

CATALOG INFORMATION

Dept and Nbr: DH 70

Title: DENT ANAT & TOOTH MORPH

Full Title: Dental Anatomy and Tooth Morphology

Last Reviewed: 9/11/2023

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.50	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	2.50	Lab Scheduled	2.00	17.5	Lab Scheduled	35.00
		Contact DHR	0		Contact DHR	0
		Contact Total	4.00		Contact Total	70.00
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 140.00

Title 5 Category: AA Degree Applicable

Grading: Grade Only

Repeatability: 00 - Two Repeats if Grade was D, F, NC, or NP

Also Listed As:

Formerly:

Catalog Description:
In this course the student will learn dental terminology, tooth morphology, tooth anomalies, structures of the oral cavity, classification of cavities, occlusion, and visual identification of individual teeth and their anatomic landmarks. Students will perform oral inspection, dental charting, and a proper recording of significant observations.

Prerequisites/Corequisites:
Concurrent Enrollment in DH 71A

Recommended Preparation:

Limits on Enrollment:
Acceptance to the Allied Dental Programs

Schedule of Classes Information:
Description: In this course the student will learn dental terminology, tooth morphology, tooth anomalies, structures of the oral cavity, classification of cavities, occlusion, and visual identification of individual teeth and their anatomic landmarks. Students will perform oral inspection, dental charting, and a proper recording of significant observations. (Grade Only)
Prerequisites/Corequisites: Concurrent Enrollment in DH 71A

Recommended:

Limits on Enrollment: Acceptance to the Allied Dental Programs

Transfer Credit: CSU;

Repeatability: Two Repeats if Grade was D, F, NC, or NP

ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:

AS Degree:	Area	Effective:	Inactive:
CSU GE:	Transfer Area	Effective:	Inactive:
IGETC:	Transfer Area	Effective:	Inactive:
CSU Transfer:	Transferable	Effective: Fall 1999	Inactive:
UC Transfer:		Effective:	Inactive:

CID:

Certificate/Major Applicable:

Major Applicable Course

COURSE CONTENT

Student Learning Outcomes:

At the conclusion of this course, the student should be able to:

1. Demonstrate knowledge pertaining to the permanent and primary dentition, tissues of the teeth, dental anomalies, and descriptive terminology to the clinical practice of dental hygiene.
2. Use their knowledge of dental anatomy and tooth morphology during extra-oral/intra-oral examination and dental restorative charting.

Objectives:

At the conclusion of this course, the student should be able to:

1. Name, describe and locate the anatomy of permanent and primary dentition.
2. Identify and explain the morphologic differences between the primary and permanent dentition.
3. List the eruption and exfoliation sequence of primary dentition and the eruption sequence of permanent dentition.
4. Define the descriptive terminology as related to the maxillary/mandibular arches, teeth, and related structures.
5. Differentiate anomalies of both permanent and primary dentition.
6. Demonstrate the Universal, International Standard Organization (ISO) and Palmer systems of tooth identification.
7. Describe the classification of occlusion and recognize early signs of deviation in deciduous, mixed, and permanent dentitions.
8. Identify the regions of the oral cavity proper, and the head and neck.
9. Chart existing restorations, unsound dentition, missing teeth, impacted teeth, and dental anomalies and conditions.
10. Perform an extra and intraoral exam using correct palpation techniques.

Topics and Scope:

Lecture-Related Topics & Scope:

I. Overview of Dentition*

- A. Tooth types and functions
- B. Tooth tissues
- C. Tooth surfaces
- D. Two types of dentition
- E. Three stages of dentition
- F. Arrangement in the dental arches
- G. Divisions of the dental arches
- H. Fundamental curvatures

II. Tooth Numbering Systems*

- A. Universal
- B. International Standard Organization (ISO)
- C. Palmer

III. Support Structures*

- A. Tissues
- B. Function
- C. Clinical considerations
- D. Attachment apparatus

IV. Development, Eruption and Exfoliation*

- A. Primary dentition
- B. Permanent dentition

V. Tooth Anatomy and Identification

- A. Primary teeth*
- B. Permanent

VI. Occlusion*

- A. Angle's Classifications of Malocclusion
- B. Primary occlusion
- C. Terminology

VII. Dental Anomalies

- A. Intrinsic and extrinsic factors
- B. Developmental, hereditary, and congenital
- C. Types of anomalies

VIII. Dental Charting*

- A. Black's Classification of Caries
- B. Common abbreviations
- C. Recognition of restorations and dental materials
- D. Charting symbols
- E. Caries and risk assessment
- F. Electronic dental charting

IX. Extra and Intraoral Exam*

- A. Identification of structures
- B. Palpation techniques
- C. Assessment methods

X. Clinical Considerations*

- A. Root anatomy
- B. Tooth morphology
- C. Malocclusion
- D. Oral habits
- E. Restorations
- F. Occlusion

*These items are introduced in lecture, and the related skill is performed in the lab

XI. Laboratory Exercises

A. Skill demonstrations

1. Extra and intraoral exam
2. Recognition of oral cavity structures
3. Recognition of Angel's Classification of Malocclusion types and terminology: overjet, overbite, cross bite, labioverted, linguoverted
4. Demonstration of three different types of tooth numbering systems
5. Recognition of tooth types, functions, stages of dentition, primary and permanent dentition, fundamental and preventive curvatures, and anatomical features
6. Recognition of Black's Classification of Caries
7. Exfoliation and eruption dates

B. Problem solving exercises

1. Tooth identification including root anatomy to facilitate instrumentation techniques and instrument choice
2. Oral cavity and anatomical landmark identification to adequately perform extra and intraoral exam
3. Identification of age determined by eruption and exfoliation dates
4. Charting existing restorations, occlusion to perform patient assessment

Assignment:

Lecture-Related Assignments:

1. Reading assessments (20-40 pages per week)
2. Readiness assignments evaluations (5-8)
3. Quizzes (4-8)
4. Midterm exam
5. Final exam

Laboratory-Related Assignments:

1. Evaluations (8-12)
 - A. Skill demonstrations; extra and intraoral exam
 - B. Problem solving; teeth anatomical features and identifications
 - C. Tooth drawings
2. Workbook assignments (4-6)
3. Midterm exam
4. Final exam

Methods of Evaluation/Basis of Grade:

Writing: Assessment tools that demonstrate writing skills and/or require students to select, organize and explain ideas in writing.

None, This is a degree applicable course but assessment tools based on writing are not included because skill demonstrations are more appropriate for this course.

Writing
0 - 0%

Problem Solving: Assessment tools, other than exams, that demonstrate competence in computational or non-computational problem solving skills.

Readiness assessment evaluations

Problem solving
10 - 20%

Skill Demonstrations: All skill-based and physical demonstrations used for assessment purposes including skill performance exams.

Lab evaluations; workbook assignments

Skill Demonstrations
20 - 30%

Exams: All forms of formal testing, other than skill performance exams.

Quizzes; midterm; final

Exams
60 - 70%

Other: Includes any assessment tools that do not logically fit into the above categories.

None

Other Category
0 - 0%

Representative Textbooks and Materials:

Illustrated Dental Embryology, Histology, and Anatomy. 5th ed. Fehrenbach, Margaret and Popowics, Tracy. Elsevier. 2021.

Illustrated Dental Embryology, Histology, and Anatomy (Student Workbook). 5th ed. Fehrenbach, Margaret and Popowics, Tracy. Elsevier. 2021.