

CATALOG INFORMATION

Dept and Nbr: DE 55B

Title: DENTAL RADIOLOGY 2

Full Title: Dental Radiology 2

Last Reviewed: 2/25/2019

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: DNA 65B

Catalog Description:
Instruction in the advanced techniques of dental radiology, anatomical landmarks, dental anatomy pertaining to dental radiography, exposure and processing faults. Emphasis is on evaluation of the quality of the films both intra- and extra-oral. Processing and maintaining automatic processors. Knowledge of panoramic techniques and other related radiographic equipment.

Prerequisites/Corequisites:
Completion of DE 55A (formerly DNA 65A) with grade of C or better.

Recommended Preparation:

Limits on Enrollment:

Schedule of Classes Information:
Description: Instruction in the advance techniques of dental radiography, anatomical landmarks, dental anatomy pertaining to dental radiography, exposure & processing faults. (Grade Only)
Prerequisites/Corequisites: Completion of DE 55A (formerly DNA 65A) with grade of C or better.

Recommended:
Limits on Enrollment:
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 1981	Inactive:
UC Transfer:		Effective:	Inactive:

CID:

Certificate/Major Applicable:

Both Certificate and Major Applicable

COURSE CONTENT

Outcomes and Objectives:

Upon completion of this course, students will be able to:

4. Describe common physical disabilities and what modifications in technique may be necessary during the radiographic examination.
5. List the areas of the oral cavity that are most likely to elicit the gag reflex when stimulated.
6. Identify normal landmarks of the maxilla and mandible on images.
7. Define the roles of the dental auxiliary and dentist in image identification.
8. Discuss the factors that may influence the interpretation of images of caries.
9. Describe the appearance on images of localized, generalized, mild, moderate, severe, horizontal and vertical bone loss.
10. Describe the appearance on images of cement bases and build-ups, amalgam, porcelain, gold and composite restorations.
11. Describe the appearance on images of calculus.
12. Position and show correct exposure factors for occlusal image receptors, buccal object, third molar and vertical bitewings on student partners.
13. Describe the purpose and uses of extraoral imaging.
14. Describe the specific purpose of each of the extraoral projections.
15. Position image receptor and expose utilizing panoramic equipment on patients.
16. List and describe the equipment and care of equipment used in digital imaging.
17. Demonstrate the manipulation of an image using stored images.
18. Implement appropriate radiation protective measures for the protection of the operator and the patient.
19. Expose full mouth surveys using the paralleling technique on patients.
20. Demonstrate professionalism as defined in the student handbook.

Topics and Scope:

- I. The Dental Radiographer
 - A. Dental Radiographer
 - B. Infection Control Theory and Application
- II. Patient Management Theory and Application
 - A. Special patient situations theory and application
 - B. Patient management techniques
- III. Radiographic Landmarks
 - A. Description
 - B. Normal landmarks of the skull
 - C. Normal landmarks of the teeth
- IV. Image Identification
 - A. Importance
 - B. Dental caries
 - C. Bone loss
 - D. Restorations and dental materials
 - E. Calculus
 - F. Periodontal disease
 - G. Trauma
 - H. Pulpal diseases
 - I. Missing teeth and impactions
- V. Occlusal and Localization Techniques
 - A. Theory and Application
 - B. Occlusal and Localization Techniques
- VI. Extraoral Imaging Theory and Application
 - A. Uses
 - B. Fundamentals of panoramic imaging
 - C. Equipment
 - D. Technique
 - E. Evaluation and interpretation
- VII. Duplicating Films
 - A. Theory and Application
 - B. Procedure.
- VIII. Digital Radiography Theory and Application
 - A. Uses of digital radiography
 - B. Types of digital imaging
 - C. Manipulation of images
- IX. Standards of Professional Conduct

Assignment:

- 1. Reading from text (10-15 pages per week)
- 2. Exams (midterm & final)
- 3. Skill demonstrations
 - a. Localization Films
 - b. Duplication of Radiographs
 - c. Specialty Films; Occlusal, 3rd Molar Projection, Vertical Bitewings
 - d. Panoramic Machine Proficiency
 - e. Digital Radiography – 1 manikin series
 - f. 4 Full Mouth X-Rays (FMX) and 1 panoramic survey
- 4. Problem solving
 - a. Evaluations with Identification
 - b. Positioning Performance Evaluation

5. Professionalism as defined in the Dental Programs Student Handbook

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.

Evaluations with interpretation, Radiological Performance Evaluation, reading

Problem solving
10 - 50%

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

Localization films, Duplication of radiographs, Specialty films, Panoramic Machine Proficiency, Digital Radiography, 4 FMX and 1 panoramic survey.

Skill Demonstrations
15 - 50%

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

Midterm, final

Exams
20 - 40%

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

Professionalism

Other Category
5 - 15%

Representative Textbooks and Materials:

REQUIRED TEXTBOOKS: Dental Radiography Principles and Techniques, Haring, Joan Iannucci and Howerton, Laura Jansen, Philadelphia: W. B. Saunders, 3rd Ed., 2006.

Torres, Ehrlich Modern Dental Assisting, Bird D. and Robinson, D., W.B. Saunders, 9th Ed., 2008.

Essentials of Dental Radiography for Dental Assistants and Dental Hygienists, Prentice Hall, current edition.