

Course Outline for: DENH 1112 Oral and Facial Anatomy

#### A. Course Description

1. Number of credits: 3

2. Lecture hours per week: 2 Lab hours per week: 2

3. Prerequisites: Acceptance into the Dental Hygiene program

Corequisites: None
MnTC Goals: None

This course focuses on the study and structure of the head, neck and oral cavity. Topics include, but are not limited to, head and neck anatomy, tooth anatomy, embryology, tooth development, histology of oral structures, and occlusion, as it relates to the practice of dental hygiene. This course also includes practical laboratory exercises.

#### **B. Date Last Reviewed/Updated:** January 2022

### C. Outline of Major Content Areas

- 1. Introduction of the oral cavity and pharynx
- 2. Introduction to head and neck anatomy
- 3. Overview of the dentition, terminology, and functions
- 4. Permanent and primary dentition
- 5. Orofacial embryology
- 6. Odontogenesis, tooth development, and eruption
- 7. Dental anomalies
- 8. Occlusion
- 9. Temporomandibular joint
- 10. Introduction into histology
- 11. Oral mucosa, gingiva, and the periodontium
- 12. Dental tissues
- 13. Osteology and muscles of the head and neck
- 14. Nerves and vasculature of the head and neck
- 15. Glandular tissues of the head and neck
- 16. The lymphatic system and the spread of infection

### **D. Course Learning Outcomes**

Upon successful completion of the course, the student will be able to:

- 1. Utilize accurate dental terminology.
- 2. Relate form to function for each type of tooth.

- 3. Annotate accurately utilizing the Universal, Palmer, and International systems.
- 4. Describe each permanent tooth according to its location, anatomical features, morphology, and function.
- 5. Describe each primary tooth according to location, anatomy, morphology, and function.
- 6. Explain the eruption and exfoliation pattern of primary and permanent teeth.
- 7. Chart accurately permanent, primary and mixed dentitions.
- 8. Recognize and classify conditions of normal and malocclusions.
- 9. Develop understanding of embryology, histology, the development of the orofacial structures.
- Relate developmental disturbances of orofacial structures to occurrences during prenatal development.
- 11. Identify the stages of tooth development and histologic features of odontogenesis.
- 12. Identify tooth anomalies and the corresponding stage of development.
- 13. Demonstrate critical decision-making of the head/neck abnormalities through case studies.
- 14. Explain the histology and function of the four basic types of human tissue.
- 15. Summarize the formation, function, and composition of oral lining, masticatory and specialized tissues.
- 16. Correlate the formation, function, and composition of tissues of the periodontium, enamel, dentin, and pulp.
- 17. Understand newly learned knowledge of the head and neck to relate its significance in dental hygiene clinical application.
- 18. Identify the anatomical landmarks of the oral cavity and pharynx.
- 19. Locate the significant osteology structures of the head and face for clinical application.
- 20. Describe the features and functions of salivary glands and glands of the head and neck.
- 21. Describe the features and functions of the lymphatic system of the head and neck.
- 22. Connect the names and functions of muscles of the head and neck.
- 23. Illustrate the features and physiology of the head and neck vascular system.
- 24. Describe the location, function and significance of the nervous system of the head & neck.
- 25. Relate the spaces and fasciae to the spread of dental infections.
- 26. Describe the anatomy, physiology & possible disorders of the temporomandibular joint.

## E. Methods for Assessing Student Learning

- 1. Lecture and Lab Participation
- 2. Quizzes
- 3. Assignments
- 4. Self-Reflection

# 5. Exams

# F. Special Information

None