

Common Course Outline

DNHY 103

Orofacial Anatomy

2 Credits

The Community College of Baltimore County

Description

DNHY 103 – 2 Credits – Orofacial Anatomy examines the gross anatomy of the anatomical structures of the oral cavity structures, teeth, and of the head and neck, concentrating on their anatomical and functional relationships. Emphasis will be placed on clinical considerations of orofacial development and anatomy relevant to dental hygiene assessment and provision of care.

2 credits; 1 lecture hour and 3 laboratory hours per week

Co-requisites: DNHY 110, DNHY 111, DNHY 112, and DNHY 115

Overall Course Objectives

Upon completion of this course the students will be able to:

1. identify the regions and associated landmarks of the head and neck;
2. describe the bones of the face and skull, the temporomandibular joint (TMJ) and the muscles of mastication, facial expression and the tongue;
3. locate and describe the function of each of the 12 cranial nerves;
4. describe the tissues innervated by each of the nerves;
5. identify by name, describe and locate the arteries and veins of the head and neck;
6. identify and differentiate between the major and minor salivary glands;
7. classify each of the salivary glands according to its types of secretion;
8. locate and identify all the major groups of lymph nodes of the head and neck;
9. identify the patterns of lymph drainage;
10. describe the common techniques of local anesthetic administration;
11. identify and categorize individual teeth according to the morphologic differences observed;
12. describe the function and common traits of deciduous and permanent individual teeth;
13. distinguish maxillary and mandibular dental arch features that contribute to normal anatomical form and function;
14. describe the stages of tooth development, eruption, exfoliation and occlusion and anomalies that may result;
15. identify the eruption dates of the deciduous and permanent dentitions;
16. define line angles, point angles, contact areas and embrasures;
17. describe the interrelationship of individual crown and root morphology;
18. explain the basic principles of occlusion and the variable that play important roles in inter- and intra-arch relationships;

19. identify the steps involved in the embryonic development of the oral cavity, face and nasal septum; and
20. utilize information and knowledge gained from this course in critically analyzing and developing clinical treatment skills.

Major Topics

- I. Head Surface Anatomy
- II. Skull
 - a. Bones of the neurocranium and viscerocranium
 - b. Openings, foramina, and canals
 - c. Maxilla and mandible landmarks
- III. Nose, Nasal Cavity, and Paranasal Sinuses
 - a. Anatomy of nose, nasal cavity and paranasal sinuses
 - b. Function of the nasal cavity, nasal epithelium, and paranasal sinuses
- IV. Head and Neck Muscles and Joint
 - a. Origin, insertion, functions of muscles of mastication, facial expression, tongue and head
 - b. TMJ landmarks and actions
- V. Nervous System of Head and Neck
 - a. 12 cranial nerves
 - b. Functions of cranial nerves
 - c. Trigeminal nerve
 - d. Innervations
- VI. Vascular System of Head and Neck
 - a. Arteries
 - b. Veins
- VII. Glandular Tissue
 - a. Major salivary glands
 - b. Minor salivary glands
- VIII. Lymphatic System
 - a. Major groups of lymph nodes
 - b. Tonsillar tissue
 - c. Lymph drainage
- IX. Intraoral Anatomy
 - a. Vestibule, oral cavity proper, alveolar mucosa
 - b. Floor of the mouth
 - c. Hard and soft palate
- X. Dentition and Tooth Classification
 - a. Primary, mixed and permanent dentition
 - b. Eruption patterns
- XI. Permanent Tooth Morphology
- XII. Primary Tooth Morphology
- XIII. Occlusion

Course Requirements

Grading procedures will be determined by the individual faculty member but will include the following:

Grading/exams: a minimum of two quizzes, minimum of two assessments, three lab evaluations, mid-term examination, and final examination.

Writing: Students are required to utilize appropriate academic resources.

Other Course Information

This course is a required course in the dental hygiene degree program. This course contains a laboratory component. A grade of “C” or better is required for all dental hygiene courses in order to progress within the program.

Revised: May, 2012