

**Course Objectives/Course Outline**  
**Spokane Community College**

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**Course Title:** *Advanced Dental Radiology Lab*

**Prefix and Course Number:** DENT 125

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**Course Learning Outcomes:**

**By the end of this course, a student should be able to:**

1. Identify the role of the dental assistant through demonstration of knowledge of radiation safety, extra oral films, digital radiographs, specialty films, normal radiographic landmarks and full mouth radiographic series and panoramic films on patients.
2. Use dental nomenclature relating to dental radiology equipment and procedures.
3. Define terminology used in this unit.
4. Protecting self and others from cross contamination by wearing protective glasses, mask, gloves and uniforms following OSHA/WISHA standards.
5. Demonstrate radiation protection and safety guidelines by wearing radiation safety badge during all labs/clinics.
6. Demonstrate safety measures to self, patient and others at all times during:
  - a. Radiology procedures
  - b. Maintenance of equipment
7. Demonstrate professional interpersonal communication both verbal and nonverbal with instructors, peers and patients.
8. Identify and practice appropriate ethics when in clinic.

**Course Outline:**

**Safety:**

- 1) Student wears dosimeter in all labs.
- 2) Demonstrate knowledge of Radiation Aseptic Techniques following Infection Control Guidelines.
- 3) Use the ALARA concept when exposing patients to radiographs.

**Extra Oral Films:**

- 1) Describe uses and techniques for extra oral films.
  - a) Understand the sequence of exposing a panoramic film.
- 2) Using the digital technique, demonstrate the accepted technique of patient positioning, sensor placement, angulation, and exposure to obtain radiographs on student partners and patients of diagnostic quality for the following area:
  - a) Panoramic exposure
- 3) Evaluate the quality of radiographs produced.

**Digital Radiographs and Specialty Radiographs:**

- 1) Describe and use digital radiography, care of sensors, infection control techniques and radiation safety.
- 2) Properly handle all equipment.
- 3) Using digital sensors, demonstrate the accepted technique of patient positioning, sensor placement, angulation, and exposure to obtain radiographs on mannequin of diagnostic quality for the following areas:
  - a) Occlusal exposure

- b) Pediatric exposure
  - c) Vertical bitewing
  - d) Endodontic exposure
  - e) Full mouth series
- 4) Demonstrate proper bisecting technique on a mannequin.
  - 5) Evaluate the quality of radiographs produced.

**Radiographic Landmarks:**

- 1) Identify normal vs. abnormal radiographic landmarks.

**Patient Radiographs:**

- 1) Obtain all documentation for patient radiograph including medical and dental histories, consent for treatment and HIPPA.
- 2) Document all appropriate information regarding treatment.
- 3) Using the digital technique, demonstrate the accepted technique of patient positioning, sensor placement, angulation, and exposure to obtain radiographs on student partners and patients of diagnostic quality for the following areas:
  - a) Panoramic exposure
  - b) Full mouth series
- 4) Obtain a minimum of two full mouth series at a 78% grade or higher to proceed to clinical internships.
- 5) Evaluate the quality of radiographs produced.
- 6) Digitally send radiographs to a mock referring dental office.

**Mounting:**

- 1) Mount a traditional full mouth set in 3 minutes or less.