

**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 (9th 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**

## Notes to Instructors

None