### DA 60 Course Outline as of Summer 2012

## **CATALOG INFORMATION**

Dept and Nbr: DA 60 Title: APPLIED DENTAL SCIENCE Full Title: Applied Dental Science Last Reviewed: 9/23/2024

Units		<b>Course Hours per Week</b>		Nbr of Weeks	<b>Course Hours Total</b>	
Maximum	3.00	Lecture Scheduled	2.00	17.5	Lecture Scheduled	35.00
Minimum	3.00	Lab Scheduled	3.00	17.5	Lab Scheduled	52.50
		Contact DHR	0		Contact DHR	0
		Contact Total	5.00		Contact Total	87.50
		Non-contact DHR	0		Non-contact DHR	0

Total Out of Class Hours: 70.00

Total Student Learning Hours: 157.50

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:	DE 52

### **Catalog Description:**

Dental terminology, basic anatomy of the oral cavity, dental anatomy and physiology, oral embryology and histology, tooth morphology, classifications of cavities and restorations, preliminary oral inspection, charting conditions of the hard and soft tissues.

**Prerequisites/Corequisites:** Course Completion or Current Enrollment in DE 51

**Recommended Preparation:** 

### **Limits on Enrollment:**

Acceptance into an Allied Dental Program

### **Schedule of Classes Information:**

Description: Dental terminology, basic anatomy of the oral cavity, dental anatomy and physiology, oral embryology and histology, tooth morphology, classifications of cavities and restorations, preliminary oral inspection, charting conditions of the hard and soft tissues. (Grade Only)

Prerequisites/Corequisites: Course Completion or Current Enrollment in DE 51 Recommended:

# **ARTICULATION, MAJOR, and CERTIFICATION INFORMATION:**

AS Degree: CSU GE:	Area Transfer Area			Effective: Effective:	Inactive: Inactive:
<b>IGETC:</b>	Transfer Area			Effective:	Inactive:
CSU Transfer:	Transferable	Effective:	Fall 1997	Inactive:	
UC Transfer:		Effective:		Inactive:	

CID:

**Certificate/Major Applicable:** 

Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

Upon completion of this course, the student will be able to:

1. Classify the bones and major anatomic landmarks of the skull.

2. Describe the histology of bone in terms of: cartilage, compact bone, spongy bone and the periosteum.

3. List the structures and describe the action of the temporomandibular joint (TMJ).

4. Identify major muscles of mastication, facial expression, floor of the mouth and extrinsic muscles of the tongue.

5. Name the four pairs of paranasal sinuses and correlate their function and physiology to dental maladies.

- 6. Locate and describe the function of the salivary glands.
- 7. Identify and differentiate the major anatomic landmarks of the oral cavity.
- 8. Locate, and describe different oral tissues.
- 9. Assess the genetic factors that most commonly affect dental development.
- 10. Compare the five stages of development in the growth period of a tooth.
- 11. Describe and assess the characteristics of normal gingival tissue.
- 12. Identify and discuss developmental abnormalities.

13. Identify and differentiate the 4 types of teeth and describe their design, function and landmarks of each type.

14. Compare and examine the dental arches.

15. Utilize the three numbering systems and cavity classifications to chart existing restorations, dental caries, missing teeth and dental anomalies.

16. Compare the primary and permanent dentition in terms of size, shape and number.

- 17. Perform a periodontal charting.
- 18. Describe the embryological development of the teeth, face and oral cavity.

### **Topics and Scope:**

A. Oral Embryology and Development

- 1. Tissue differentiation
- 2. Embryonic development of the face and oral cavity
- 3. Factors influencing prenatal dental development
- 4. Factors influencing primary and permanent dentition
- B. Oral Histology
- 1. Anatomic parts of a tooth
- 2. Periodontium
- C. Tooth Morphology
- 1. Types of teeth
- 2. Maxillary and mandibular arches
- 3. Anatomical features
- 4. Physiology of occlusion
- 5. Primary dentition
- 6. Permanent dentition
- 7. Dental anomalies
- D. Numbering and Charting Systems
- 1. Numbering systems
- 2. Classification of cavities
- 3. Symbols
- 4. Translation from oral examination
- 5. Periodontal charting
- E. Anatomy and Physiology
- 1. Regions of the head
- 2. Bones of the skull
- 3. Muscles of mastication, facial expression, tongue and floor of mouth
- 4. Structures and action of the temporomandibular joint
- 5. Paranasal sinuses
- F. Oral Cavity
- 1. Landmarks
- 2. Hard and soft tissues
- G. Bone Composition
- 1. Compact bone
- 2. Spongy bone
- 3. Periosteum
- 4. Cartilage

### Assignment:

- 1. Reading assignments in reference texts and workbooks (10-20 pages per week)
- 2. Clinical application of charting skills--patient experiences (5-6)
- 3. Clinical application of charting skills--digital and film (2-3)
- 4. Competency evaluations (7-9).
- 5. Tooth drawings (1-2)
- 6. Quizzes (8-9)
- 7. Lab midterm (1) and final (1)
- 8. Identification of landmarks of oral cavity
- 9. Written mid-term (1) and final (1)
- 10. Participation

### 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.

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

None

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

Clinical application of charting skills, competency evaluations, tooth drawing

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

Quizzes, lab midterm and final and written midterm and final exams

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

Participation

### **Representative Textbooks and Materials:**

Torres and Ehrlich, Modern Dental Assisting, Bird, D. and Robinson, D. 10th Edition, 2011 Instructor-prepared material

Writing 0 - 0%
Problem solving 0 - 0%
Skill Demonstrations 40 - 55%
Exams

40 - 50%

Other Category

5 - 10%