



Western Technical College

31508304 Dental & General Anatomy

Course Outcome Summary

Course Information

Description	Prepares dental assistant students to apply fundamentals of general and dental anatomy to informed decision-making and to professional communication with colleagues and patients.
Career Cluster	Health Science
Instructional Level	Technical Diploma Courses
Total Credits	2
Total Hours	72

Textbooks

Dental Assisting: Comprehensive Approach. 6th Edition. Copyright 2022. Singahl, Vaishali, Susan Kantz, Melissa Damatta, Donna Phinney, and Judy Halstaed. Publisher: Cengage Learning. **ISBN-13:** 978-0-357-45652-1. Required.

508-304 Dental and General Anatomy Course Manual. Western. Publisher: Western. **ISBN-13:** 979-8-822-72033-6. Required.

Learner Supplies

Budget Life-Size Skull (CS20). Anatomical Chart Company. Publisher: Lippincott. **ISBN-13:** 878-0-003-18591-2. Required.

Dental Typodont (D95SDP-200-GUB). Kilgore International, Inc. **ISBN-13:** 878-0-003-18553-0. Required.

Success Abilities

1. Live Responsibly: Foster Accountability
2. Refine Professionalism: Improve Critical Thinking
3. Refine Professionalism: Participate Collaboratively
4. Refine Professionalism: Practice Effective Communication

Program Outcomes

1. DA-1 year: Demonstrate professional behaviors, ethics, and appearance

Course Competencies

1. Apply descriptive, anatomical, physiological, and directional terminology to the human body and its organization.

Assessment Strategies

- 1.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 1.1. you use accurate anatomical terminology for the anatomical position.
- 1.2. you use accurate directional terminology for the anatomical position.
- 1.3. you accurately describe location, structure, and function of body cavities and linings.
- 1.4. you accurately identify body planes, sections, and regions.

Learning Objectives

- 1.a. Distinguish between anatomy and physiology.
- 1.b. Describe the anatomical position.
- 1.c. Define terms related to organization of the human body.
- 1.d. Describe the body planes and directions.
- 1.e. Identify the major body cavities.
- 1.f. Compare the axial and appendicular regions of the body.

2. Compare primary tissue types of the body.

Assessment Strategies

- 2.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 2.1. you include all of the significant items to classify.
- 2.2. you categorize using significant characteristics.
- 2.3. you correctly categorize tissue types.
- 2.4. you use correct terminology for body tissue types.

Learning Objectives

- 2.a. Name the four main groups of tissue in the human body.
- 2.b. Describe the general function of each main tissue group.
- 2.c. Identify the areas of the body where each tissue may be found.

3. Illustrate the relationship among body systems and functions.

Assessment Strategies

- 3.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 3.1. you link the body system and its function.

- 3.2. you describe the pathologies associated with each body system.
- 3.3. you identify the main components of each body system.

Learning Objectives

- 3.a. Identify the ten body systems.
- 3.b. Explain the purpose and function of each body system.
- 3.c. Describe the components of each body system.
- 3.d. Describe the common disorders related to each body system.

4. Identify the anatomical components of the head and neck according to their structure and functions.

Assessment Strategies

- 4.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 4.1. you identify the bones of the cranium and face.
- 4.2. you identify the major muscles of head and neck.
- 4.3. you trace the routes of the blood from the heart to the teeth and back to the heart.
- 4.4. you identify and locate major salivary glands.
- 4.5. you identify and locate the divisions of the trigeminal and facial nerves.
- 4.6. you identify the bones and landmarks that make up the temporomandibular joint.

Learning Objectives

- 4.a. Identify the bones of the cranium and the face.
- 4.b. Describe the landmarks of the face and oral cavity.
- 4.c. Explain the location and function of the muscles of the head and neck.
- 4.d. Describe the action of the temporomandibular joint.
- 4.e. Identify the location of the major and minor salivary glands.
- 4.f. Explain the location and function of the nerves of the maxilla and mandible.
- 4.g. Identify the arteries and veins of the head and neck.

5. Characterize the structures of the oral cavity.

Assessment Strategies

- 5.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 5.1. you identify external oral cavity structures.
- 5.2. you identify internal oral cavity structures.

Learning Objectives

- 5.a. Use dental terminology related to characterizing dental structures appropriately.
- 5.b. Identify and define the external structures of the oral cavity.
- 5.c. Identify and define the internal structures of the oral cavity.
- 5.d. Identify each dentition.

6. Classify the types of teeth.

Assessment Strategies

- 6.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 6.1. you identify all of the names of teeth.
- 6.2. you describe the type and function of teeth.
- 6.3. you divide the dentition into arch, quadrant, anterior, and posterior.
- 6.4. you use different numbering system(s) of teeth.
- 6.5. you locate tooth surfaces.

Learning Objectives

- 6.a. Use dental terminology related to characterizing dental structures appropriately.
- 6.b. Compare the primary and permanent dentition.
- 6.c. List the primary teeth and permanent teeth by name and location.
- 6.d. Locate the dentition, arch, quadrant, anterior, and posterior of each dentition.
- 6.e. Describe the function of the teeth.
- 6.f. Identify the parts of the tooth.
- 6.g. Identify the anatomical and clinical crown.
- 6.h. Describe tooth numbering systems as they correlate to specific teeth.
- 6.i. Identify the surfaces of each tooth and their location.

7. Characterize tooth structure.

Assessment Strategies

- 7.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 7.1. you differentiate among tooth structures.
- 7.2. you describe enamel histology.
- 7.3. you describe dentin histology.
- 7.4. you describe cementum histology.
- 7.5. you describe pulp histology.
- 7.6. you describe the external structures of the tooth.
- 7.7. you explain life-cycle of the teeth (including embryology, eruption, exfoliation).
- 7.8. you describe dental developmental anomalies.
- 7.9. you identify classes and factors associated with malocclusion.
- 7.10. you explain eruption and exfoliation sequence

Learning Objectives

- 7.a. Use dental terminology related to characterizing tooth structures appropriately.
- 7.b. Describe tooth morphology.
- 7.c. Differentiate among overbite, overjet, crossbite, open bite, and end to end.
- 7.d. Describe oral histology and embryology and their relationship to the oral cavity.
- 7.e. Identify the tissues of the tooth.
- 7.f. Explain the life cycle of a tooth and identify the stages.
- 7.g. Identify developmental anomalies.
- 7.h. Explain the eruption/exfoliation schedule for the primary and permanent teeth.
- 7.i. Identify developmental anomaly (ie. cleft lip and cleft palate).

8. Characterize the supporting structure of the teeth.

Assessment Strategies

- 8.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 8.1. you identify the supporting structures of the teeth.
- 8.2. you describe properties of the periodontal ligament.
- 8.3. you describe properties of the alveolar process.
- 8.4. you describe properties of the cementum.
- 8.5. you describe structures of the gingiva and oral mucosa.

Learning Objectives

- 8.a. Use dental terminology related to characterizing the supporting structures of the teeth appropriately.
- 8.b. Define the supporting structures of the tooth and their functions.
- 8.c. Recognize the components of the periodontium.

9. Relate oral pathologies to dental health and treatment.

Assessment Strategies

- 9.1. in an oral, written, or graphic assessment

Criteria

You will know you are successful when

- 9.1. you explain how oral pathology impacts treatment.
- 9.2. you describe common pathologies.
- 9.3. you differentiate healthy tissue from unhealthy tissue.
- 9.4. you describe the types of oral lesions.

Learning Objectives

- 9.a. Define oral pathology and identify the dental assistant's role in identifying abnormal conditions.
- 9.b. Characterize the process of inflammation including acute and chronic inflammation.
- 9.c. Identify oral diseases and lesions related to biological agents.
- 9.d. describe oral diseases and lesions related to physical agents.
- 9.e. Identify oral diseases and lesions related to chemical agents.
- 9.f. Identify oral conditions related to hormonal disturbances.
- 9.g. Identify oral conditions related to developmental disturbances.
- 9.h. Distinguish among oral conditions related to nutritional disturbances.
- 9.i. Discuss oral cancer and its warning signs.
- 9.j. Describe the conditions related to miscellaneous disorders affecting the oral cavity.