

**DNA 65A Course Outline as of Fall 1981****CATALOG INFORMATION**

Dept and Nbr: DNA 65A Title: INTRO DENT RADIO I

Full Title: Introduction to Dental Radiology I

Last Reviewed: 11/14/2022

Units		Course Hours per Week		Nbr of Weeks	Course Hours Total	
Maximum	2.00	Lecture Scheduled	1.00	17.5	Lecture Scheduled	17.50
Minimum	2.00	Lab Scheduled	3.00	17.5	Lab Scheduled	52.50
		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: 35.00

Total Student Learning Hours: 105.00

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:**

Instruction in the basic principles of radiography, history, protection and safety guidelines. Physics and biological effects of radiation for the patient's and operator's protection and comfort. Types of films, exposures and manual processing techniques on manniquins. The relationship of dental anatomy and facial structures to the exposure and mounting of films.

**Prerequisites/Corequisites:**

DNA 61, HLC 50, or Anatomy 51

**Recommended Preparation:**

Eligibility for English 100A, 104 or 1A or equivalent

**Limits on Enrollment:****Schedule of Classes Information:**

Description: Instruction in the basic principles of radiography, history, protection & safety guidelines; the relationship of dental anatomy & facial structures to the exposure & mounting of films. (Grade Only)

Prerequisites/Corequisites: DNA 61, HLC 50, or Anatomy 51

Recommended: Eligibility for English 100A, 104 or 1A or equivalent

Limits on Enrollment:  
Transfer Credit: CSU;  
Repeatability: Two Repeats if Grade was D, F, NC, or NP

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

<b>AS Degree:</b>	<b>Area</b>		Effective:	Inactive:
<b>CSU GE:</b>	<b>Transfer Area</b>		Effective:	Inactive:
<b>IGETC:</b>	<b>Transfer Area</b>		Effective:	Inactive:
<b>CSU Transfer:</b>	Transferable	Effective:	Fall 1981	Inactive:
<b>UC Transfer:</b>		Effective:		Inactive:

### **CID:**

**Certificate/Major Applicable:**  
Certificate Applicable Course

## **COURSE CONTENT**

### **Outcomes and Objectives:**

1. Explain the properties and principles of the emission of x-rays, its biological effects and sources.
2. Demonstrate knowledge of the history of x-ray in dentistry, and identify and apply the various terms applicable to dental radiography.
3. Describe the hazards, maximum permissible dose and demonstrate the application of the protective considerations when working with x-radiation equipment for the patient, operator and additional personnel in the office.
4. Demonstrate knowledge of film composition.
5. Demonstrate manual processing techniques.
6. Demonstrate the technique for placement and exposure of FMXs.

### **Topics and Scope:**

- I. Application of X-Ray to Dentistry
- II. Terminology
  - A. Exposure Factors
  - B. Evaluation
- III. Operation of Equipment
  - A. Control Panel
  - B. Head Unit
  - C. Production of Radiation
- IV. Patient Positioning
- V. Films
  - A. Types
  - B. Composition
  - C. Processing
- VI. Bite Wing Examination

- A. Technique
- B. Evaluation
- VII. Periapical Examination
  - A. Technique
  - B. Evaluation
- VIII. Mounting Films

### Assignment:

Reading assignments in texts and course syllabus.

### 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 problem solving assessments and 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.

Homework problems, Lab reports, Quizzes, Exams

Problem solving  
30 - 75%

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

Class performances, Performance exams

Skill Demonstrations  
15 - 50%

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

Multiple choice, True/false, Matching items, Completion

Exams  
10 - 20%

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

None

Other Category  
0 - 0%

### Representative Textbooks and Materials:

Torres, H. & Ehrlich, A. Modern Dental Assisting. 4th Ed. W.B. Saunders, 1991

Chasteen, J. Essentials of Clinical Dental Assisting. 4th Ed. Mosby, 1991