



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:

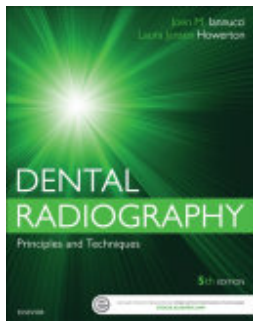
Course Level Objectives

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 tickets and password reset: [San Juan College Help Desk](#)

For Canvas support information: [Canvas Support](#)

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 Pedo 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 pedo 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.

COVID Safe Practices for Being on Campus

Masks / cloth face coverings must be worn while on campus in accordance with the New Mexico public health order. If you feel that you cannot wear a mask due to health complications, please contact Disabilities Services:

disabilityservices@sanjuancollege.edu or call (505) 566-3271. Hand sanitizer stations are at all building entrances, please “wash in, wash out”--clean your hands when you enter and before you leave. Classrooms and labs have been arranged to allow for social distancing; please respect your classmates and instructors by staying 6 feet away from everyone. You will be expected to disinfect your table or area prior to class and after class, cleaning products will be provided for this purpose. Check with your instructor for specific policies for their course. Please do not congregate in hallways or common areas, instead utilize our beautiful outside spaces and weather to visit with your friends and colleagues from a safe distance.

If you have been in contact with anyone who has tested positive for COVID-19, has symptoms, or is waiting on test results, contact your instructor and DO NOT come to class. If you have tested positive, have symptoms or are waiting on test results, contact your instructor and DO NOT come to class. Your health care provider or the assigned contact tracer will let you know when it is safe for you to be around others.

Student Support

Student Services and Support

The Student Support webpage provides information on counseling, tutoring, technical support, and many other support services available to San Juan College students.

[Student Support](#)

Academic Support

Academic Support webpage provides information on academic advising, the library, Testing Center, and the honors program.

[Academic Support](#)

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 Time

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

The following information also applies to your work in this class. If you have special needs for campus emergency situations, please inform me immediately.

1. Academic Accommodations - American with Disabilities Act (ADA)

If you believe you need academic accommodations due to physical or learning disabilities, you are encouraged to inform them as soon as possible. The

coordinator can work with you in verifying your disabilities and developing accommodation strategies. Please go to [Disability Services Office](#), click the button for “Request for Services” and complete all the steps.

You can also contact the college’s disability coordinator in the Advising/Counseling Center at 566-3271 or disabilityservices@sanjuancollege.edu. More information is available on the website listed above.

2. The Family Educational Rights and Privacy Act (FERPA)

Your personal information and grade are confidential. Aside from routine reporting to the college required for this course, I will not share such information with anyone unless I have your permission.

3. Academic Honesty Rules

San Juan College expects all students to adhere to the [Academic Honesty Rules](#) as posted online. These are the official guidelines for all classes at San Juan College (July 2006).

4. Student Conduct Statement

College is preparation for professional opportunities, and professional conduct is expected in courses, including online classes, as well as any written communications, and interactions with members of the college community. As part of our learning community, students are expected to interact and communicate in a mature, respectful, thoughtful, and supportive manner. Students who demonstrate disrespectful, hostile, belittling, bullying or other disruptive behavior will be subject to potential consequences and possible dismissal from the college. The college will take appropriate action when students demonstrate threatening behavior (to others or self). Students should refer to the Code of Conduct in the Student Handbook for additional information.

5. Student Safety

Keeping students safe is a priority, and part of that is ensuring that we have the ability to communicate emergency messages – whether for school closures due to weather or for more or urgent situations. Rave is San Juan College’s emergency messaging system. Through your SJC student email, you will automatically receive email messages, however, it is also vital that you receive text messages. In order to receive the messages, you must register in a simple process with [Rave](#). When registering, please make sure that your mobile status is “confirmed.”

The Department of Public Safety is available 24 hours per day. In an emergency, they can be accessed by calling 215-3091 or 566-3333.

In the event of an emergency, a Rave message will be sent, and depending on the situation, you will be instructed to do one of the following:

- Evacuate the building
- Shelter in place (Campus doors are locked, and operations continue as normal. During this situation, no one other than law enforcement is allowed

in or out of the campus.)

- Lockdown (Campus doors are locked. All operations cease, and you should take cover in your immediate area. No one other than law enforcement is allowed in or out of the campus.)

6. **Non-Discrimination, Sexual Harassment, and Retaliation.**

San Juan College does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, disability, age, genetic, veteran's status, or on the basis of any other category protected under federal, state and local laws. If you have experienced sexual harassment, sexual assault, or any other form of protected class discrimination, we encourage you to make a report. If you report to a faculty member, she/he/they are obligated by policy to share knowledge, notice, and/or reports of harassment, discrimination, and/or retaliation with the Title IX Coordinator. These disclosures include but are not limited to reports of sexual assault, dating/domestic violence, and stalking. You may also make a confidential report to a SJC Counselor. Please refer to San Juan College's [Title IX](#) site for further details.

San Juan College's Title IX Coordinator is Stacey Allen, Assistant Director of Human Resources/Equity, Diversity, and Inclusion Officer. The office is located at the Educational Services Center Building, 2nd Floor, Human Resources, Room 4243 at (505) 566-3515 or allens@sanjuancollege.edu.

7. **Drop for Non-Attendance and/or Non-Participation**

Class Attendance and Participation Expectation:

Face-to-Face -- Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

On-line -- Students are expected to participate regularly and submit all course assignments, based on the course guide definition. A student who does not submit any assignments during a consecutive 10% of the course (1.5 weeks of a 15-week semester) without consulting the instructor, may be considered as having abandoned the course. Logging in does not meet the attendance standard.

Competency-Based Education Classes -- Students are expected to have regular and substantive interactions with their instructor and to actively work on course

content. A student who has not submitted coursework, nor had substantive interactions with the instructor over a consecutive 10% of the term, without the instructor's prior approval, will be considered to have abandoned the competency progression. Last date of attendance will be recorded as the last date that coursework was submitted or that the student met with the instructor. For on-line learners, logging in does not meet the attendance standard.

8. Failure to Meet Class Participation Expectation:

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

9. Grading Policies

Incomplete: Incomplete Grade Assignment ([Incomplete Grades Information](#))

The grade of I (Incomplete) is given for passing work that could not be completed during the semester because of circumstances beyond the student's control. Ordinarily, the assignment of an I is given by the course instructor at the time final grades are due

In no case is an I grade to be used to avoid assignment of D or F grades for marginal or failing work or to require a student to enroll in the class the next semester because work was not completed on time. Circumstances warranting the issuance of an I grade must be beyond the student's control and must be documented on the appropriate form prior to approval.

I grades can be removed only during the subsequent 16 weeks from the end of term, or within the time limit set by the instructor. Removal of an I is accomplished by completing the work in a manner acceptable to the instructor. Re-enrollment in the course under the repeat option does not remove the prior grade of I. Students should not re-enroll for the course. An I not made up within 16 weeks or within the time limit set by the instructor will change to an F grade thereafter and cannot be changed by work completion.

10. Grade Appeals

The policy for grade appeals is in the Academic Catalog. ([Grade Appeal Policy](#))

Student Handbook

The Student Handbook provides information on Student support, student organizations, and San Juan College policies.

[Student Handbook](#)

Program Handbook

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