

# Dakota County Technical College

## DENT 1100: Dental Science

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 4

Lab Hours/Week: \*.\*

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course provides an overview of basic normal body structure and function including an understanding of the common disease process. Special attention will be given to a comprehensive overview of the oral anatomical structures, functions, and development of the oral cavity, as well as the identification of structures of the head and neck and their functions. Prerequisites: Admission to Dental Assisting Program

**B. COURSE EFFECTIVE DATES:** 02/12/1998 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

**D. LEARNING OUTCOMES (General)**

1. Submit all assignments within the time frame allowed
2. Be aware of the ethical ramifications of an online class
3. Finish this online class with integrity and ethical awareness
4. Define anatomy and physiology
5. Define body directional terms
6. Describe anatomic position
7. Describe anatomic body locations
8. Explain the different body planes
9. Explain the human organism and cell components
10. Identify the basic systems of the body as they relate to dentistry
11. Describe muscle functions
12. Describe joint movements
13. Describe skeletal functions
14. Differentiate between compact bone and cancellous bone
15. Describe cardiac structure function
16. Describe central nervous system functions
17. Describe circulation
18. Describe digestive system functions
19. Describe organs/systems
20. Distinguish between the muscles of mastication and the muscles of facial expression
21. Identify the major veins and arteries of the face and mouth
22. Describe the embryonic development of the palate
23. Describe the resorption process involved in exfoliation
24. Describe types and structures of papilla located on the tongue
25. Differentiate the function and placement of primary and secondary cementum
26. Identify the major sources of innervation of the teeth and oral cavity
27. Define the anatomical features of the permanent dentition
28. Identify the bones and major anatomical landmarks of the skull
29. Identify the components of the pulp
30. Identify the correct division into thirds of a tooth
31. Identify the facial bones and landmarks
32. Compare the eruption dates of permanent and primary teeth
33. Describe respiratory functions
34. Describe the glide and hinge action of the temporomandibular joint
35. Identify the four classes of teeth describing design and function
36. Identify the major anatomic landmarks of the oral cavity
37. List the maxillary/mandibular 2nd premolar characteristics
38. Describe the characteristics of the maxillary/mandibular 1st premolar characteristics
39. Identify the location of soft tissue structures of the oral cavity
40. List maxillary/mandibular 1st molar characteristics
41. List maxillary/mandibular 1st premolar characteristics
42. List the maxillary/mandibular central incisor characteristics
43. List the maxillary/mandibular lateral incisor characteristics
44. List the maxillary/mandibular 2nd molar characteristics

45. Determine the universal numbering system for the permanent dentition
46. Determine the universal numbering system for the primary dentition
47. Identify the number and types of teeth in the primary and permanent dentition
48. Identify the parts, function, structure and disorders of the gingiva and the periodontal ligament
49. Label diagrams of the tongue and the oral cavity
50. List the maxillary/mandibular 3rd molar characteristics
51. Define landmarks in the floor of the mouth
52. Define landmarks in the hard and soft palate
53. Define the function of epithelium and name the various types
54. Describe the boundaries of the oral cavity
55. Describe the normal tissue from the abnormal in the oral cavity
56. Identify the structures of the hard palate
57. Identify the various stages of dental development both in utero and after birth
58. Indicate the functions of the salivary glands
59. Label and describe the major salivary glands
60. Label diagrams showing the bones and muscles of the skull
61. List the component parts of the periodontium
62. List the stages of tooth development and describe what happens in each stage

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted