

DHYG 110-HEAD AND NECK ANATOMY 3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

A study of anatomy and physiology of the head and neck region with an emphasis on the oral cavity.

Prerequisites: Admission into the Dental Hygiene Program

Semester Offered: Fall

Common Student Learning Outcomes

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the Associate School.

Course Goals

Upon completion of this course, the student will be able to correctly identify the major structures of the head and neck as evidenced by a 75% or higher accuracy on learning assessments.

Course Learning Outcomes

Upon successful completion of the course, the student will be able to...

1. Discuss the clinical applications of the study of head and neck anatomy by dental professionals.
2. Apply the correct anatomical nomenclature during the study of head and neck anatomy,
3. Discuss normal anatomical variation and how it applies to different structures in the head and neck.
4. Discuss the anatomical considerations for patient examination and dental radiology of the head and neck region.
5. Locate and identify the regions and associated surface landmarks of the head and neck on a diagram.
6. Locate and identify the specific anatomical landmarks of the TMJ on a diagram and skull.
7. Describe the movements of the TMJ and their relationship to the muscles in the head and neck region.
8. Discuss the disorders of the TMJ.
9. Integrate the knowledge about the anatomy of the TMJ into the examination of the joint for disorder.
10. Identify and trace the routes of the blood vessels of the head and neck on a diagram and skull.
11. Discuss the types of lesions that can occur with blood vessels in the head and neck region.
12. Integrate the knowledge about the head and neck blood supply into clinical practice when a vascular problem is present, especially from a local anesthetic injection or during the spread of infection or cancerous cells by the blood.
13. Discuss the process of mastication, speech, and swallowing in regard to anatomical considerations.
14. Integrate the knowledge about the muscles of the head and neck into the clinical practice of patient examination and related muscular diseases.
15. Locate and identify the muscles of the head and neck on a diagram and skull.
16. Describe the origin, insertion, and action of the muscles of the head and neck.
17. State the nerve (s) innervating each of the muscles of the head and neck.
18. Locate and identify the bones of the head and neck and their landmarks on a diagram and skull.
19. Describe in detail the various parts and landmarks of the maxilla and mandible.
20. Discuss certain abnormalities of the bone.
21. Integrate the knowledge about the bones into the overall study of the head and neck anatomy.
22. Discuss the spread of infection to the sinuses and by the blood system, lymphatics, and spaces to other areas in the head and neck region.
23. Trace the routes of the spread of dental infection in the head and neck region on a diagram and skull.
24. Discuss the lesions and complications that can occur with the spread of dental infection in the head and neck region.
25. Discuss the prevention of the spread of dental infection during patient care.
26. Integrate the knowledge of the spread of dental infection into the ability to prevent and manage the spread of dental infection.
27. Locate and identify all the glandular tissue and associated structure in the head and neck region on diagram and skull.
28. Integrate the knowledge about the head and neck glands during clinical practice when these glands may be involved in a disease process.
29. Describe the component of the nervous system and outline the actions of nerves.
30. Discuss in general the major divisions of the central and peripheral nervous systems.
31. Identify and trace the routes of the cranial nerves from the skull on a series of diagrams.
32. Briefly discuss the general function of each of the cranial nerves.
33. Identify and trace the routes of the nerves to the oral cavity and associated structures of the head and neck on diagram and skull.
34. Describe the tissues innervated by each of the nerves of the head and neck.
35. Discuss certain nerve lesions associated with the head and neck region.

36. Integrate the knowledge about the head and neck nerves into the functioning region's muscles, joints, and glands, the concepts of pain management with local anesthesia, and also the related nervous system disorders.
37. List the tissues anesthetized by each type of injection and describe the target areas.
38. Locate and identify the anatomical structures used to determine the local anesthetic needle's penetration site for each type of injection on a skull.
39. Demonstrate the correct placement of the local anesthetic needle for each type of injection on a skull.
40. Identify the correct depth and tissues penetrated by the local anesthetic needle for each type of injection.
41. Discuss the complications of local anesthesia of the oral cavity associated with anatomical considerations for each type of injection.
42. Integrate the knowledge about the nerves into the administration of local anesthesia and control of pain during the dental procedure.
43. Discuss and list the lymphatic system and its components.
44. Locate and identify all the major groups of lymph nodes of the head and neck on a diagram.
45. Locate and identify all the tonsillar tissues of the head and neck on a diagram.
46. Identify the patterns of lymph drainage for each head and neck tissue or region.
47. Describe and discuss lymphadenopathy of lymphoid tissue.
48. Discuss the spread of cancer in the head and neck region and its relationship to lymph nodes.