

# DENTAL HYGIENE

## DHYG 110. Preclinical Dental Hygiene

### 3 Credits (3)

Basic scientific principles and current theory, prevention of disease transmission, ethical and professional treatment of patients, clinical learning preparation, and introduction to comprehensive patient care. Offered concurrently with DHYG 112 to provide dental hygiene students with introductory knowledge, skills and attitudes to function in the clinical setting. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 112. Preclinical Dental Hygiene Lab

### 3 Credits (12P)

Clinical application to basic theories and procedures used in dental hygiene practice. Techniques of instrumentation used in performing diagnostic, preventive and therapeutic services utilized when providing comprehensive patient care. Student will practice these techniques on manikins and student partners in the clinic. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 114. Oral Histology and Embryology

### 2 Credits (2)

Introduction and description of general histology and embryology with emphasis on the microscopic structures of enamel, dentin, pulp, cementum, periodontal ligament, bone, oral mucosa, epithelial attachment and development of orofacial structures. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 116. Head and Neck Anatomy

### 3 Credits (3)

Comprehensive study of the anatomy of the head and neck regions, including skeletal, nervous, circulatory, lymphatic, and muscular systems. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 117. Dental Anatomy

### 2 Credits (2+1P)

A detailed study of nomenclature, morphologic characteristics, and physiologic relationships of human primary and permanent teeth as related to the clinical practice of dental hygiene. Laboratory activities develop observation and dexterity skills. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 118. Dental Radiology

### 4 Credits (3+1P)

Study of radiation physics, hygiene and safety theories. Fundamentals of oral radiographic techniques and interpretation of radiographs. Includes exposure of intra-oral radiographs, quality assurance, radiographic interpretation, patient selection criteria, ancillary radiographic techniques and application to dental hygiene treatment. Restricted to Community College campuses.

### Learning Outcomes

1. Explain the basic principles and concepts of radiation in general and x-radiation in particular.
2. Identify the component parts and workings of the dental x-ray machine and the production of x-rays.
3. Discuss the effects of ionizing radiation on living tissues including protective and recommended health and safety factors.

4. Use appropriate procedures for selecting films and exposure factors and for processing and evaluating radiographs in the production of quality radiographs.
5. Recognize the characteristics of an acceptable x-ray image, the factors that influence the image, and the importance of quality assurance in imaging.
6. Analyze the legal issues related to dental radiography and the role of the dental radiographer in patient education and patient relations.
7. Demonstrate effective patient management techniques for intraoral and extraoral radiographs, panoramic and alternate imaging modalities utilized in dental radiography.
8. Demonstrate competency in radiographic interpretation including normal radiographic landmarks and radiographic pathology.
9. Demonstrate the radiographic techniques of interproximal, paralleling, bisection, panoramic and occlusal radiography which meet SJC standards for acceptable radiographs. 1
10. Demonstrate acceptable radiographic processing, film duplication, evaluation of radiographs, and radiographic equipment maintenance utilizing radiation safety and infection control protocols.

## DHYG 120. Dental Hygiene Theory I

### 3 Credits (3)

Continuation of the theoretical basis for dental hygiene clinical practice. Emphasis on emergency care, planning dental hygiene care, health promotion and disease prevention, oral rehabilitation and care of appliances, modifications of dental hygiene care through the life-span, and an introduction to medically comprised patients. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 122. Clinical Dental Hygiene I

### 3 Credits (16P)

Application of dental hygiene procedures on a variety of clinical patients under direct supervision of faculty. Emphasis on patient assessment and diagnosis, treatment procedures, appointment planning and prevention techniques. Theory is simultaneously related to practical experience. Offered concurrently with DHYG 120. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 124. General and Oral Pathology

### 3 Credits (3)

Introduction to general pathology with focused study of diseases and disorders of the oral cavity and their interrelationship with body systems; developmental anomalies of the teeth and jaws; manifestations of disease in the oral cavity, head and neck. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 126. Periodontology

### 3 Credits (3)

Study of normal and diseased periodontium to include the structural, functional and environmental factors. Emphasis on etiology, pathology, evaluation of disease, treatment modalities, and therapeutic and preventative periodontics relative to the hygienist's role as a co-therapist in a contemporary practice setting. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

## DHYG 132. Clinical Dental Hygiene II

### 2 Credits (2)

Continuation of clinical skills, patient assessment and diagnosis, treatment and appointment planning, preventive techniques and

application of dental hygiene procedures at an intermediate level under the direct supervision of faculty. Clinical-based instruction helps students synthesize new knowledge, apply previous knowledge, and gain experience managing the workflow. Theory is simultaneously related to practical experience. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** "C" or above in DHYG 120, DHYG 122, DHYG 124, DHYG 126, DHYG 134.

**Corequisite(s):** DHYG 218.

#### **DHYG 134. Dental Materials**

##### **3 Credits (2+1P)**

Study of the composition, chemical and physical properties, manipulations, and uses of dental materials. Emphasis on materials and procedures for which the dental hygienist is directly responsible. Laboratory experiences include application and manipulation of various materials used in dentistry. Restricted to Community College Campuses only. May be repeated up to 3 credits.

##### **Learning Outcomes**

1. Recognize general rules for handling dental materials.
2. Recognize and identify materials science and dentistry.
3. Implement proper infection control and safety in the dental office.
4. Recognize the properties and uses of impression materials.
5. Demonstrate proper disinfection of impressions, dentures and other appliances and materials.
6. Understand the process and demonstrate the technique for taking of alginate impressions and elastomeric impressions.
7. Recognize the properties and demonstrate the use of gypsum materials.
8. Demonstrate the fabrication and trimming of study models.
9. Recognize the properties and demonstrate the use of Adhesive materials, Direct polymeric restorative materials, Amalgam and other direct metallic restorative materials, Polishing materials and abrasion, and Dental cements. 1
10. Demonstrate the steps for fabricating and delivery protocol of an oral appliance. 1
11. Recognize and apply the concepts of vital tooth whitening.

#### **DHYG 210. Dental Hygiene Theory III**

##### **2 Credits (2)**

Advanced theory of dental hygiene and information on periodontal therapies relative to the hygienist's role as a co-therapist in clinical practice. Continuation of the study of dental hygiene care for medically compromised patients and an introduction to special needs patients. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 212. Clinical Dental Hygiene III**

##### **4 Credits (16P)**

Continuation of clinical skills, patient assessment and diagnosis, treatment and appointment planning, preventive techniques and applications of dental hygiene procedures at the intermediate to competent level under supervision of faculty. Emphasis on dental hygiene treatment for the medically compromised and periodontally involved patients. Theory is simultaneously related to practical experience. Offered concurrently with DHYG 210. May be repeated up to 4 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 214. Dental Pharmacology**

##### **3 Credits (3)**

Study of the pharmacologic aspects of drugs and drug groups with which the dentist and dental hygienist are directly and indirectly concerned.

Emphasis is placed on nomenclature, origin, physical and chemical properties, preparation, modes of administration and effects of drugs upon the body systems. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 215. Medical and Dental Emergencies**

##### **2 Credits (2)**

This course provides an overview of medical and dental emergencies encountered most frequently in the dental setting. It also provides the student with knowledge and techniques on how to address those emergencies should they occur. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 217. Research Methodology**

##### **2 Credits (2)**

This course provides an introduction to the principles and application of research methods in social, behavioral and medical research. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 218. Pain and Anxiety Management**

##### **2 Credits (2)**

Study of the application of various physical, chemical, and psychological modalities to the prevention and treatment of preoperative and postoperative patient anxiety and pain. Emphasis on administration of local anesthesia and nitrous oxide. May be repeated up to 2 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 219. Pain and Anxiety Management Clinical**

##### **1 Credit (4P)**

Clinical application of concepts learned in DHYG 218. Emphasis on the administration and techniques of local anesthesia and monitoring nitrous oxide. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

**Prerequisite(s):** DHYG 218.

#### **DHYG 220. Dental Hygiene Theory IV**

##### **3 Credits (3)**

Theoretical preparation for advanced clinical practice. In-depth study of dental hygiene care for patients with special needs. Case Study presentations and a Board Review are utilized to demonstrate the synthesis of comprehensive dental hygiene knowledge, skills and attitudes. The most current dental and dental hygiene technology will be reviewed as it related to clinical practice. May be repeated up to 3 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 222. Clinical Dental Hygiene IV**

##### **4 Credits (16P)**

Clinical sessions combine basic and advanced dental hygiene skills with time management techniques essential for private practice. Comprehensive patient care to include assessment, dental hygiene diagnosis, treatment planning, implementation and evaluation of dental care, nonsurgical periodontal therapy, adjunct clinical procedures, ultrasonic instrumentation, patient management, sealants, and comprehensive programs for control of oral diseases will be emphasized. Theory is simultaneously related to practical experience. Students are encouraged to develop independent decision-making with minimal faculty supervision. May be repeated up to 4 credits. Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

#### **DHYG 224. Principles of Practice**

##### **2 Credits (2)**

Examination of the dental hygienist's role in both traditional and non-traditional employment settings. Career planning, resume preparation and interviewing are practices. An understanding of the law,

professional ethics of dental hygiene and the need for lifelong learning are emphasized. Future roles of the dental hygienist and emerging issues in dental hygiene will be explored. May be repeated up to 2 credits.

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**DHYG 225. Dental Public Health Education**

**3 Credits (3)**

Study of principles and concepts of community public health and dental health education. Emphasis on dental epidemiology and statistical methods, community assessment, educational planning, implementation, and evaluation, scientific review of literature, and classroom presentation.

Restricted to: DHYG majors. Restricted to Community Colleges campuses only.

**DHYG 255. Special Topics in Dental Hygiene**

**1-6 Credits (1-6)**

Study of special topics related to the advanced practice of dental hygiene. May include educational methodology as well as applications in clinical practice, research, or community service. Consent of instructor required. Restricted to: Community Colleges only. Restricted to DHYG majors.