DA A100: DENTAL ANATOMY

Item	Value
Curriculum Committee Approval Date	12/02/2020
Top Code	124010 - Dental Assistant
Units	2 Total Units
Hours	36 Total Hours (Lecture Hours 36)
Total Outside of Class Hours	0
Course Credit Status	Credit: Degree Applicable (D)
Material Fee	No
Basic Skills	Not Basic Skills (N)
Repeatable	No
Grading Policy	Standard Letter (S)

Course Description

Anatomical structures of the head and neck. Emphasis on tooth growth, development, and their surrounding structures. Morphology of permanent and primary teeth. Identification of types of occlusions and related terminology. Transfer Credit: CSU.

Course Level Student Learning Outcome(s)

1. Identify and differentiate the normal anatomical structures and landmarks of the head, neck and oral cavity.

Course Objectives

- 1. Differentiate major anatomical structures located within the oral cavity, associated body systems to include the head and neck.
- 2. Distinguish and compare primary and permanent dentitions including the eruption schedules of each.
- 3. Identify anatomical tooth characteristics including the surrounding periodontium and supporting tissues.
- 4. Describe the tooth life cycle including each embryonic stage of development.
- 5. Classify, locate and describe all 32 permanent teeth within the oral cavity.
- 6. Describe and locate all intraoral anatomical landmarks including the tongue and palate.
- 7. Differentiate and identify the bones of the cranium and face.
- 8. Identify and describe the function of muscles of mastication and facial expression.
- 9. Locate and describe the function of all sinuses and glands of the head and neck.
- 10. List and describe occlusion classification as they relate to tooth function.
- 11. Identify and describe the function of the temporomandibular joint.
- 12. Identify and describe the function of the trigeminal and facial nerves.
- 13. Identify the major vessels that supply blood to the head and neck.
- 14. Describe the function of the lymphatic system in the oral cavity.

Lecture Content

Dental Terminology prefixes roots Tooth Morphology primary dentition characteristics of each tooth function permanent dentition characteristics of each tooth function tooth arrangement General Dental Terminology Histology of Tooth Tissues phases developmental time sequences Life Cycle of Tooth Initiation growth calcification eruption attrition Eruption of Teeth eruption cycles primary dentition permanent dentition Tooth Tissues enamel dentin cementum pulp Supporting Tooth Structures periodontium alveolar gingivae Oral Cavity Including Vestibule hard palate soft palate rugae oral mucosa frenums uvula tonsils lips Glands and Ducts parotid submaxillary sublingual minor glands function and location Sinuses maxillary frontal sphenoid ethmoid function and location Tongue parts taste buds circumvallate foliate fungiform filiform Skeletal Head and Neck Cranial bones facial bones hyoid bone > Growth Pattern cranial bones mandible Landmarks Facial landmarks head oral cavity internal external Muscles of Mastication location origin insertion function Muscles of Facial Expression location origin insertion function Temporomandibular Joint parts of joint function dysfunction Angles Classification of occlusion Class I Class II Class III Terminology overjet overbite crossbite end to end Trigeminal Nerve branches areas innervated relationship to anesthesia Facial Nerve branches areas innervated Blood Supply Head arteries oral cavity veins oral cavity Lymphatic Vessels as They Relate to Oral Cavity location function dysfunction Respiratory System as it Relates to Oral Cavity pharynx larynx trachea nares

Method(s) of Instruction

- Lecture (02)
- DE Live Online Lecture (02S)

Instructional Techniques

Lecture/discussion Textbook and supplemental sheets Demonstrations Visual aids, models, etc. Overhead transparencies, slides, etc.

Reading Assignments

Assigned textbook chapter readings.

Writing Assignments

Proficiency will be demonstrated with exams/quizzes using multiple choice, matching, short answer, diagram identification, practical identification. In addition, homework and written assignments will be given.

Out-of-class Assignments

Weekly workbook assignments to supplement lecture material presented.

Demonstration of Critical Thinking

1. Knowledge of dental anatomy will be evaluated by periodic quizzes, midterm and final examination. A composite total score of 72% (or C) accuracy or better is necessary to pass the course.2. Levels of testing: Testing will include multiple choice, written short answer, completion type questions. This will require the student to demonstrate: a. Memory: Both total recall and recognition of information are necessary. b. Interpretation: The student must define and use nomenclature particular to subject area. c. Analysis and Synthesis: From the comprehensive information provided the student will be able to relate appropriate information to specific tasks. d. Application: The student must demonstrate the acquisition and application of knowledge with a paper and pencil list. e. Other Methods of Evaluation: cognitive testing, multiple choice, matching, short answer, diagram identification, practical identification, attendance, homework, tests, written assignments.

Required Writing, Problem Solving, Skills Demonstration

Proficiency will be demonstrated with exams/quizzes using multiple choice, matching, short answer, diagram identification, practical identification. In addition, homework and written assignments will be given.

Textbooks Resources

1. Required Bird, Doni and Robinson, Debbie. . Modern Dental Assisting , Latest ed. Missouri: : Elsevier Saunders,, 2015 2. Required Bird, Doni and Robinson, Debbie . Modern Dental Assisting Student Workbook , Latest ed. Missouri: Elsevier Saunders, 2015

Other Resources

1. Dental Assisting 100 Student Handbook, OCC Reprographics.