumentation.

#### Objective(s):

1. Apply proper mechanics during instrumentation.
2. Recognize specific instruments based on design.
3. Differentiate instruments for specific clinical conditions.
4. Identify the components of assessment and debridement instruments.

5. Select and practice advanced fulcrum techniques.
6. Demonstrate calculus removal strokes.
7. Distinguish instruments and their components during a timed evaluation.

---

**Course Outcome(s):**

Evaluate dental information gathered during patient assessment.

**Objective(s):**

1. Identify proper terminology to describe various gingival conditions.
2. Differentiate normal from abnormal gingival conditions.
3. Identify all teeth in the permanent dentition.
4. Classify categories of occlusion on diagnostic study models.
5. Identify versions of tooth positioning.

---

**Course Outcome(s):**

Present proper oral self care education to a dental patient.

**Objective(s):**

1. Compare and contrast proper and improper infection control protocol.
2. Interpret criteria relating to a proper oral self-care presentation.

---

**Methods of Evaluation:**

1. Mazes Exercise
2. Instrument Basics Exercise
3. Instrument Identification Test
4. Occlusion Assessment Assignment
5. Modified Pen Grasp and Fulcrum Exercise
6. X-ray Machine Components Assignment
7. Professional Development

**Course Content Outline:**

- A. Radiographic Imaging Techniques
  1. Image Receptor Placement
  2. Image Receptor Apparatus Assembly
  3. X-ray Machine Operation
  4. Mathematical Concepts in Dental Imaging
  5. Mounting
- B. Instrumentation Fundamentals
  1. Instrument Design and Identification
  2. Assessment Instruments
  3. Debridement Instruments
  4. Mechanics and Selection
  5. Advanced Fulcrums
  6. Calculus Removal Strokes
- C. Patient Assessment
  1. Gingival Description Terminology
  2. Normal Versus Abnormal Appearance of the Gingiva
  2. Categories and Versions of Occlusion
  3. Tooth Identification and positioning
- D. Miscellaneous
  1. Infection Control Evaluation

## 2. Oral Self Care Video Evaluation

### Resources

Boyd, L, Wilkins, E M., Wyche, C. (2020) *Clinical Practice of the Dental Hygienist*, Philadelphia: Wolters Kluwer.

---

Gehrig, JS, Saccuzzo, D, Sroda, R. (2017) *Fundamentals of Periodontal Instrumentation & Advanced Root Instrumentation*, Philadelphia: Walter Kluwer.

---

Tri-C Faculty and Staff. *Dental Hygiene Clinic Manual*, Cleveland: Tri-C.

---

Fehrenbach, M. & Popowics, T. *Dental Embrology, Histology and Anatomy*. 5th ed. St. Louis: Elsevier Saunders, 2020.

---

Iannucci, J. & Howerton, L. (2017) *Dental Radiography Principles and Techniques*, St. Louis: Elsevier Saunders.

---

### Resources Other

Oral Self Care Video

Infection Control Video

Patient Manikins

Image Receptor Apparatus

Dental Hygiene Instruments

Complete Mouth Radiographic Images

Darwin Manikins

Phosphor Plates

Sensors

Occlusion Models

[Top of page](#)

Key: 1317