

South Central College

DA 1826 Radiology II

Common Course Outline

Course Information

Description	This course is a continuation of Radiology I. This in-depth course will cover the history of radiation, radiation physics, and differing radiation characteristics. The course will also include patient exposures, patient management and quality assurance. Students will also learn film techniques and processing. (Prerequisite: DA 1816).
Total Credits	3
Total Hours	64

Types of Instruction

Instruction Type	Credits/Hours
Lecture	2 / 32
Laboratory	1 / 32

Pre/Corequisites

Prerequisite DA 1816

Institutional Core Competencies

Communication - Students will be able to demonstrate appropriate and effective interactions with others to achieve their personal, academic, and professional objectives.

Critical and Creative Thinking - Students will be able to demonstrate purposeful thinking with the goal of using a creative process for developing and building upon ideas and/or the goal of using a critical process for the

3. Apply patient management techniques

Learning Objectives

Utilize patient communication and management skills
Employ techniques to overcome patient challenges

4. Document patient information

Learning Objectives

Utilize dental software and formatting
Demonstrate radiographic patient record documentation

5. Explain fundamental radiation physics

Learning Objectives

Identify atomic and molecular structures
Describe x-radiation ionization process, radiation, and radioactivity
Explain electromagnetic radiation properties and concepts
Identify radiation x-ray properties

6. Explain dental radiograph machine components

Learning Objectives

Identify and describe x-ray machine components and functions
Identify and describe x-ray machine tubehead components and functions
Identify and describe x-ray tube components and functions

7. Explain the x-ray generation process

Learning Objectives

Explain the x-ray production steps
Identify and describe types of x-rays produced
Explain x-ray interactions

8. Identify characteristics of dental images

Learning Objectives

Explain acceptable image characteristics
Describe image errors
Identify image correction methods

9. Explain radiation biology

Learning Objectives

Describe radiation injury, contributing factors, and sequencing
Identify and describe radiation effects
Describe radiation risks and benefits
Define and explain radiation measurements, traditional and international

10. Apply panoramic techniques

Learning Objectives

Identify and apply panoramic techniques
Demonstrate panoramic radiographic techniques, including patient management and positioning

11. Explain radiographic film characteristics

Learning Objectives

Identify and describe radiographic film components and functions
Explain intra-oral film types, speeds, and sizes
Explain traditional film methods
Describe film errors and corrections
Describe latent image formation

12. Identify film processing knowledge and skills

Learning Objectives

