COMMON COURSE OUTLINE: Course discipline/number/title: DA 1210: Dental Science I

A. CATALOG DESCRIPTION
1. Credits: 3
2. Hours/Week: 2 hours lecture, 2 hours lab
3. Prerequisites (Course discipline/number): DA Program admission
4. Co-requisites (Course discipline/number): None
5. MnTC Goals (if any): NA

This course covers anatomy and physiology of the teeth, the oral structures, and structures of the head and neck. Emphasis will be given to their anatomical parts, shape and form, clinical characteristics, development, and physiology. This course provides the student with foundation information required to effectively communicate and perform in a dental setting.

This course is a prerequisite to all clinical courses in dental assisting and a prerequisite to DA 1250, Dental Science II.

B. DATE LAST REVISED (Month, year): April, 2012

C. OUTLINE OF MAJOR CONTENT AREAS:
1. Dentitions, Teeth and Eruption
2. Structures of the Oral Cavity
3. Tooth Surfaces, Anatomical Parts of the Tooth, Line Angles and Pit Angles, Tooth Divisions
4. Tooth Tissues (Histology)
5. Periodontium
6. Tooth Numbering Systems
7. Crown Elevations
8. Crown Depressions
9. Tooth Morphology
10. Occlusion
11. Functional Tooth Form
12. Dental Development
13. Bones of the Skull
14. The Maxillae
15. The Mandible
16. The TMJ, Hyoid Bone, and the Tongue
17. Muscles of Mastication, Facial Expression, Floor of Mouth, Soft Palate, and Neck
18. The Sinuses
19. The Salivary Glands
20. The Lymphatic Supply to the Head and Neck
21. Nerve Supply to the Head and Neck
22. Blood Supply to the Head and Neck

D. LEARNING OUTCOMES (GENERAL): The student will be able to:
1. Define dental anatomy terms.
2. Describe the deciduous and permanent dentitions.
3. Describe the dental eruption, resorption, and exfoliation.
4. Identify tooth eruption order.
5. Describe oral cavity structures and functions.
7. Locate tooth surfaces.
8. Locate anatomical tooth parts.
9. Identify tooth/root one third divisions.
10. Name tooth line/point angles.
11. Describe tooth tissues structure and function.
12. Describe periodontium structure and function.
14. Name teeth using the Universal, Palmer and International numbering systems.
D. LEARNING OUTCOMES (General): Continued...

15. Identify crown elevations.
16. Identify crown depressions.
17. Examine crown elevations/depressions.
18. Describe permanent incisor's morphology.
19. Describe permanent canine's morphology.
20. Describe permanent premolar's morphology.
21. Describe permanent molar's morphology.
22. Identify individual teeth.
23. Compare and contrast permanent and deciduous tooth morphology.
24. Define terms related to occlusion.
25. Describe the classifications of occlusion.
26. Describe occlusion and tooth position deviations.
27. Examine patient's occlusion.
29. Examine tooth and arch functional form.
30. Define dental development terms.
31. Describe facial development and anomalies.
32. Describe palatal development and anomalies.
33. Describe tooth development.
34. Describe tooth development anomalies.
35. Locate facial surface landmarks and anatomical areas.
36. Describe skull structure and function.
37. Locate skull bones.
38. Describe maxillae structure and function.
39. Locate maxillae anatomical areas.
40. Describe mandible structure and function.
41. Locate mandibular anatomical areas.
42. Describe temporomandibular joint structure and function.
43. Describe tongue and hyoid bone structure and function.
44. Identify muscles or the oral cavity, face, floor of mouth, soft palate, and neck.
45. Describe the function of oral/facial muscles.
46. Describe salivary gland structure and function.
47. Describe paranasal/sinus structure and function.
48. Describe the function and structure of the lymphatic system in the head and neck.
49. Describe trigeminal nerve structure and function.
50. Identify nerve innovation to specific teeth and oral structures.
51. Describe facial/glossopharyngeal/hypoglossal nerve supply.
52. Describe blood supply and drainage to the head.
53. Identify arterial supply to the teeth and oral structures.
54. Describe venous drainage of the teeth and oral structures.

E. LEARNING OUTCOMES (MNTC): NA

F. METHODS FOR EVALUATION OF STUDENT LEARNING:
1. Weekly written quizzes.
2. Practical identification quizzes.
3. Tooth numbering system quizzes.
4. Written Final Exam
5. Practical identification final exam.
6. Attendance

G. RCTC CORE OUTCOME(S) ADDRESSED:
☐ Communication  ☑ Civic Responsibility
☒ Critical Thinking  ☐ Personal/Professional Accountability
☐ Global Awareness/Diversity  ☐ Aesthetic Response
H. SPECIAL INFORMATION (if any):
1. Immunizations up to date
2. Hepatitis B Vaccine
3. Satisfactory physical assessment
4. Acceptable state and national background studies
5. Students must comply with all RCTC Dental Assistant Program Dental Clinic/Lab Policies and Protocols. (i.e. Infection Control and Hazards Management Protocols and Clinic Dress and Etiquette Protocols)