

Virginia Western Community College

DNH 111

Oral Anatomy

Prerequisites

Admission to the Dental Hygiene Program

Course Description

To study the morphology and function of oral structures with emphasis on the primary and permanent dentition, eruption sequence, occlusion, and intra-arch relationships.

Semester Credits: 2

Lecture Hours: 2

Lab/Clinical/Internship Hours: 0

Required Materials

Textbook:

Woelfel's Dental Anatomy. Scheid, Rickne C. and Weiss, Gabriella. 9th Edition. Lippincott
ISBN: 9781496320223

Supplementary Materials:

Course Outcomes

At the completion of this course, the student should be able to:

- Develop a working knowledge of dental terminology
- Apply appropriate terminology to dental hygiene practice
- Utilize knowledge of the morphologic characteristics of the permanent and primary dentitions, occlusion, and temporomandibular joint (TMJ) to plan treatment and provide appropriate oral hygiene education to clients
- Recognize the role of intra-arch relationships in the maintenance of oral health
- Apply knowledge of the morphologic characteristics of permanent and primary dentitions to correctly chart the dentition of clients
- Apply and integrate knowledge gained in this course to other dental hygiene courses

Topical Description

I. Introduction to Oral Anatomy – Weeks 1 & 2

- Tooth identification systems
- Terminology
- Protective features

II. Primary and Mixed Dentition – Week 3

- Definitions
- Functions
- Development
 - Crown and root development
 - Eruption sequence for primary and secondary teeth
 - Crown and root traits of primary anterior teeth
 - Crown and root traits of primary posterior teeth
- Type Traits
 - Primary incisors
 - Primary canines
 - Primary molars

III. Morphology of Permanent Incisors – Weeks 4 & 5

- Description
- Functions
- Class traits
- Arch traits
- Variations

IV. Morphology of Permanent Canines – Week 6

- Description
- Functions
- Class traits
- Arch traits
- Variations

V. Morphology of Premolars – Week 7

- Description
- Function
- Class traits
- Arch traits
- Type traits
 - Eruption Traits that differentiate maxillary first and second molars
 - Traits that differentiate mandibular first and second molars

VI. Morphology of the Permanent Molars – Weeks 8 & 9

- Description
- Function
- Class traits
- Arch traits
- Type traits
 - Traits that differentiate maxillary first and second molars
 - Traits that differentiate mandibular first and second molars
 - Traits that differentiate maxillary and mandibular third molars

VII. Variations Root Morphology – Week 11

- Shape of pulp cavities
- Root canal configurations
- Clinical Applications
 - Pulp morphology and restorative dentistry
 - Pulp morphology and endodontic therapy
- Ethnic variations

VIII. Functional Occlusion and Malocclusion – Week 12

- Ideal occlusion
- Malocclusions
- Anatomy of the temporomandibular joint (TMJ)
- Jaw relationships between the mandible and maxilla
- Parafunctional movements
- Treatment methods for malocclusion

IX. Dental Anomalies – Week 13

- Anodontia
- Supernumerary teeth
- Abnormal tooth morphology
 - Crown
 - Shape
 - Color
 - Root
 - Position
 - Post eruption changes

X. Wrap-up – Week 15XI. Tooth Identification – Week 16

Note to Instructors