



DHYG 217 Dental Radiography Section Name Section Credit Hours Credits
Syllabus

Course Information

Meeting times and location: section meeting_times section location

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 other ancillary radiographic techniques. Prerequisites: Admissions into the Dental Hygiene Program.

Prerequisites: Take DHYG-110, DHYG-112, DHYG-113, DHYG-114 and DHYG-115

Terms offered: Fall Only

Section-specific Course Description:

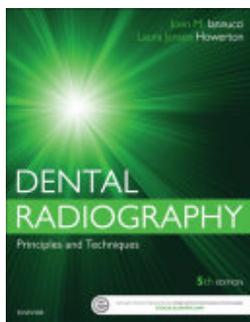
Course Level Objectives

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.

Required Texts and/or Materials



Dental Radiography

9780323297431

Joen Iannucci, Laura Jansen Howerton

Elsevier Health Sciences

2016-02-17

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at [San Juan College Help Desk](#).

For password reset and Canvas support, visit the [Student Technology Guide](#) website.

Accessibility/Privacy Policies for all Technology Tools Used

[Accessibility/Privacy Policies for all Technology Tools Used](#)

Course Requirements

Radiographic Policy: The following guidelines will be used during radiology labs and clinics.

1. No radiographs will be exposed by a student until he/she has successfully passed an exam on ionizing radiation, radiation safety and infection control. In addition, three (3) Dexter FMX with BW must be passed with 75% accuracy on technique before exposing any patient.
2. Students will wear a name badge and a radiation monitoring badge as part of the uniform whenever in the clinic. Pregnant students and faculty will wear fetal monitoring badges.
3. Radiographs taken on all patients must be prescribed by a dentist or dental hygiene faculty and have a signed patient consent form, a signed release for duplicate radiographs, a signed HIPAA consent form and a current, signed medical dental history.
4. All radiographic series selected for a patient must meet the "Guidelines for Prescribing Dental Radiographs." Pregnant women will be referred out if radiographs are necessary for diagnostic purposes since this program does not provide full dental services.
5. Expired film will be used for manikin practice only.
6. E speed or higher film and rectangular collimators (when available) will be used to help reduce radiation exposure.
7. Lead aprons and thyroid collars will be used on all patients during radiation exposure. Except that collars will not be placed on patients having Panoramic surveys.
8. Retakes on humans must be approved by faculty and observed during the retake process. Retakes can only be taken when the radiograph is un-diagnostic and the area of interest is not evident somewhere else in the series. If a second retake is necessary, a faculty person will take the image with the student observing. Retakes are limited to:
 1. 5 retakes for a Full Mouth Series (FMX or CMRX)

2. 2 retakes for a Bite Wing series
3. 1 retake for a Panoramic survey or for Occlusal image
4. As students' progress through the program the percentage of accuracy required on technique and interpretation of images will be increased with fewer retakes allowed.
9. All radiographs on humans must be read by a dentist for diagnosis and be documented in the patient's chart.
10. Referrals for needed dental care identified in radiographs must be filled out, given to the patient and documented in the chart.
11. Clinical notes for each patient must be entered into the computer. Clinical notes must include the type of radiographic series, number of exposures (including retakes), and type of receptor. Instructor must sign the clinical notes.
12. All radiographs taken must be critiqued for both technique and interpretation and graded using the appropriate critique forms.
13. When it is anticipated that a referral will be made to a community dental provider, digital images will be sent electronically upon the patients request and after the appropriate release form is signed and placed in patients chart.
14. The first several series of radiographs taken on humans must be directly supervised by a faculty person until the student can demonstrate competency at 75% accuracy on technique in 30 minutes.
15. Students and faculty will read and adhere to the Ionizing Radiation and Radiation Infection Control Policy found in the DH Student Manual. Each student and faculty should sign the training documentation form associated with this policy and have it filed in the training log.
16. Children are not allowed in the clinic area unless they are patients. They must ALWAYS have a supervising adult- clinicians may not be a supervising adult. Children may not accompany parents who are patients. Clinic staff and students are not allowed to babysit. Parents must make plans to have a supervising adult with children who are waiting in the waiting room.
17. Students are required to complete two (2) dental radiology chart audits. See chart audit notebook for further instructions.

DH 217 Radiographic Requirements: All series must be graded for technique. 75% accuracy is required to "Pass" each requirement.

Dexter/ Manikin

1 FMX- Parallel Technique (Traditional film)

2 FMX- Parallel Technique (One of each type of digital image receptor)

1 FMX- Bisecting Angle Technique (Digital)

1 BWX- Horizontal (4 images) – direct image receptor

1 BWX- Vertical (7 images) – indirect image receptor

1 set of Occlusal images: 1 Maxilla/1 Mandible (digital image receptor of choice); one “set” includes 1 maxilla image and 1 mandibular image

4 Localization Periapical images (2 direct image receptors and 2 indirect image receptors)

1 Panoramic

Patients:

4 FMX- Parallel technique*

1 BWX- Vertical (7 images) – indirect image receptor

2 sets of Occlusal images: (1 set per patient) digital image receptor of choice

2 Pado Bitewings: One of each type of digital image receptor

1 Primary dentition- usually 6yrs and under (2 images)

1 Mixed dentition- usually 7yrs-11yrs (2-4 images depending on age and size of patient).

2 Panoramic images**

*Out of the 4 FMX, must have at least one of each digital image receptor

** Could possibly use “mixed dentition” patient for both the pano AND the pado BWX

Total 9 Patients

Graduation Requirements: The above radiographic series taken during this course will apply toward graduation requirements as long as they are passed with 75% accuracy in both technique and interpretation.

Professional Policy: All students are considered mature enough to seek faculty assistance and to monitor their own progress in meeting course requirements. Please refer to the Dental Hygiene Student

Manual and the SJC Student Handbook for more information on Professional Qualities and Academic Integrity.

Course Outcomes Inventory: The effectiveness of DHYG 217 is measured by several methods:

1. Completion of all course work with a satisfactory grade.
2. Course evaluations.
3. Analysis of clinical application of material presented.
4. Scores on National and Regional Boards are reviewed and evaluated.

Healthy and Safe Practices for Being on Campus

We want a healthy and safe campus for students, faculty, staff, and guests.

Contagious diseases and your responsibility:

If you have COVID-19 symptoms, fever, flu or even the common cold, you should stay home. Do not come to campus if you are feeling sick. Contact your instructor about missing class (and review your instructor's policies on missed or late work). Being sick does not necessarily excuse you from completing your work on time.

Safety on campus and your responsibility:

If you are on campus and experience or witness an emergency, call 9-1-1 first and then the Department of Public Safety at 505-566-3333 (or just 3333 if calling from a campus phone).

When you are on campus, be aware of your surroundings. If you need an escort to your vehicle, call 505-566-4444 (DPS non-emergency line) or 505-215-3091 (officer on duty line).

The College will send information for campus emergencies through SJC AlertAware, email and the webpage. Stay informed and stay safe.

Student Support

At San Juan College, we are committed to supporting your academic success and overall well-being. We recognize that college life can be challenging and stressful, impacting both learning and personal health. We are here to help you succeed.

Academic Support and Resources

We provide a range of academic support services to help you stay on track on your educational journey. Free resources include tutoring, computer loans, life skills workshops, and so much more. Visit the [Academic Support and Resources](#) webpage to learn more about support and resources available through Academic Advising, the Tutoring Center, the Student Resource Center (formerly Student Achievement Center) and the Testing Center.

Student Support and Resources

If you or someone you know could benefit from counseling, accessibility services, career exploration, veteran transitional assistance, or any of our other support services, visit the [Student Support and Resources](#) webpage where you'll find detailed information about various resources available to you as an SJC student.

We encourage you to take advantage of these free resources to enhance your college experience and ensure your success.

Participation and Attendance Policy

Students are expected to attend all regularly scheduled classes, labs and clinics and to be on time.

Other Classroom Policies and Expectations

Preparation: It is expected that the student will prepare for class. This includes reading or viewing the information prior to class. Students should be prepared to participate in active learning discussions in each class on the topic assigned for that day.

Make-Up Policy: A student will not be allowed to make up quizzes (a zero will be given for each missed quiz). If a major examination is missed, it is the student's responsibility to make arrangements with the instructor and schedule a Make-Up Examination. The Make-Up Exam may be different from the one given to the other students and may be oral, written, clinical or a combination.

Assignments: Radiographic Grade Sheets are to be turned in no later than two (2) weeks after the patient exposure date. Assignments that are not received on time will receive a 5% reduction in grade each day they are late, with a maximum of 10% deduction.

Lab/Clinic Usage: Students are not allowed in the lab or clinic without direct faculty supervision.

Professional Policy: All students are considered mature enough to seek faculty assistance and to monitor their own progress in meeting course requirements. Please refer to the Dental Hygiene Student

Manual and the SJC Student Handbook for more information on Professional Qualities and Academic Integrity.

Course Outcomes Inventory: The effectiveness of DHYG 217 is measured by several methods:

1. Completion of all course work with a satisfactory grade.
2. Course evaluations.
3. Analysis of clinical application of material presented.
4. Scores on National and Regional Boards are reviewed and evaluated.

Canvas Participation and Expectations

Students are expected to monitor their own progress on Canvas, take quizzes, exams and participate in discussion boards.

Distance Education Policy

Distance Education Policy

New technologies allow for the delivery of education in a multitude of different formats. Many of these may involve distance education in which instruction to students may be delivered while separated from the instructor, either synchronously or asynchronously. This may include technologies such as the CANVAS learning management system, use of email correspondence, and the internet and audio/video conferencing. In light of these ever changing technologies, the following are expectations of student behavior with regard to distance education;

Academic Honesty

The standards and requirements of academic honesty and integrity apply to all Dental Hygiene Students whether engaged in or utilizing distance-education or not. Any required work submitted by the student must be their own. This applies to any course within the Dental Hygiene curriculum.

Safeguards

San Juan College has ensured that safeguards are in place with regard to student login and passcode access to the CANVAS learning management system. Distance education within the Dental hygiene Program curriculum will therefore utilize this leaning management system. In order to protect student privacy, students shall not share such log-in and passcode informing.

Tuition & Fees

There are no additional student charges associated with the utilization of distance education within the Dental Hygiene curriculum and/or with the verification of student identity at the time of registration or enrollment.

Instructor Response Times & Regular Interaction Expectations

Exams are typically graded and entered within the same week. Radiographs may take up to two weeks to grade and enter. Emails are usually responded to within 24 hours.

Course Time Commitment

Students should expect to spend 6-9 hours outside of class reading, preparing, studying, and evaluating radiographs.

Grading

To determine final grades....

Category	Weight	Grade Scale	
Quizzes	10	90-100	A
Exams	40	80-89	B
Dexter	20	75-79	C
Patients	30	65-74	D
			75% is the passing standard for all dental hygiene courses

Key Dates to Remember

[Full Academic Calendar](#)

Course Schedule

Exact schedule with due dates will be determined by instructor. See Course Requirements for general information on assignment expectations.

College Policies and Resources for Current Students

The [Student Handbook](#) provides information on student support, student organizations, and student conduct policies at San Juan College.

The San Juan College catalog outlines the [Academic Policies](#) students need to know.

Inclement Weather Information

Students will receive notification of class delays and cancellations due to inclement weather via the SJC AlertAware and SJC student email. Face-to-face classes will not meet in person; however, students are advised to check with instructors about alternative meeting options, as some may choose to meet via zoom. Hybrid classes will meet as scheduled via zoom. For questions regarding your class delay or cancelation, please contact your instructor.

Program Handbook

The Dental Hygiene Student Handbook can be found on the Canvas course Important Information - The Cutting Edge

Online Course Fee

Online Courses - San Juan College requires all online courses to include some form of assessment to demonstrate the mastery of course objectives. This could include exams, capstone projects, e-portfolios, presentations, final papers or other appropriate assessments. The use of a proctoring platform, plagiarism detection software or other method to ensure that assessments are completed by the enrolled student is required.

A course fee of \$5.00 is assessed for all online courses at San Juan College to cover the cost of the above services. Students who are required to take a proctored exam and choose to use a physical testing center outside the SJC Testing Center or SJC Disability Services will be responsible for the cost of using that center.

