SAN JUAN COLLEGE
Success Matters

DHYG 217-DENTAL RADIOGRAPHY 3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

A study of radiation physics, hygiene, and safety theories. Emphasis on the fundamentals of oral radiographic techniques and interpretation of radiographs. Includes exposure of intra-oral radiographs, quality assurance, radiographic interpretation, patient selection criteria, and ancillary radiographic techniques.

Prerequisites: Admission into the Dental Hygiene Program Corequisites: DHYG 110, 112, 113, 114, 115

Semester Offered: Fall

COMMON STUDENT LEARNING OUTCOMES

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in…

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

COURSE LEARNING OUTCOMES

Upon successful completion of the course, the student will be able to…

1. The student will utilize the theories of radiation physics, hygiene, safety, and quality assurance in dental radiography as evidenced by a 75% or higher accuracy on written learning assessments and achievement of clinical competency.
2. The student will produce and interpret diagnostically acceptable radiographs utilizing various radiographic techniques as evidenced by a 75% or higher accuracy on written learning assessments and achievement of clinical competency.
3. Explain the basic principles and concepts of radiation in general and x-radiation in particular.
4. Identify the component parts and workings of the dental x-ray machine and the production of x-rays.
5. Discuss the effects of ionizing radiation on living tissues including protective and recommended health and safety factors.
6. Use appropriate procedures for selecting films and exposure factors and for processing and evaluating radiographs in the production of quality radiographs.
7. Recognize the characteristics of an acceptable x-ray image, the factors that influence the image, and the importance of quality assurance in imaging.
8. Analyze the legal issues related to dental radiography and the role of the dental radiographer in patient education and patient relations.
9. Demonstrate effective patient management techniques for intraoral and extraoral radiographs, panoramic and alternate imaging modalities utilized in dental radiography.
10. Demonstrate competency in radiographic interpretation including normal radiographic landmarks and radiographic pathology.
11. Demonstrate the radiographic techniques of interproximal, paralleling, bisection, panoramic and occlusal radiography which meet SJC standards for acceptable radiographs.
12. Demonstrate acceptable radiographic processing, film duplication, evaluation of radiographs, and radiographic equipment maintenance utilizing radiation safety and infection control protocols.