



BAKER COLLEGE

STUDENT LEARNING OUTCOMES

DHY 1110 Oral Anatomy and Histology
4 Semester Hours

Student Learning Outcomes

1. Define embryology and histology.
2. Classify the four basic tissues in the body, and give an example of each in the body.
3. Classify cell organelles according to their functions.
4. Classify and describe various types of epithelia.
5. Identify locations in the body where various types of epithelia are found.
6. List and describe various types of connective tissue.
7. Name, describe and give examples of the three types of muscle tissue found in the body.
8. Describe neurons, and describe how the nervous system communicates messages in the body.
9. Describe the development of a human baby from fertilization to the blastocyst stage.
10. Classify the tissues of the embryonic disc and the various tissues derived from each.
11. Differentiate between the names and lengths of the three intrauterine periods of life.
12. Analyze the embryonic period of maxillofacial development.
13. Define stomodeum and buccopharyngeal membrane.
14. Analyze the development of the palate.
15. Analyze the development of the face.
16. Identify the processes involved with cleft lip and palate.
17. Define Rathke's pouch.
18. Define dental lamina, and discuss its role in tooth formation.
19. Classify the bud, cap and bell stages of tooth development, and identify the various cells and layers associated with each.
20. Organize the mature tissues derived from the enamel organ, dental papilla, and dental sac.
21. Describe the composition of enamel.
22. Identify and describe the anatomical features of enamel.
23. Compare and contrast different abnormalities of enamel.
24. Analyze the composition of dentin.
25. Differentiate between the three distinct areas of dentin.
26. Compare the formation of primary, secondary and reparative dentin.
27. Differentiate between the common abnormalities in dentin.
28. Analyze the composition of the pulp.
29. Define, and describe the function of the histological components of the pulp.
30. Appraise the relationship between the cementum and enamel.
31. Assess the composition of cementum.
32. Assess the function of cementum.

33. Differentiate between cellular and acellular cementum.
34. Define the histological terms associated with cementum.
35. Compare the components of the periodontium, and describe the characteristics of each.
36. Analyze the functions of the periodontal ligament.
37. Define the histological terms associated with the periodontal ligament.
38. Identify the functions of the principal fibers of the PDL.
39. Assess bone remodeling in tooth movement and tooth loss.
40. Compare and contrast the stages of tooth eruption.
41. List the primary and permanent teeth in the proper eruption sequence.
42. Define ankylosis.
43. Differentiate between masticatory, lining and specialized mucosa, and give examples of each.
44. Differentiate the clinical and histological appearance of healthy and inflamed gingiva.
45. Analyze the histology and anatomy of the gingiva.
46. Define submucosa, and identify its locations in the oral cavity.
47. Analyze the embryonic development of the tongue.
48. Identify the four types of tongue papillae, and list the characteristics of each.
49. Differentiate between serous and mucous saliva.
50. Define acini and myoepithelial cell.
51. Describe types of ducts associated with saliva glands.
52. Differentiate among the three pairs of major saliva glands, and list the characteristics of each.
53. Describe the boundaries of the oral cavity.
54. Evaluate all structures within the oral cavity.
55. Differentiate the tissues that compose the teeth.
56. Differentiate single, bifurcated, and trifurcated teeth by their name and location.
57. Assess the functions of teeth.
58. Assess the importance of the shape and the size of teeth.
59. Demonstrate the ability to differentiate between primary, secondary, and mixed dentitions.
60. Code teeth, using the Universal, FDI, and the Palmer Notation Systems.
61. Identify the lobes of teeth.
62. Demonstrate the ability to recognize and analyze the eruption patterns of deciduous and permanent dentitions.
63. Demonstrate the ability to recognize and analyze implications of mesial drift, root resorption, exfoliation, impacted teeth, congenitally missing teeth, attrition, occlusal plane, and Curve of Spee.
64. Describe the factors that lead to a retained primary tooth.
65. Demonstrate the ability to classify a dentition according to alignment relationships and the Angle's system of classification.
66. Assess the periodontium (gingiva, alveolar mucosa, cementum, alveolar bone, and periodontal ligament) differentiating each component for appearance, function, location, and relationship to each other.
67. Analyze how occlusal trauma, shape, and contour of teeth can contribute to dental disease.
68. Identify specific teeth by name, number, and location.
69. Practice teamwork activities related to the laboratory assignments.

70. Model professional behavior and etiquette throughout partner treatment.
 71. Analyze two recent histology professional journal articles in relation to their significance to a practicing dental hygienist.
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These SLOs are not approved for experiential credit.

Effective: Fall 2017