

D A 53B: DENTAL RADIOGRAPHY II

Foothill College Course Outline of Record

Heading	Value
Effective Term:	Summer 2021
Units:	2
Hours:	1 lecture, 3 laboratory per week (48 total per quarter)
Degree & Credit Status:	Degree-Applicable Credit Course
Foothill GE:	Non-GE
Transferable:	CSU
Grade Type:	Letter Grade Only
Repeatability:	Not Repeatable

Student Learning Outcomes

- On a full mouth survey of radiographs, the student will be able to identify one radiolucent and one radiopaque anatomical feature in each arch.
- The student will be able to recognize a cone cut error for premolar and molar bitewing radiograph.

Description

Intraoral radiographic technique continued with evaluation of film quality, proficient parallelism with the XCP film holders, proper patient management, and a reduction in technique errors. Introduction to direct digital panoramic radiographs and indirect intraoral images using PSP plates. Further identification of radiolucent and radiopaque landmarks of the head and neck using the panoramic image. Intended for students in the Dental Assisting Program; enrollment is limited to students accepted in the program.

Course Objectives

The student will be able to:

- recognize skull and dental anatomy on radiographic films
- identify on clinical radiographs all diagnostically unusable films (errors)
- identify a patient who benefits from panoramic radiography
- understand the certification and licensing of a dental assistant earning a radiation safety certificate
- identify who is the legal owner of radiographs

Course Content

- Anatomical landmarks (Lec)
 - Maxillary sinus
 - Median palatal suture
 - Zygomatic arch
 - Mandibular canal
 - Mental foramen
 - Genial tubercle
- Radiographic technique errors (Lec)
 - Backwards film
 - Blurred film
 - Under/over exposed film
 - Double exposure

- Foreshortening
- Cone cutting
- Overlapping
- Elongation
- Patients for the panoramic radiograph (Lec)
 - Children/adolescents
 - Orthodontic patients
 - Trauma patients
 - 3rd molar extractions
 - Conclusive maxillary and mandibular interpretations
- Ethical and Legal Principles:
 - Describe the legal requirements for the operation of radiographic equipment
 - Medical/dental records: ownership of x-rays: dental practice, dental insurance, patient

Lab Content

- Image exposure on mannequins and patients.
- Continued practice on film development and viewing critique of film placement, developing errors and angulations.
- Laboratory assignments include peer and instructor evaluations on film mounting, film holder set-ups and film placement practice.
- Panoramic radiographic techniques will be demonstrated.

Special Facilities and/or Equipment

- Gown, safety glasses, masks, and gloves.
- X-ray laboratory, mannequins, transfer boxes, PSP plates and digital dental scanner, computer, monitor, EagleSoft Office Management System.
- Panoramic x-ray machine.

Method(s) of Evaluation

Methods of Evaluation may include but are not limited to the following:

- Written exams
- Slide quizzes
- Laboratory/clinical performance evaluations
- Students are required to produce diagnostic dental x-rays; dental film analysis and evaluation of technical placement will be completed on patients

Method(s) of Instruction

Methods of Instruction may include but are not limited to the following:

- Lecture
- Discussion
- Observation
- Cooperative learning exercises

Representative Text(s) and Other Materials

Iannucci, and Howerton. Dental Radiography, 5th ed. 2017.

Yamamoto, Judy. Radiology Lab Policy and Information Manual. .

Types and/or Examples of Required Reading, Writing, and Outside of Class Assignments

A. Lab reading assignment example: Review the KODAK Dental Radiography Series of "Successful Panoramic Radiography", sponsored by the Academy of Dental Therapeutics & Stomatology by William S. Moore, DDS MS, at UTHSCSA Dental School, San Antonio, TX.

B. Writing assignment example: List the procedures and state the rationale involved in taking a diagnostic panoramic x-ray. Include all technical aspects and the prevention of diagnostic errors.

C. Assigned lab readings will be from the course's lab syllabus and Policy Manual.

Discipline(s)

Dental Technology