

Virginia Western Community College
DNH 111
Oral Anatomy

Prerequisites

Admission to the Dental Hygiene Program

Course Description

Studies 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

Required Materials

Textbook:

Scheid, Rickne C. and Weiss, Gabriella. *Woelfel's Dental Anatomy* (9^h edition). Lippincott, ISBN: 978-1496320223.

Other Required Materials:

Kilgore International, Anatomically Shaped Teeth 83-305

Course Outcomes

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

1. Develop a working knowledge of dental terminology.
2. Apply appropriate terminology to dental hygiene practice.
3. 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 patients.

4. Recognize the role of intra-arch relationships in the maintenance of oral health.
5. Apply knowledge of the morphologic characteristics of permanent and primary dentitions to correctly chart the dentition of clients.
6. Apply and integrate knowledge gained in this course to other dental hygiene courses.

Topic Description

I. Introduction to Oral Anatomy – WEEKS 1 & 2

- A. Tooth identification systems
- B. Terminology
- C. Protective features

II. Primary and Mixed Dentition – WEEK 3

- A. Definitions
- B. Functions
- C. Development
 - i. Crown and root development
 - ii. Eruption sequence for primary and secondary teeth
 - i. Crown and root traits of primary anterior teeth
 - ii. Crown and root traits of primary posterior teeth
- D. Type Traits
 - i. Primary incisors
 - ii. Primary canines
 - iii. Primary molars

III. Morphology of Permanent Incisors – WEEKS 4 & 5

- A. Description
- B. Functions
- C. Class traits
- D. Arch traits
- E. Variations

IV. Morphology of Permanent Canines – WEEK 6

- A. Description
- B. Functions
- C. Class traits
- D. Arch traits
- E. Variations

V. Morphology of Premolars – WEEK 8

- A. Description
- B. Function
- C. Class traits
- D. Arch traits
- E. Type traits
 - i. Traits that differentiate maxillary first and second molars
 - ii. Traits that differentiate mandibular first and second molars

VI. Morphology of the Permanent Molars – WEEKS 9 & 10

- A. Description
- B. Function
- C. Class traits
- D. Arch traits
- E. Type traits
 - i. Traits that differentiate maxillary first and second molars
 - ii. Traits that differentiate mandibular first and second molars
 - iii. Traits that differentiate maxillary and mandibular third molars

VII. Root Morphology – WEEK 11

- A. Shape of pulp cavities
- B. Root canal configurations
- C. Clinical Applications
 - i. Pulp morphology and restorative dentistry
 - ii. Pulp morphology and endodontic therapy
- D. Ethnic variations

VIII. Dental Anomalies – WEEKS 12

- A. Anodontia
- B. Supernumerary teeth
- C. Abnormal tooth morphology
 - i. Crown
 - a. Shape
 - b. Color
 - ii. Root
 - iii. Position
 - iv. Post eruption changes

IX. Functional Occlusion & Malocclusion – WEEK 13

- A. Ideal occlusion
- B. Malocclusions
- C. Anatomy of the temporomandibular joint (TMJ)
- D. Jaw relationships between the mandible and maxilla
- E. Parafunctional movements
- F. Treatment methods for malocclusion

X. Wrap Up – WEEK 15

XI. Tooth Identification – WEEK 16