

WEST LOS ANGELES COLLEGE
DEPARTMENT OF DENTAL HYGIENE

- I. DH 104: (section #7026) DENTAL MORPHOLOGY
- II. PREPARED BY: Lisa Kamibayashi R.D.H., M.S.D.H.
- III. REVISED FOR: FALL 2015
- IV. PREREQUISITES: ENROLLMENT IN THE DENTAL HYGIENE PROGRAM.
- V. UNITS AND HOURS: TWO UNITS, 110 minute LECTURE/LAB per week
Every Wednesday at 8:00 to 10:05 p.m. for 15 weeks
- VI. COURSE INSTRUCTOR: Lisa Kamibayashi R.D.H., M.S.D.H.
Office: 310-287-4457
Google Voice: 434-571-2647
MrsKamiba@gmail.com
Office hours: Monday 11:00 to 12:00 p.m. and 1:00 to 2:00 p.m.
or by appointment
- VII. COURSE DESCRIPTION:
Through lecture and demonstration, the morphological characteristics of the teeth are presented. Emphasis is on comparative crown and root anatomy and features of morphology and occlusion, which relate to the health of the periodontium.
- VIII. REQUIRED TEXT:

Fehrenbach and Popowics, Illustrated Dental Embryology, Histology and Anatomy, Fourth Edition, Elsevier Saunders, St. Louis Missouri, 2016 ISBN # 978-1-4557-6

Fehrenbach, Student Workbook for Illustrated Dental Embryology, Histology and Anatomy, Fourth Edition, Elsevier Saunders, St. Louis Missouri, 2016 ISBN # 978-1-4577-7645-0

Institutional Student Learning Outcomes

- A. Critical thinking: Analyze problems by differentiating fact from opinions, using evidence, and using sound reasoning to specify multiple solutions and their consequences.
Assessment: Identification of extracted teeth. Case study to analyze and problem solve the issue using dental anatomy knowledge.

Program SLOs Addressed

PLO-III. Patient Care

The students will demonstrate a through foundation in the biomedical, clinical, and behavioral sciences to achieve successful patient treatment outcomes. Student will utilize critical thinking and sound clinical judgment and cultural sensitivity with patients.

Course SLO (This SLOs are 2015 version will be updated for BS degree)	Criterion Level
1. Identify the general characteristics of tooth morphology and the development process behind these structures as well as their clinical function.	At least 80% of students will complete their clay sculpturing and correctly identify and complete at least 75% of the rubric components on this SLO.

2. Apply dental morphology concepts to analyze and problem solves a case study.	At least 80% of the students will achieve 75% of the points or more on this course SLO.
3. Understand dental morphology and apply problem solving strategies and critical thinking to insure comprehensive oral health care for individuals, groups and communities.	At least 80% of students will correctly answer 75% or more of the exam questions.

X. COURSE GOAL:

At the end of the course, the student will be able to make appropriate clinical applications of dental morphology and occlusion, including use of correct terminology, accurate tooth identification, recognition of common variations, knowledge of arch form relationships, and understanding the features of dental morphology which contribute to the health of the periodontium.

COURSE OBJECTIVES

Through knowledge gained in lectures, reading assignments and examination of extracted teeth and study models the student will be able to:

1. Define and accurately use terminology including:

A. Tooth Surfaces	E. Cusp and marginal ridges
B. Height of contour	F. Grooves and fossae
C. Line and point angles	G. Cementoenamel junction
D. Embrasures	
2. Accurately use the universal numbering system and the Palmer notation for both permanent and primary teeth and be aware of the FDI system.
3. Explain a dental formula and give the dental formula for the permanent and primary dentitions.
4. Distinguish between the primary, mixed and permanent dentition periods.
5. Recognize the approximate timing for the eruption of the first primary teeth, completion of the primary dentition, eruption of the first permanent teeth, and end of the mixed dentition period.
6. Describe the function(s) and general features of each class of tooth in the permanent dentition:

A. Incisors	C. Premolars
B. Canines	D. Molars
7. Describe arch and trait differences between each tooth in the permanent dentition.
8. Describe external root anatomy including grooves and furcations for each tooth in the permanent dentition.
9. Know how many root canals are commonly in the roots of each permanent tooth.
10. Identify permanent teeth on the basis of diagrams, extracted specimens, or study models.
11. Identify general differences between the primary and permanent teeth.
12. Describe general features of each tooth in the primary dentition
13. List the requirements for stable and esthetic arch form relationships
14. Define intercuspal position and describe the requirements for ICP stability.
15. Describe relationships between the maxillary and mandibular arches in terms of orthodontic classification.
16. Identify the following orthodontic variables on study models:

- A. Angle class
- B. Overbite
- C. Overjet

17. Recognize the following common dental anomalies and describe the clinical presentation:

- A. Partial anodontia
- B. Supernumerary teeth
- C. Shape variations

18. Distinguish attrition, abrasion, and erosion by etiology and clinical presentation.

19. Understand how the following features of dental anatomy and occlusion relate to the health of the periodontium:

- A. Crown contours
- B. Proximal contacts
- C. Embrasure form
- D. Marginal ridges
- E. Intercuspal position
- F. Arch Form

XI. METHODS OF INSTRUCTION:

Lecture, Drawings, Demonstration, Discussion, Sculpturing

XII. METHODS OF EVALUATION:

Attendance is required. Written exams will be given at regular intervals and will include matching, multiple choice, identification, and short answer type questions.

Exam #1 & #2	30 % (15 % each exam)
Final Exam (Cumulative)	40%
Tooth sculpturing project	20 %
Workbook tooth drawing assignment	10 %

COURSE LETTER GRADE WILL BE BASED ON THE FOLLOWING SCALE:

- 90 - 100% = A
- 80 - 89% = B
- 70 - 79% = C
- 60 - 69% = D
- Below 59% = F

Please bring following items to class every week.

1. Pencil
2. Eraser
3. Ruler
4. Textbook
5. Workbook
6. Typodont
7. Full model teeth
8. Polymer Clay (Sculpey III is the best product. Light Beige color is recommended.)
9. Polymer Clay tool kit (optional)

XIII. COURSE CONTENT OUTLINE
DH 104 DENTAL MORPHOLOGY
 COURSE SCHEDULE - FALL 2015

<u>SESSION</u>	<u>LECTURE TOPIC</u>	<u>ASSIGNED READINGS HOME WORK</u>
1. 9/2	Introduction and Nomenclature	Chapter 15
2. 9/9	Face and Neck Anatomy, Oral Cavity and Pharynx	Chapter 1 & 2
3. 9/16	Occlusion & Arch Form Relationships	Chapter 20
4. 9/23	Exam #1 (Chapter 1, 2, 15 & 20) How to draw a tooth Central Incisors Draw central and lateral incisors	Chapter 16
5. 9/30	Lateral incisors and Canines Draw canines	Chapter 16
6. 10/7	Premolars Draw premolars	Chapter 17
7. 10/14	First molars Draw first molars	Chapter 17
8. 10/21	Second and third molars Draw second molars	Chapter 17
9. 10/28	Root Anatomy	Darby: Chapter 28
10. 11/4	Tooth Sculpturing Project Instruction Review for exam	
11. 11/11	Veteran's Day Holiday	
12. 11/18	Exam #2 (Chapter 16, 17, Darby 28) Primary Dentition Eruption sequence	All the above chapters Chapter 18
13. 11/25	Mrs. Kamibayashi Out of Town	
14. 12/2	Variations in Dental Anatomy	Chapter 6 (some pages)
15. 12/9	Study Model and Tooth Identification Workshop	Tooth sculpture due
16. TBA	Final Examination	