SANTA BARBARA CITY COLLEGE

Associate of Science Degree
Program in Radiologic Technology

Policies and Procedures
(Student Handbook)

The program reserves the right to update the program handbook, policies and procedures, clinical forms and syllabi contained within this handbook as needed to best meet program and student needs. Every attempt will be made to have these completed prior to the start of each fall or spring semester. Should it be necessary to change or update a policy or form in the middle of a semester, all students, faculty, and clinical staff will be notified and provided with the new forms. In addition, a meeting will be held to introduce the changes to the students.

Bruce K. Oda MAOL, R.T. (R), CRT (R)
Program Director Radiologic Technology Program
Santa Barbara City College

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Assistant Professor, Radiography
Santa Barbara City College

Note: Program requirements, as well as policies, are revised from time to time. New or updated requirements and/or policies become effective when this handbook is revised, and the additions and/or revisions supersede any previous requirement and/or policy in past use, whether in writing or in past practice.

Revised May 2025 by BKO and IF

Contents

Preface

At Santa Barbara City College (SBCC), it is the belief that if students are given the platform to learn and apply the principles underlying the art and science of radiography, they shall build a solid foundation for their future careers.

This handbook is designed to help students who participate in the SBCC Radiography Program. Specifically, it is a reference for radiography students, faculty, clinical preceptors, and the communities of interest (general public).

Statement of Non-Discrimination

Santa Barbara Community College District is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities without regard to the protected classes, as established by BP 3410, Chapter 3 of the General Institution Policies.

“Protected classes” mean those established by statute and include: national origin, religion, age, gender, gender identity, gender expression, race, ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, military, and veteran status, or because they are perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics. (BP 3400)

JRCERT Standard 1.3: The sponsoring institution and program have student recruitment and admission practices that are nondiscriminatory and consistent with published policies.

Section I: Mission Statements

The Associate Degree of Radiologic Technology is consistent with the mission of Santa Barbara City College and the standards of the Joint Review Committee on Education in Radiologic Technology (JRCERT).

Radiography Program Mission Statement

The mission of the Associate of Science Degree Program in Radiologic Technology is to educate students to become qualified and competent entry-level radiologic technologists with the technical knowledge and skills to serve the needs of a diverse patient population in an ethical and compassionate manner while inspiring continuous learning.

SBCC Mission Statement

As a public community college dedicated to the success of each student, Santa Barbara City College welcomes all students. The College provides a diverse learning environment and opportunities for students to enrich their lives, advance their careers, complete certificates, earn associate degrees, and transfer to four-year institutions.

The College is committed to fostering an equitable, inclusive, respectful, participatory, and supportive community dedicated to the success of every student.

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

JRCERT Standard 4.1: The program has a mission statement that defines its purpose.

Section II: Program Goals

Goal 1: Students will be clinically and technically prepared to enter the current job market.

Student Learning Outcomes:

1. Students will pass the ARRT on the first attempt
2. Students will apply accurate positioning skills on patients in the clinical setting
3. Students will evaluate clinical images for proper anatomy, positioning, and image quality

Goal 2: Students will be professional and ethical.

Student Learning Outcomes:

1. Students will practice radiation protection
2. Students will provide competent patient care
3. Students will routinely practice the standards of the profession to produce high-quality radiographs

Goal 3: Students will demonstrate written and oral communication skills.

Student Learning Outcomes:

1. Students will demonstrate written communication skills
2. Students will demonstrate oral communication skills
3. Students will properly communicate with patients

Goal 4: Students will demonstrate critical thinking and problem-solving skills in the performance of their duties.

Student Learning Outcomes:

1. Students will evaluate radiographs for diagnostic quality
2. Students will adjust procedures and techniques for various circumstances
3. Students will demonstrate an understanding of the basic functions of radiographic equipment

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

Accountability Statement

The design and curriculum of the Radiologic Technology Program is based on national standards established by the Joint Review Committee on Education in Radiologic Technology (JRCERT). JRCERT serves as the accrediting body for the Department of Education as well as the California Department of Health Services. Periodically the Radiographic Imaging and Science Department at Santa Barbara City College undergoes the voluntary process of evaluation and site-visits by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

The Radiologic Technology program at SBCC has participated in the JRCERT accreditation process for the past 26 years. The program is fully accredited and in good standing with JRCERT. The next site visit is tentatively scheduled for the Second Quarter of 2026.

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

Accreditation Statement

The Joint Review Committee on Education in Radiologic Technology (JRCERT) accredits the SBCC Radiology Program. JRCERT is recognized by the Council for Higher Education Accreditation (CHEA) and the U.S. Department of Education. Any student with questions or concerns regarding the Radiologic Science Program at Santa Barbara City College and compliance with the JRCERT Standards may contact the JRCERT at:

Joint Review Committee on Education in Radiologic Technology (JRCERT).
20 N. Wacker Drive
Suite 2850 Chicago, Il
60606-2901
(312) 704-5300
Email: mail@jrcert.org

JRCERT Standards

JRCERT Standards for an Accredited Educational Program in Radiography are designed to promote academic excellence, patient safety, and quality healthcare. The Standards require a program to articulate its purposes; to demonstrate that it has adequate human, physical, and financial resources effectively organized for the accomplishment of its purposes; to document its effectiveness in accomplishing these purposes; and to provide assurance that it can continue to meet accreditation standards.

Standards for an Accredited Educational Program in Radiography

(Effective January 1, 2021)

JRCERT Standard 1.5: The program assures that students and faculty are made aware of the JRCERT Standards for an Accredited Educational Program in Radiography and the avenue to pursue allegations of noncompliance with the Standards.

CDPH-RHB

The Radiology Program is also approved and recognized by the following departments and organizations: The Radiologic Health Branch (RHB) is within the Radiation Safety and Environmental Management Division of the Department of Public Health. The Branch enforces the laws and regulations addressing ionizing radiation, including radioactive material, designed to protect the public, radiation workers, and the environment. RHB is responsible for providing public health functions associated with administering a radiation control program. This includes licensing of radioactive materials, registration of X-ray-producing machines, certification of medical and industrial X-ray and radioactive material users, inspection of facilities using radiation, investigation of radiation incidents, and surveillance of radioactive contamination in the environment. Any student with questions or concerns regarding the Radiologic Science Program at Santa Barbara Community College and compliance with the DHS Standards may contact the DHS at:

Department of Public Health Radiologic Health Branch
P.O. Box 997414, MS 7610
Sacramento, CA 95899-7414
(916) 327-5106

ARRT

Upon successful completion of the AS Degree in Radiologic Technology, the graduate is eligible to submit their application to take the National Certification Exam in Radiology proctored by the American Registry of Radiologic Technologist (ARRT).

Section III: Program Overview

Admission Requirements

Prerequisites:
Complete BioMed 107- Human Anatomy, or equivalent. (grade of "C" or better)
Complete BioMed 108- Human Physiology, or equivalent. (grade of "C" or better)
Complete RT 100- Radiography and Health Care. (grade of "C" or better)

Admission and Transfer of Credit Policies

For additional information click here

Graduation Requirements

For additional information click here

Articulation Agreement

For additional information click here

Application Period

The Radiologic Technology Program is a 24-month program with selective admission. Before applying, please see the prerequisites. We strongly encourage all students to satisfy the SBCC General Education requirements before applying to the program due to the rigorous requirements of the program: ARRT Associate Degree Requirements.

The 2025 application selection process is first-come first-served. Each submitted application will have a date and timestamp. Student acceptance is based on the order in which the applications were received.

Students accepted into the program will be notified via email. All accepted students are required to attend a mandatory orientation meeting held in March.

Current Entry Procedure

Students are admitted for entry through a first come first serve process. The first 30-35 students will be granted entry each year.
Once the application is accepted and before entry into the program, the applicant is required to:

1. Complete RT 100 Introduction to Radiography
2. Attend the mandatory Program Orientation meeting in March (time and date will be announced to the students who are scheduled to begin in the summer semester)
3. Complete the SBCC physical examination on SBCC form
4. Results from a negative TB skin test (or chest x-ray if warranted)
5. Lab results that prove immunity to Measles, Mumps, and Rubella (MMR)
6. Lab results that prove immunity to Hepatitis B (note that the Hepatitis B vaccination is given in three doses over a period of six months)
7. Lab results that prove immunity to varicella
8. Submit proof of receiving the Tdap vaccination
9. Submit results each flu season of that season's influenza vaccine
10. Obtain a CPR/BLS for healthcare professionals, which must be kept current throughout the duration of the program

11. Complete a background check
12. Submit the results of a ten-panel drug test
13. Pay a one-time Radiation monitoring badge fee at registration

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

JRCERT Standard 1.3: The sponsoring institution and program have student recruitment and admission practices that are nondiscriminatory and consistent with published policies.

*It is highly recommended to complete Medical Terminology and General Education Areas before starting the program. These are graduation requirements but beneficial to the student to have completed before starting the program. Otherwise, the student's date of taking the board exam will be delayed.

*Failure to fulfill any of the above requirements will negate the students' admission into the Radiography program.

Ongoing Program Self-Evaluation

To maintain a continuing standard of excellence, regular self-evaluation shall occur outside the cycle of re-accreditation self-study. This will be accomplished by the adoption of an evaluation plan that measures program effectiveness through self-evaluation and measurable program outcomes.

Protocol

The following activities will be undertaken to evaluate and monitor program performance:

Instructional Evaluation: - Each course and instructor shall be evaluated by the students as to the effectiveness and content. The Program Director shall be responsible for monitoring compliance with the course outlines. The Program Director meets with faculty to review evaluation results and discuss how the instructors feel they can improve and what support they need to improve.

Course review: - The Program Director, Clinical Coordinator, and Clinical Preceptor(s) shall review course content annually and shall recommend changes when appropriate.

Program review - The faculty shall review the didactic and clinical sections of the program annually to determine strengths and weaknesses. This review shall include input from students, faculty, and other communities of interest. A report shall be made available to the Dean of Health Technologies and Vice President of the College.

Physical resources evaluation - The Program Director shall review available resources annually and shall maintain the resources necessary to promote the goals of the program.

Graduate survey - A written questionnaire asking the graduate to evaluate their didactic and clinical educational experiences. Additionally, future educational and career choices or desires are asked for.

Graduate employment survey - A survey is given to a graduate's employer asking the employer to rate the technical and clinical abilities of the recent graduate.

One-year graduate survey- a survey is sent out to the graduates one year once they graduate from the program to determine their employment status.

All the above evaluation tools will be used in the annual self-evaluation process of the program. The annual self-evaluation will take place during the month of July with a report to be prepared immediately after.

JRCERT Standard 3.4: The sponsoring institution and program assure program faculty performance is evaluated and results are shared regularly to assure responsibilities are performed.

JRCERT Standard 3.5: The sponsoring institution and/or program provides faculty with opportunities for continued professional development.

JRCERT Standard 6.1 The program maintains the following program effectiveness data

Radiography Program Faculty

Contract Faculty

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Adjunct Faculty

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Martin Schafer M.A., R.T.(R)(ARRT)
Clinical Supervisor
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Dean of Health and Human Services

Dr. Devin Daugherty
Dean of Health and Human Services, Career Technologies
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Program Support (Health Technologies Office)

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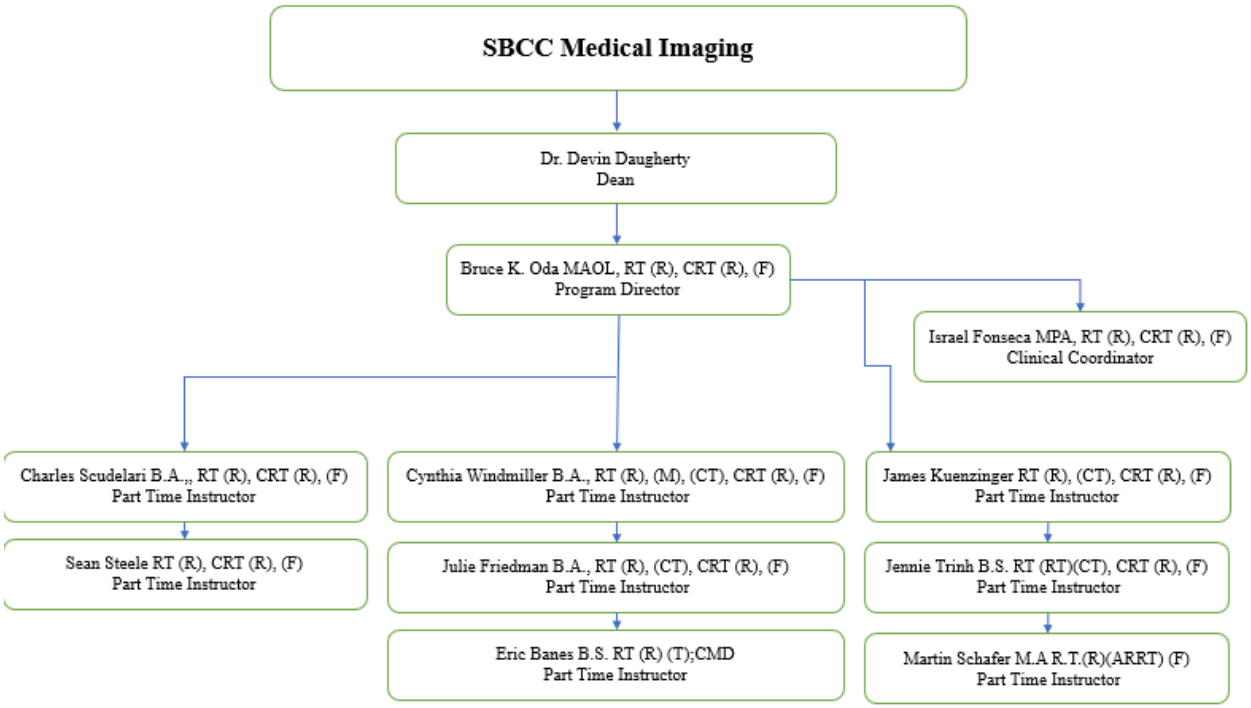
Medical Imaging Organization Chart



Section IV: Program Design

Preface

The Radiography Program adheres to the standards set forth by the Joint Review Committee on Education in Radiologic Technology (JRCERT and the California Department of Public Health-Radiologic Health Section (CDPH-RHB). Upon successful completion, the student will be awarded an Associate in Science Degree in Radiography and will be eligible to apply for the American Registry of Radiologic Technologist (ARRT) exam in Radiography.

The program is a twenty-four month, six-semester program, commencing with the first summer session in June. In the entire program, there will be a total of four (4) major clinical education rotations. The first clinical rotation, two semesters in length, commences in the fall semester and is completed at the end of the spring semester. Minor rotations in other specialty imaging areas will also be included to complement the student's clinical experience. See the policy on specialty rotations.

Program Cost

Tuition, Fees and Refunds:

For additional information on Tuition and Fees click here

For additional information on Refunds click here

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

Estimated Costs (Subject to Change)

Mandatory SBCC fees per semester		$23.00 $32.00 $ 8.00 $ 2.00		Health Services Fee ($18 in the summer semesters) Transportation Fee ($14 in the summer semesters) Student Activity Pass (Fall & Spring semesters only) Student Representation Fee
Optional fees:		$32.00		SBCC Parking permit (Fall and Spring) (Spring $34-Summer I & II $19)
Film badge fee:		$85.00 $35.00		Paid at registration-good for two years Second-year materials fee Replacement cost if lost $25
Physical exam:		Varies		Depending on insurance and immunization needs
Castlebranch: Mask Fit Test		$150.00 $90 $115		Includes background check, drug test, and immunization documents management note: background check and drug test may be required to repeat for specific clinical sites. Additional drug/background checks if required by your Clinical site or suspicion you may be under the influence **Cost is subject to change*
Uniforms:		$120.00 $75-120		Two each: pants & top (White or navy only) 2 pairs of shoes
ID markers:		$20.00		
Textbooks		$1,000.00+		For two years Corectec Review (online review)
Supplies:		$100.00		For two years
Licensing		$225.00 $112.00 $112.00		ARRT-National Exam (2nd year) CDPH-State licensing fee DCPH-State Fluoroscopy exam

*Approximate Estimated Expenses for Two-Year Program: **$5,500-$6,500**

Optional Expenses $25.00 California Soc. Of Radiologic Technologist

$35.00 American Soc. Of Radiologic. Technologist.

Program Orientation

A **mandatory** program orientation will take place on a Saturday in March (to be announced). This is approximately three (3) months prior to the start of the Radiography Program in the Summer term. Students are also informed of all other obligations and fees including but not limited to:

1. SBCC Physical Examination
2. CPR Requirements
3. Radiation Monitoring Badge
4. Registration/Tuition
5. Uniforms and Costs
6. Background check
7. Drug screening
8. TB testing
9. Titers
10. Hepatitis B vaccination
11. Mask Fit Test

A pre-enrollment physical (paid for by the student) is required of all new students, which includes Tuberculosis (T.B.) test and TDAP (tetanus and whooping cough), and titers to show proof of immunization for Measles, Mumps, Rubella (MMR), varicella, and Hepatitis B, and physical evaluation is discussed during the program orientation. Failure to attent the mandatory orientation will negate entry into the program.

Annual Renewals:

One of the following three (3) actions is required to be performed, documented, and uploaded into Castlebranch, or a similar platform, at the students cost documenting compliance prior to the annual TB renewal:

1. TB skin test performed with a negative result

2. IGRA blood test (lab report required with a negative result)

3. If a previous TB test documented a positive result, and a chest X-ray was required, a yearly symptom free questionnaire (provided in Castlebranch) and the most recent chest X-ray result **(within 3 years),** is required to be uploaded.

*Note- An updated chest x-ray is required every 3 years to r/o TB.

CPR/BLS certifications are to remain current throughout the duration of enrollment in the program.

Curriculum

The curriculum for the School of Radiologic Technology shall meet the criteria identified in the Essentials and Guidelines of an Accredited Education Program for the Radiographer adopted by the Joint Review Committee on Education in Radiologic Technology and the Minimum Standards for Diagnostic Radiologic Technology Programs published by the State of California, Department of Health Services, Radiological Health Section Certification.

The master plan of instruction shall include specific goals, objectives, and directed assignments related to the three major sections of the training program:

1. Academic Courses
2. Clinical Instruction
3. Assignments and Student Evaluation both Academic and Clinical.

The following tentative academic courses are included in the curriculum.

Summer (RT 101-Introduction to Radiology)

Fall I (RT 102-Fundamental of Radiographic Positioning and Procedures I)
Fall I (RT 109-Principles of Radiographic Exposure)
Fall I (RT 120-Patient Care in Radiography)
Fall I Clinical Practicum (RT 191-Radiographic Clinical Practicum 1)

Winter Intersession (RT 191A-Radiographic Clinical Practicum 1A)

Spring (RT 103-Fundamental of Radiographic Positioning and Procedures II)
Spring I (RT 111-Advanced Principles of Exposure)
Spring I (RT 119-Radiological Technology)
Spring I Clinical Practicum 2 (RT 192-Radiographic Clinical Practicum 2)

Summer II (RT 293-Radiographic Clinical Practicum 3)
Summer II (RT 251-Principles of Mammography and Procedures)

Fall II (RT 220-Radiation Biology & Protection)
Fall II (RT 230-Radiographic Pathology)
Fall II (RT 250-Principles of Cross-Sectional Anatomy)
Fall II (RT 294-Radiographic Clinical Practicum 4)

Spring II (RT 202-Advanced Radiographic Procedures)
Spring II (RT 203-Radiology Certification Preparation)
Spring II (RT 295-Radiographic Technology Clinical Practicum 5)

Course Sequencing

First Year (June-May)

Summer (RT 101-Introduction to Radiology)

This course is designed to introduce and orientate incoming students to the Radiographic and Imaging Science program. Topics provide students with entry-level information and skills to begin practicing in an imaging department. Additional topics include ethics, introduction to fluoroscopy, lab practice, basic radiation protection, and patient care.

Fall I (RT 102-Fundamental of Radiographic Positioning and Procedures I)

This course is designed to cover radiographic positions and procedures dealing primarily with the respiratory system, the abdomen, upper extremities, shoulder girdle, pelvis, and lower extremities. The course contains two days consisting of (3) hours of lecture and two days consisting of (3) hours of skills lab at the college. Precise and detailed information on routine radiographic procedures of the chest, abdomen, and appendicular skeleton. Portable and traumatic exams also included.

Fall I (RT 109-Principles of Radiographic Exposure)

This course is designed to provide first-year radiography students with the basic principles of image production, exposure techniques, photographic and geometric factors, computed and digital radiography, and radiation protection.

Fall I (RT 120-Patient Care in Radiography)

This course is designed to provide students with the concepts of patient care. Routine and emergency patient care are described. Also, topics on venipuncture and contrast media/medication administration are discussed. The role of the radiographer in patient care administration is identified. Aspects of death and dying are also reviewed.

Fall I Clinical Practicum (RT 191-Radiographic Clinical Practicum 1)

This course is designed for the opportunity of students to perform learned exams at their clinical assignment. The course commences the week prior to the beginning of the fall semester consisting of 5 consecutive days at 8 hr. per day. Students will report to their assigned clinical site thereafter on Tuesday and Thursday, eight and one half (8.5) hours each day. Introduction to clinical settings and exposure to the departmental organization; patient flow, CR and PACs; observation of techniques employed; and policies and procedures of clinical cases. The student performs basic radiographic procedures under direct supervision. Total clinical hours will equal **278 positive attendance hours**.

Winter Intersession (RT 191A-Radiographic Clinical Practicum 1A)

This course is designed for the opportunity of students to perform learned exams at their clinical assignment. The winter intersession allows for the opportunity of students to solidify their positioning knowledge on a more repetitive basis. Students are required to intern for 8 hrs. (8.5 hrs including lunch) per day during the winter break. Designed to give students the opportunity to improve clinical skills as well as accumulate the clinical hours required by the California Department of Health. Total clinical hours will equal **112 positive attendance hours**.

Spring (RT 103-Fundamental of Radiographic Positioning and Procedures II)

This course is designed to cover the spine, skull, and all routine examinations requiring contrast media. The contrast studies will include the gastrointestinal and urinary systems. A survey of invasive vascular procedures of the abdominal region will be included. The course consists of three (3) hours of lecture, (3) hours of skills lab at the college. Basic principles of positioning for the axial skeleton to include vertebral column, skull, facial bones, contrast procedures for the gastrointestinal and genitourinary tract.

Spring I (RT 111-Advanced Principles of Exposure)

This course is designed to examine the principles of X-ray production with the effect of image production with digital imaging systems. Principles of the digital system quality control and maintenance are also discussed.

Spring I (RT 119-Radiological Technology)

This course is designed specifically for radiation physics. The primary focus is on fundamental concepts of energy and measurement, atomic structure, molecules, electricity, magnetism, electromagnetism, X-ray tubes, production, emission, and interactions.

Spring I Clinical Practicum 2 (RT 192-Radiographic Clinical Practicum 2)

Second in a series of clinical education courses.. Students are assigned 17 hours per week at a clinical education center. During this supervised experience, the student observes and performs diagnostic radiographic procedures. The student must demonstrate competency in recently taught radiographic examinations, as well as in the exams previously evaluated. Total clinical hours will equal **246.5 positive attendance hours**.

*It should be noted that students will follow the regular college schedule during the first year, taking part in all holidays, vacation periods, final exam breaks, and designated recesses. During the first year students will report on Tuesdays and Thursdays at their clinical sites.

Weekend or evening assignments are permitted during this time if approved by the Clinical Preceptor and Clinical Supervisor. The day shift consists of an 8.5-hour clinical experience. The hours are determined by the clinical site and will vary from one clinical site to another. Some examples of possible schedules are as follows: 0500–1400, 0600-1500, 0700–1600, 0800-1700, 0900-1800, 1200- 2100 and 1430-2330. Students are not permitted to work more than 10 hours per day.

Second Year (June-May)

Summer II (RT 293-Radiographic Clinical Practicum 3)

Third in the series of clinical education courses. This Summer Practicum course is designed exclusively for the beginning second-year student to improve on clinical skills and complete examinations previously learned during the RT 102 and RT 103 course experiences. The student will report for the duration of the Summer intersession. The summer internship is for eight (8) hours (8.5 hrs including lunch) each day, for a total of forty (40) hours per week. The student must demonstrate continued competency in those exams previously mastered and additional competencies throughout the semester. During this time the students may be assigned to weekend or evening assignments to complete the 5 mandatory rotations. Upon completion of this Summer Practicum, the student will be on a break until the program resumes in the Fall semester. Total clinical hours will equal **376 positive attendance hours**.

Summer II (RT 251-Principles of Mammography and Procedures)

This class is an elective, open to all students. This class prepares the radiographer for state and national certification in mammography. Content covers the anatomy and physiology of the breast, positioning, radiation biology and protection, and QA and QC regulations for mammography equipment.

Fall II (RT 220-Radiation Biology & Protection)

Fluoroscopic imaging systems, digital and conventional image intensification, radiation safety regulations, and quality control methods are discussed. This course is approved by the DPHS and prepares students for the California State Fluoroscopy Examination. Radiation biology, dose-effect relationships, and long-term somatic and genetic effects of radiation exposure are covered.

Fall II (RT 230-Radiographic Pathology)

This course is designed as an introduction to more advanced pathological conditions for second-year students. Differentiates normal radiographic anatomy from pathologic conditions. Students are expected to identify, evaluate, and present common pathologic conditions throughout this course.

Fall II (RT 250-Principles of Cross-Sectional Anatomy)

This course provides an understanding of cross-sectional anatomy and knowledge relationships of human organs to each other as they appear in the sagittal, coronal and axial plane. The practical applications of cross-sectional with CT, MRI and ultrasound are emphasized.

Fall II (RT 294-Radiographic Clinical Practicum 4)

Fourth in a series of clinical education courses to increase technical and clinical proficiency in routine and advanced X-ray procedures under supervision of the Clinical Coordinator/Clinical Preceptor and departmental radiographers. Internships will occur on Monday, Wednesday, and Friday. The student must demonstrate competency of recently taught radiographic exams plus continued competency of exams previously evaluated. Total clinical hours will equal **328 positive attendance hours**.

Spring II (RT 202-Advanced Radiographic Procedures)

This course is designed to introduce and provide the advanced student with a survey of advanced imaging and an introduction to other specializations in the (radiation) radiologic sciences. The advanced imaging procedures include (C.T., MRI, Ultrasound, special procedures), Mammography and Pediatric Radiology. The course consists of three (3) hours of lecture and has no skills lab assignment. It concludes with an introduction to special invasive procedures, especially those focused with the heart/vascular system.

Spring II (RT 203-Radiology Certification Preparation)

This course is designed as a review of those subjects deemed critical for the ARRT examination. Consists of lecture, both by the instructor and guests, simulated registry examinations and a computer-assisted learning program.

Spring II (RT 295-Radiographic Technology Clinical Practicum 5)

Fifth in a series of clinical education courses to increase technical and clinical proficiency in routine and advanced X-ray procedures are performed under supervision of the Clinical Coordinator/Clinical Preceptor and departmental radiographers. Internships will occur on Monday, Wednesday, and Friday. The student must demonstrate competency of recently taught radiographic exams plus continued competency of exams previously evaluated. Total clinical hours will equal **368 positive attendance hours**.

*It should be noted that students will follow the regular college schedule during the second year, taking part in all holidays, vacation periods, final exam breaks, and designated recesses. During the second year students will report on Monday, Wednesday, and Friday at their clinical sites. Weekend or evening assignments are permitted during this time if approved by the Clinical Preceptor and Clinical Supervisor.

The day shift consists of an 8-hour clinical experience. The hours are determined by the clinical site and will vary from one clinical site to another. Some examples of possible schedules are as follows: 0500–1330, 0600-1430, 0700–1530, 0800-1630, 0900-1730, 1200- 2030 and 1430-2300. Students are not permitted to work more than 10 hours per day.

First Year: SUMMER I (Subject to change)

Course		Course Title		Units
RT 101		Introduction to Radiology		2.3
Total				2.3

SUMMER I or SUMMER II

HIT 135, Basic Medical Terminology, 3.0 Units

It is recommended to take medical terminology prior to fall, as it will be useful in both the clinical and classroom settings.

All remaining general Ed. classes needed to graduate (i.e. Math, PE, Library class)

FALL

Course		Course Title		Units
RT 102		Fundamental of Radiographic Positioning and Procedures I		4.0
RT 109		Principles of Radiographic Exposure		3.0
RT 120		Patient Care in Radiography		3.0
RT 191		Radiographic Clinical Practicum 1		5.7
Total				**15.7**

WINTER INTERSESSION

Course		Course Title		Units
RT 191A		Radiographic Clinical Practicum 1A		2.1
Total				**2.1**

SPRING

Course		Course Title		Units
RT 103		Fundamental of Radiographic Positioning and Procedures II		4.0
RT 111		Advanced Principles of Exposure		3.0
RT 119		Radiological Technology		3.0
RT 192		Radiographic Clinical Practicum 2		5.1
Total				**15.1**

SECOND YEAR

SUMMER II

Course		Course Title		Units
RT 293		Radiographic Clinical Practicum 3		6.7
RT 251		Principles of Mammography and Procedures		2.0
Total				**8.7**

FALL

Course		Course Title		Units
RT 220		Radiation Biology & Protection		3.0
RT 250		Principles of Cross-Sectional Anatomy		2.0
RT 230		Radiographic Pathology		3.0
RT 294		Radiographic Clinical Practicum 4		7.1
Total				**15.1**

SPRING

Course		Course Title		Units
RT 202		Advanced Radiographic Procedures		3.0
RT 203		Radiology Certification Preparation		4.0
RT 295		Radiographic Technology Clinical Practicum 5		8.6
Total				**15.6**

Program Total		72.3 Units

For additional information click here to access SBCC's Academic Calendar

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

Grading Policy

The following grading policy has been adopted by the faculty of the Medical Imaging department and will be utilized for all didactic radiography courses.

Grading Scale
97-100%=A+
92-96.9% =A
88-91.9% =B+
83-87.9% =B
79-82.9%=C+
75-78.9% =C
Fail= Below 75%

A grade designate of "C" shall indicate a passing evaluation for the clinical portion of the program. A grade of “D” or "F" shall constitute a failure in the didactic portion of the program.

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

Mammography Policy

RT 251, Principles of Mammography and Procedures is open to all students enrolled in the Radiography Program.

Students are required to observe mammograms for four (4) hours prior to enrolling in the class to ensure all students are exposed to the requirements in performing a mammogram.

The program will make every effort to place students in a breast imaging clinical rotation/procedure if requested and available. However, the radiography program will not attempt to supersede clinical site policies that restrict breast imaging rotations/ procedures to students. Students should be advised that placement in a breast imaging rotation is not guaranteed.

Upon completion, students will have fulfilled 40 hours of mammography education required for MQSA initial qualifications requirements and to apply for the California Mammography license. This course will also satisfy the ARRT Structured Education requirement for certification (M). Students will have the opportunity to complete 25 supervised mammograms with an ARRT certified and California state licensed mammographer present in compliance with MQSA initial qualifications requirements. In addition, ARRT certification in mammography requires 100 supervised mammograms with the technologist present, but we cannot guarantee that students will be able to complete this number during their final fall and spring semesters.

Students may enroll in RT 290, Work Experience in Radiography in the attempt to complete the required 100 mammograms to be eligible for the ARRT Mammography exam. Work Experience in Radiography will be offered during the Summer I semester immediately following graduation.

Section V: Student Code of Conduct

Academic Standards:

The academic school year is divided into six (6) major grading periods and one (1) minor period (winter intersession). At the conclusion of each major grading period, the student will be evaluated clinically by the Clinical Preceptor in conjunction with the Clinical Supervisor. The Program Director, Clinical Coordinator, and Clinical Supervisor will review each evaluation for student progress.

The evaluations will afford students an opportunity to express their opinions on the training program. Students should be aware if they are experiencing problems, either academically or clinically, they are encouraged to discuss it with the Program Director, Clinical Coordinator, Clinical Supervisor, and/or Clinical Preceptor as soon as possible.

All students must maintain an average of at least 75% in all academic and clinical work. Failure to maintain an average of at least 75% in all academic and clinical work will result in probation up to dismissal from the program.

Faculty Expectations for Student Performance:

To assist in your success during your tenure in the Radiography Program, the following standards have been provided as expectations of student performance.

On campus at the college, the student is expected to:

1. Adhere to all college and departmental policies/procedures.
2. Be on time for class and clinical sessions.
3. Complete all assignments for all courses according to the date and time scheduled.
4. Take examinations on the day and time scheduled. Any deviations must be approved by the instructor of record.
5. Be prepared to participate in class by preparing assignments and answering objectives prior to the class.
6. Maintain a consistent pattern of professional and ethical behavior by:
    a. Completing your own work on tests and written exams.
    b. Not writing assignments for other students.
    c. Consulting with the instructor regarding any material in the course that is not clear.

For the radiography student to qualify for the ARRT exam they shall be in good standing at the time of the exam administration. Good standing means students are:

1. Currently enrolled in the terminal courses of the program with a minimum of a "C" average at the time of exam administration.
2. Have completed all previously required courses in sequence with a minimum of "C" grade.
3. Students shall have completed all clinical education hours.

Progressive Discipline

The progressive discipline policy is a structured process addressing student misconduct or performance issues.

It is designed to provide students with the opportunity to correct their behavior or improve their performance before elevated measures are taken. The steps are outlined below:

Step 1: The instructor verbally discusses the concern with the student and documents the discussion using the electronic Student Conference Form.
Step 2: The instructor documents the second discussion with the student in a formal manner using the electronic Student Conference Form.
Step 3: The instructor Creates a Performance Improvement Plan (PIP) (in tandem with the Clinical Coordinator as outlined below)
Step 4: After all counseling/mentoring options are exhausted, dismissal from the program shall occur.

Program Improvement Plan (PIP):

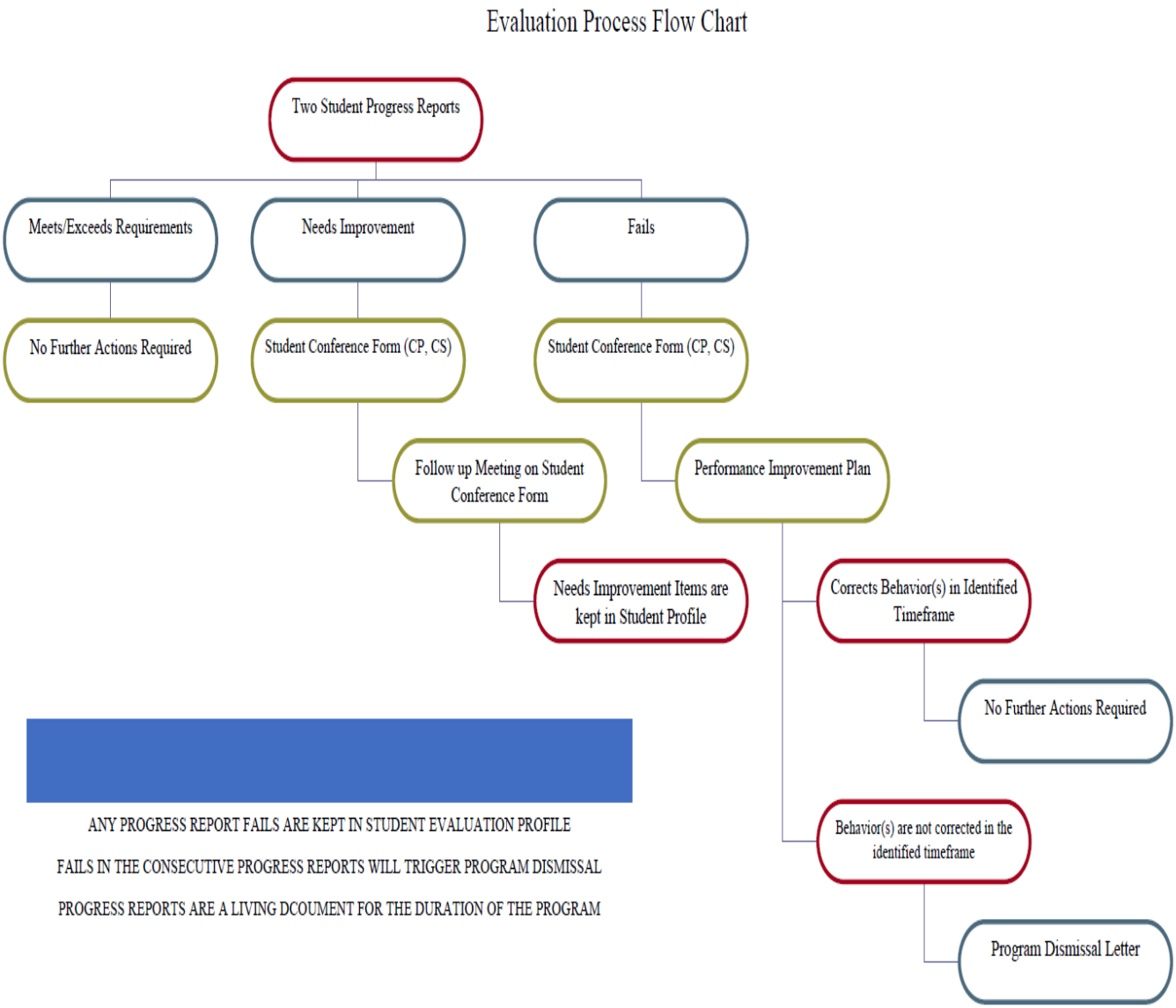
The Program Improvement Plan is designed to provide students with clear measurable steps on how they can improve their performance. The PIP will be utilized for didactic and clinical coursework.

The PIP utilized for didactic and clinical coursework includes an electronic Student Conference Form and will provide clear actions that need to be completed to satisfactory make progress. All required actions identified in the PIP are to be completed and will be outlined with measurable steps and clear completion timeframes.

The flow chart below outlines the steps that are included in the PIP for clinical coursework, and the process. The didactic process mirrors the clinical flowchart. The PIP is utilized as counseling for students and serves as a tool/resource for student improvement/success.

In the event the student does not complete a PIP, they will be dismissed from the program as outlined below.

Evaluation Process Flow Chart



Standards for Disqualification:

The School of Radiologic Technology reserves the right to dismiss a student at any time during the program if the student is found not qualified or is determined as a poor candidate to become a Radiologic Technologist. Inability or failure to maintain the Standards for Retention and Rules of Conduct, insubordination, unprofessional conduct, constitute some reasons for dismissal from the program. A student who does not adhere to the *Code of Ethics, Rules of Conduct, or Clinical Regulations* as outlined in the Radiography Policies and Procedures Manual may be subject to disciplinary probation, suspension, or expulsion from the program. Each specific incident will be reviewed by the program officials and the necessary action is decided upon on an individual basis. Further details regarding disciplinary action and dismissal are explained in the SBCC Standards of Student Conduct.

Inability or failure to adhere the following established academic standards shall result in immediate dismissal:

1. Failure to comply with the Policies and Procedures.
2. Failure to maintain an average of at least 75% in all radiography classes or the clinic within the same grading period.
3. Failure to satisfactorily complete the clinical competencies or clinical assignments.
4. Failure to satisfactorily complete the designated makeup work during the probationary term.
5. Insubordination at the Clinical Site / Unprofessional Conduct.
6. Any violation of the ARRT code of ethics will result in disciplinary action including dismissal from the program.
7. Excessive or unjustified absence or tardiness from classes or clinical rotations.
8. Failure to observe clinical work schedules, including rest and lunch periods.
9. Failure to maintain clinical records and workbook.
10. Failure to inform the clinical site promptly when unable to report for clinical assignments.
11. Inefficient or careless performance of duties, including failure to maintain proper standards of workmanship, productivity, or clinical workbook.
12. Disorderly conduct on hospital premises, such as fighting, practical jokes, horseplay, wasting time, loafing, idleness, or sleeping during clinical hours, or loitering on the clinical property at any time.
13. Failure to observe safety rules and regulations of the clinical site.
14. Failure to immediately report errors, accidents, or "near" accidents occurring on clinical premises.
15. Excessive use of cellphones for personal business during clinical internship.

16. Leaving the clinical site or department during working hours without proper permission.
17. Falsifying information, signatures, times ect. (immediate dismissal from the program).

*Note-The preceding list is not exhaustive.

Sexual Harassment:

Sexual harassment of or by a student in the workplace is considered a form of behavior that is unacceptable and **will not be** tolerated by the Radiography Program and Santa Barbara City College.

1. All Radiology employees and students, whether management or non-management are expected to refrain from any behavior or conduct that could be interpreted as sexual harassment toward any other employee, student, patient, or visitor.
2. Management and supervisory personnel will take prompt and corrective action whenever they become aware of sexual harassment in the workplace.
3. Corrective action will include discipline that may include termination of the offending employee(s) or student(s).
4. All incidence of sexual harassment should be reported to the Program Director or Clinical Supervisor immediately.
5. All students should familiarize themselves with the SBCC policy on Sexual Harassment. In the case of Sexual Harassment, the Radiography Program will abide and uphold the SBCC policy.

Student Due Process:

The school recognizes the right of a student to express valid grievances that may arise in day-to-day working situations without fear of recrimination. The following due process procedures gives students the proper methods and communication path to take when seeking solutions to problems which may occur between the students and the faculty, or the students and clinical personnel. The following steps should be taken when trying to resolve a problem or grievance.

Method I

Step 1: Applies to any student or group of students recognizing a grievance in the clinical education site. The student wishing to seek due process for the problem must pursue the following procedure unless it relates to Sexual Harassment.

Any complaint concerning a clinical matter should first be discussed with the Clinical Preceptor of the designated clinic within the first two weeks of the occurrence of the situation creating the grievance. The Clinical Preceptor will investigate and obtain all pertinent factual information regarding the problem and will provide the student with a solution or decision within three academic days following the receipt of the verbal or written discussion of the problem. A report reflecting the discussion and decisions made will be submitted to the assigned Clinical Supervisor, the student, and the clinical personnel involved.

Step 2: If the assigned Clinical Preceptor does not satisfactorily solve the grievance, the student may appeal verbally or in writing to the assigned college Clinical Supervisor of the program. The college faculty member will obtain all pertinent factual information and provide the student with a written or verbal solution or explanation within five academic days following the receipt of the complaint or problem. A report reflecting the discussion and decision made will be submitted to the Clinical Coordinator, (if the Clinical Coordinator is not the assigned university faculty member), the student, and the faculty involved.

Step 3: If the assigned college faculty (Clinical Supervisor) does not satisfactorily solve the grievance, the student may appeal verbally or in writing to the Clinical Coordinator (or Program Director if the Clinical Coordinator is the college faculty, move to Step 4). The Clinical Coordinator will obtain all pertinent factual information and provide the students with a written or verbal solution or explanation within five academic days following receipt of the problem. A report reflecting the discussion and decisions made will be submitted to the assigned Clinical Supervisor, the Program Director, the student, and the Clinical Preceptor.

Step 4: If the Clinical Coordinator does not satisfactorily solved grievance, the student may appeal verbally or in writing to the Program Director. The Program Director will obtain all pertinent factual information and provide the students with a written or verbal solution or explanation within five academic days following receipt of the problem. A report reflecting the discussion and decisions made will be submitted to the Dean of the Allied Health Department,

the Clinical Coordinator, assigned Clinical Supervisor, the student, and the Clinical Preceptor.

Step 5: If the decision of step 4 does not provide a satisfactory solution to the problem, the student may appeal in writing to the Dean of the Department of Health Technologies. The Dean will review the problem and provide the student with a written or verbal solution or explanation within five academic days following receipt of the problem. A report reflecting the discussion and decisions made will be submitted to the Dean of the Allied Health Department, the Clinical Coordinator, assigned Clinical Supervisor, the student and the Clinical Preceptor.

Step 6: If the decision of step 5 does not provide a satisfactory solution to the problem, the student may appeal to the Dean of Student Affairs within one week following the receipt of the Dean's recommendations regarding the problem. Requests are to be in writing and made to the Santa Barbara Community College Dean of Student Affairs as outlined in the District's Student Code of Conduct, Student Discipline Procedures, and Student Rights.

- **AP 5500 - Student Code of Conduct**
- **AP 5520 - Student Discipline Procedures**
- **Student Rights and Grievances**

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information.

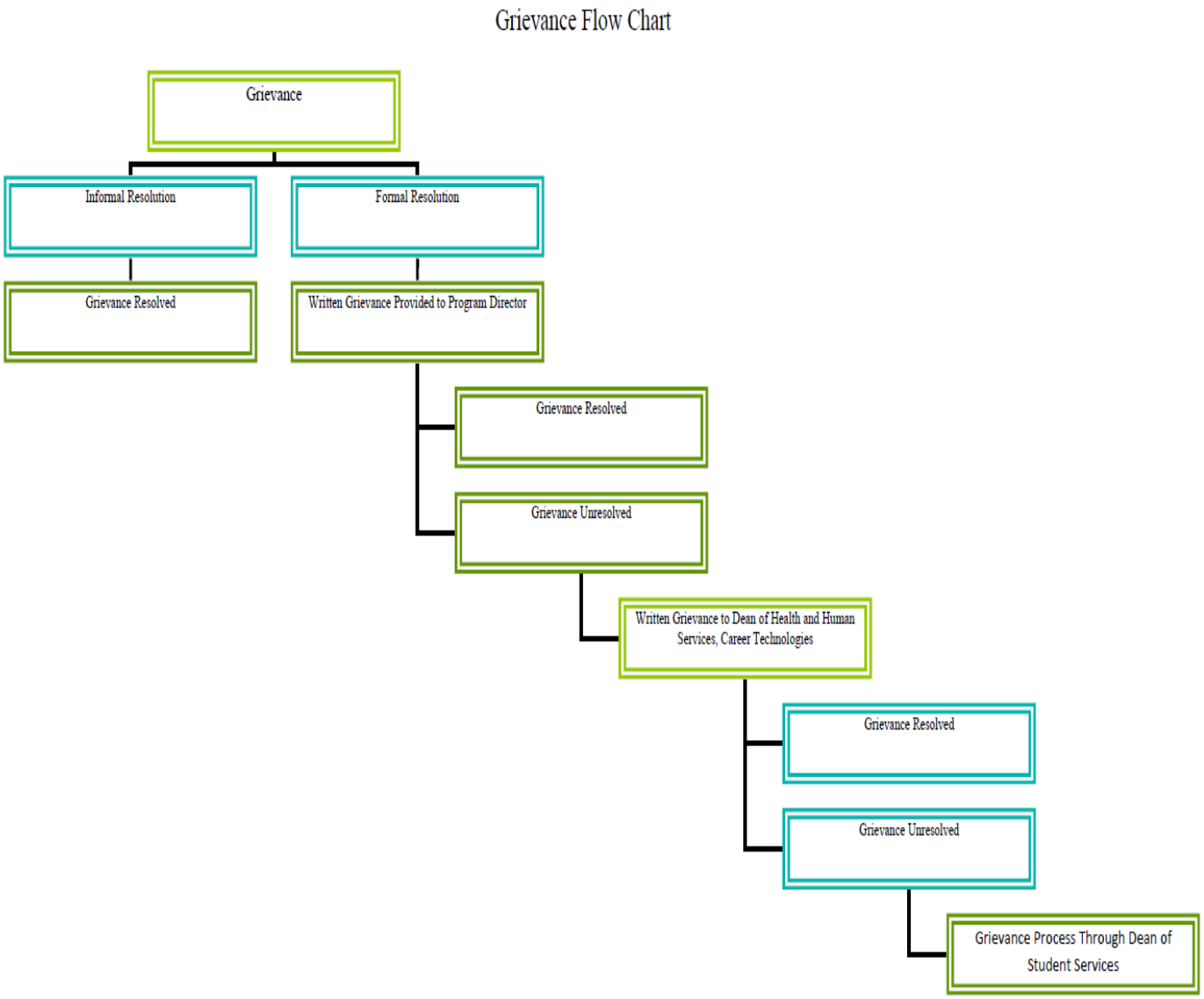
Method II

Applies to any student or group of students recognizing a grievance regarding a grade, the instructor, the course content, or any aspect of the didactic courses and /or campus laboratory sections. The student must pursue the procedure listed on the Office of Student Conduct and Conflict Resolution webpage.

Method III

Applies to any student or group of students recognizing a valid grievance involving a grade, the instructor, the course content, or any aspect of a Santa Barbara Community College faculty not employed for the Program. The student must pursue the procedure listed on the Office of Student Conduct and Conflict Resolution webpage.

Grievance Flow Chart



Student Policy for Re-Entry

Students who leave the Radiologic Technology program for any reason (self or faculty initiated) may be eligible for readmission to the program by filing another application during the selection process period, along with a self-evaluation describing what steps have been taken for a successful completion of RT courses the second time.

Eligibility for re-entry will depend on a number of factors such as space availability, reasons for leaving, length of absence, sequence in the program, and if the student left in good standing. There are no guarantees for reentry. Student academic standing at the time of leaving the program will determine whether academic support courses will be prescribed before reentry. Student's clinical progress and performance at the time of departure will also factor into the eligibility to return. Students must comply with all conditions of acceptance for re-entry before the student may return.

Medical Leave of Absence:

If medical leave becomes necessary, while enrolled in the program, the student must provide written notification to the Program Director. This notification should state the estimated length of requested leave and a physician's verification. Return to the program and or clinical assignment requires a written physician's release and must state "with no restrictions". No student will be permitted to return to a clinical assignment unless he/she can resume full unrestricted duties. Returning students must meet with program officials to determine status for reentry. All missed time that exceeds the permitted absences must be made up. Missed time that cannot be made up will subject the student to a failing grade, which will prevent their continuance in the program.

Section VI: Clinical Education

Student Accountability

Throughout the entire program, students are primarily and ultimately responsible to the Program Director and Clinical Coordinator. Since Clinical Preceptors are not available for each shift, the responsibility for clinical performance of the student has been delegated to the supervisor of the shift and/or the technologist with whom the student is assigned. If, and when possible, students should direct all problems to the Clinical Supervisor and or Clinical Preceptor.

Ethical/Professional/Practice Standards of Conduct

The student radiographers will accept and uphold the professional and ethical standards established by, but not limited to the American Registry of Radiologic Technologists (ARRT), and American Society of Radiologic Technologists (ASRT).

Ethical and professional conduct will encompass all students' competence, integrity, appearance and honesty in dealings with co-workers and clients.

A. **Definitions**:

1. Ethical Conduct: The thoughtful and reflective application of moral principles and a competent level of knowledge and skills, according to principles and standards established and generally accepted by society and the profession.
2. Professional Conduct: The act, manner or process of carrying out the profession, Department of Imaging expectations, principles and standards.

B. **Unethical and Unprofessional Conduct:**

1. All students will refer suspected or actual unethical and/or unprofessional conduct to the immediate supervisor as soon as the occurrence takes place.
2. The supervisor will investigate occurrences to determine reporting requirements and the necessary action to be taken.
3. Disciplinary action will be consistent with SBCC Policy.

ARRT Code of Ethics:

The ARRT Code of Ethics forms the first part of the ARRT Standards of Ethics. The Code of Ethics shall serve as a guide by which Certificate Holders and Candidates may evaluate their professional conduct as it relates to patients, healthcare consumers, employers, colleagues, and other members of the healthcare team. The Code of Ethics is intended to assist Certificate Holders and Candidates in maintaining a high level of ethical conduct and in providing for the protection, safety, and comfort of patients. The Code of Ethics is aspirational.

1. The radiologic technologist acts in a professional manner, responds to patient needs, and supports colleagues and associates in providing quality patient care.
2. The radiologic technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity of mankind.
3. The radiologic technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, familial status, disability, sexual orientation, gender identity, veteran status, age, or any other legally protected basis.
4. The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed, and employs procedures and techniques appropriately.
5. The radiologic technologist assesses situations; exercises care, discretion, and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.
6. The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.
7. The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in minimizing radiation exposure to the patient, self, and other members of the healthcare team.
8. The radiologic technologist practices ethical conduct appropriate to the profession and protects the patient's right to quality radiologic technology care.
9. The radiologic technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy, and reveals confidential information only as required by law or to protect the welfare of the individual or the community
10. The radiologic technologist continually strives to improve knowledge and skills by participating in continuing education and professional activities, sharing knowledge with colleagues, and investigating new aspects of professional practice.
11. The radiologic technologist refrains from the use of illegal drugs and/or any legally

controlled substances, which result in impairment of professional judgment and/or ability to practice radiologic technology with reasonable skill and safety to patients. (Retrieved from ARRT. 5/2022)

Radiography Program Clinical Affiliates:

Santa Barbara Cottage Hospital

400 West Pueblo St., Santa Barbara, CA 93105
Clinical Preceptor: Griselda Johnson, R.T.(R), (M)
Email: g5johnso@sbch.org
Hilda Kirchmaier, R.T.(R)

Goleta Valley Cottage Hospital

100 South Patterson Avenue, Santa Barbara, CA 93111
Clinical Preceptor: Rene Ramos, R.T. (R)
Tel: 805-967-3411 or 805-681-6406

Sansum Clinic (Pueblo Multi-Specialty Clinic)

317 W. Pueblo Street, Santa Barbara, CA 93105
Clinical Preceptor: Martin Schaefer, R.T.(R),
Email:Martin.Schaefer@sutterhealth.org

Sansum Clinic

215 Pesetas Lane, Santa Barbara, CA 93110
Clinical Preceptor: Martin Schaefer, R.T.(R),
Email:Martin.Schaefer@sutterhealth.org

Sansum Clinic (Foothill Surgery Center)

4151 Foothill Rd Building A, Santa Barbara, CA 93110
Clinical Preceptor: Martin Schaefer, R.T.(R),
Email:Martin.Schaefer@sutterhealth.org

Pueblo Radiology

250 W. Pueblo Street, Santa Barbara, CA 93105
Clinical Preceptor: Latrice Ludy R.T.(R)
Cell Phone: 805-217-9699(Text)
Email:lludy@puebloradiology.com

Santa Ynez Valley Cottage Hospital

2050 Viborg St., Solvang, CA 93455
Clinical Preceptor: Alexandra Dignam-Sandoval, R.T. (R), (CT)
Email:a1dignam@sbch.org

Ventura County Medical Center

300 Hillmont Ave, Ventura, CA 93003
Clinical Preceptor: Kylie Lake, R.T. (R).
Email: Kylie.lake@ventura.org
Work Phone: 805-652-3336

Community Memorial Hospital

147 N. Brent Street, Ventura, CA 93003
Clinical Preceptor: Alexandro Albarran, R.T(R)
Email: alexandroalbarran2@gmail.com

Arroyo Grande Hospital

345 South Halcyon Road, Arroyo Grande CA 93420
Clinical Preceptor: Ryan Stitt R.T.(R)(CT)
Cell Phone: 805-714-8335 (Text)
Email: ryan.stitt@commonspirit.org

Marian Regional Medical Center

1400 E Church Street, Santa Maria, CA 93454
Clinical Preceptor: Jake Gallagher, R.T.(R), (CT)
Email: jakerosewallgallagher@gmail.com

Lompoc Valley Medical Center

1515 East Ocean Ave, Lompoc, CA 96436
Clinical Preceptor: Stacey Landon, R.T.(R)
Cell Phone: 805-588-6116 (Text)
Work Phone: 805-737-3374
Email: landons@lompocvmc.com

Sierra Vista Medical Center

1010 Murray Street, San Luis Obispo, CA 93405
Clinical Preceptor: Jimmy Diaz, R.T. (R)
Email: Diazjr@ah.org

Lompoc Health - North H Center

1225 North H Street, Lompoc, CA 96436
Clinical Preceptor: Stacey Landon, R.T.(R)
Cell Phone: 805-588-6116 (Text)
Work Phone: 805-737-3374
Email: landons@lompocvmc.com

French Hospital Medical Center

1911 Johnson Ave, San Luis Obispo, CA 93401
Clinical Preceptor: Jessica Tracy, R.T. (R), (CT)
Email: jctracy82@gmail.com

Clinical Orientation:

All students must complete a general orientation at their imaging department by the designated assignment date in Canvas at the start of each of their clinical rotations. All new students are required to attend HIPAA training and all safety educational and orientation programs as mandated by their position and/or the Hospital (safety, blood borne pathogens, hazardous materials, etc.).

1. Orientation of all work areas, imaging department, and hospital departments.
2. Orientation for each piece of radiographic equipment, including fluoroscopy, portables and C-arms are to be completed. Documents are to be uploaded into the associated clinical course in Canvas. This is a Title 17 requirement.
3. Explanation of their role and responsibilities in the department as it relates to their job description, patient population (pediatrics, adolescents, adults, and geriatrics), and mission statement.
4. General department policies, including, but not limited to, attendance, time and attendance system, environmental safety, radiation safety, role in Quality Assurance/Quality Improvement (QA/QI).
5. At the beginning of each major clinical internship, a Department Orientation Checklist is required to be completed. The document is to be uploaded into the associated clinical course in Canvas.

Clinical Regulations:

The Radiography student is required to follow all of the following policies while at a clinical assignment.

Clinical Rules of Conduct:

Every organization must have rules and regulations if it is to function effectively. Because of the nature of the services given, hospitals/imaging centers must have a very strict adherence to these rules and regulations. The following are some of the violations which may be considered cause for **immediate termination** or **dismissal** from clinical affiliations.

1. Abuse or inconsiderate treatment of patients.
2. HIPAA violation of patient's privacy by any unauthorized release of confidential information.
3. Interference with, insubordination, or refusal to obey any supervisor or other duly constituted authority.
4. Possessing, drinking or being under the influence of alcohol or drugs on the hospital premises.
5. Falsifying enrollment application, attendance records, or any hospital documents.
6. Unauthorized handling, possession or use of narcotics or drugs.
7. Theft from the hospital, fellow employees, patients or anyone on hospital property.
8. Immoral or indecent conduct to fellow students, patients, staff, or faculty.
9. Any serious misconduct on or off duty that may reflect upon the profession.
10. Accepting monetary tips or gratuities from anyone.
11. Intentionally giving false information in accident or insurance cases.
12. Altering attendance records or intentionally altering another student's records.
13. Absence for three consecutive working days without notice to the Program Director.
14. Any violation of hospital/imaging center policies in an egregious manner.

*Note-The preceding list is not exhaustive.

Student Clinical Supervision:

All students shall be adequately supervised. The quality of radiographic procedures performed by students will be adequately monitored to maintain both the proper development of skills and habits and high level of Radiographic image quality.

Procedure

All students of the Radiography program will be under direct supervision during their clinical practicum assignments at all times until they have earned competency and at the discretion of the Clinical Preceptor, to be competent in a given procedure.

Direct supervision is defined as that:

a qualified technologist reviews the request in relation to the student's competency.
a qualified technologist evaluates patient condition in relation to student's competency and knowledge.
a qualified radiographer is present during the examination.
a qualified technologist reviews and approves the radiographs.
Repeat radiographs must be performed under direct supervision of a qualified technologist.
Students may not be assigned to a radiographic room or portable unit unless a qualified technologist is also assigned to the specific area until the student is judged to be competent.

Direct supervision of students, as defined, is required under the following conditions:

1. Portables and surgery
2. Mammography and special imaging modalities
3. Repeat examinations

Students judged competent in a specific area of radiography may perform procedures under indirect supervision.

Indirect supervision is defined as that a qualified technologist shall be immediately available to assist the student regardless of competency level.

Prior to student competency achievement, a single qualified technologist may not be directly responsible for more than one first-year student and indirectly one second-year student during all clinical assignments.

Clinical Rotation Placement Policy:

Students are assigned to four (4) clinical rotations as described below:

1. First rotation fall of first year through the spring (RT 191, RT 191A, and RT 192)
2. Second Summer (RT 293)
3. Fall of second year RT 294)
4. Spring of second year (RT 295)

Clinical Assignments are made by the Clinical Coordinator. The student clinical placement process is based on the following considerations: assurance of equitable learning opportunities, assurance of access to a sufficient variety and volume of procedures to achieve program competencies, and proper orientation of students to clinical settings. In some cases, students may be required to drive up to 100 miles each way to their clinical site, therefore students must be able to provide their own transportation.

There is no guarantee of clinical assignments. Each student has agreed upon acceptance into the program, assignment to any one of the clinical affiliate hospitals. Per 2021 JRCERT Standard 4.4: “Clinical placement must be non-discriminatory in nature and solely determined by the program.”

JRCERT Standard 1.1: The sponsoring institution and program provide students, faculty, and the public with policies, procedures, and relevant information (Clinical Obligations).

JRCERT Standard 4.4: The program provides timely, equitable, and educationally valid clinical experiences for all students.

Course Registration

Students are required to register for each course prior to the start of the semester. Failure to register will result in the student, upon arriving at their clinical site, being required to leave the premise until registration for the course occurs, and four (4) hours have elapsed. Time missed will need to be made up according to the make-up policy.

Clinical Internship Schedule

Clinical internship schedules are set monthly or for the duration of each semester. Schedules should be posted 2 weeks in advance of the scheduled start date.

1. All students will receive equitable rotations to assigned areas and shifts. Rotations will be on a one to two-week basis.
2. It is the student's responsibility to be aware of the changing scheduled hours and clinical assignments. If a student shows up on the wrong shift, they will be sent home and no clinical hours will be rewarded. The student is still required to work his assigned shift.
3. Any clinical schedule changes must be approved by the Clinical Preceptor and Clinical Supervisor before they occur. The schedule change must be requested in written communication and in a reasonable timeframe.
4. Internship schedules are required to be uploaded into the appropriate clinical Canvas shell by the designated due date.

Clinical Assignment hours

Clinical assignment hours will consist of 8 or 8.5 hours (not to exceed 10 hours per day). Assigned clinical hours will vary depending on the clinical site. While standard hours are 0800–1630, hours may range from a start time of 0500 through to 1300 depending on the clinical site and semester. Students are required to report to their Clinical Preceptor or lead technologist in their assigned area and be ready to participate in the procedures at the time posted on the assignment schedule.

Students are scheduled no more than 10 hours per day. Students will not be assigned to "call" or “night shifts” 2300 to 0700, holidays or weekends unless they volunteer. **Students are never to be utilized as hospital staff.**

The specific hours will depend upon the clinical assignment of the student. Shifts assignments include but not limited to:

8 Hour shift	8.5 Hour shift
0500 to 1330	0500 to 1400
0600 to 1430	0600 to 1500
0700 to 1330	0700 to 1600
0800 to 1630	0800 to 1700
0900 to 1730	0900 to 1800
1300 to 2130	1300 to 2200

The normal assignment schedules for students are arranged from Monday through Friday. When assigned to a Saturday or Sunday, this is considered a special assignment and the student is given equal time off during the week.

State and Federal work laws apply including: two (2) fifteen (15) minute breaks and one (1) thirty (30) minute lunch break.

Evening/Weekend Shifts

While the majority of our clinical sites assign students to complete clinical hours between 5 a.m. to 7 p.m. Monday-Friday, some sites do have later shift start times in order to separate the students to achieve better one-on-one training. While weekend shifts are not routinely scheduled, students may ask their Clinical Preceptors to rotate through them. No more than 25% of a student's clinical hours for the entire program are to be performed on evening or weekend shifts. It is strongly suggested that students schedule a weekend and night shift(s) to accompany their clinical training. Weekend and night shifts will not be routinely scheduled in place of weekday shifts. These shifts provide students with flexible and creative learning opportunities.

JRCERT Standard 4.2: The program provides a well-structured curriculum that prepares students to practice in the professional discipline.

Specialty Rotations (Advanced Modalities)

The program provides learning opportunities in advanced imaging and/or therapeutic technologies. It is the program's prerogative to decide which advanced imaging and/or therapeutic technologies should be included in the didactic and/or clinical curriculum.

We will make every effort possible to offer clinical rotations in advanced imaging and/or therapeutic technologies; however, these clinical rotations are earned as soon as all radiographic components are completed.

Dress Code:

The radiography student is required to abide by the program's dress code policy standards unless our clinical affiliates dress code is stricter. Each student is a representative of the Radiologic Technology Program, SBCC, and profession.

Uniforms:

1- Solid **Navy Blue or White** colored uniform top and pants only. Two to three sets are suggested in proper size.

2- You may wear a Navy Blue (workout) Jacket over the uniform for warmth.

3- Solid **WHITE or BLACK** undergarment may be worn under a uniform, but cannot extend beyond sleeve or hemline, (must be tucked in) A solid **WHITE or BLACK** long sleeve fitted shirt may be worn under the uniform top. (May be required to cover tattoos)

4- Undergarments should not be visible when raising arms, bending, sitting, squatting – or doing other movements in the daily routines of performing radiographic exams and patient care.

5- Uniforms must be CLEAN, IRONED, PROFESSIONAL and properly sized – not too tight or too loose.

6- No thermal shirts, oversized shirts, hoodies, or sweatshirts may be worn under or over the uniform top.

7- Hospital issued O.R. scrubs may be worn only when assigned to surgery and shall never be removed from the clinical training facility.

8- Clothing shall not have overly large graphics, branding, or names on apparel.

Shoes:

Shoes must be kept neat and clean, consisting of leather covering the upper foot and toes, and a closed heel. This is required to protect you. Canvas or mesh style shoes are not acceptable. Socks must always be worn. Shoes are to be predominately white, black, or brown in color.

Hair:

All hair must be kept clean and trimmed. Hair that is "touching the collar" length must be neatly pulled back off the collar. Beards, sideburns, and mustaches must be kept clean and trimmed. Conservative hairstyles provide a professional appearance. No extreme styles are allowed – (such as shaved hair patterns, coloring, or Mohawks). The definition of conservative hairstyles is at the discretion of Program faculty.

Jewelry:

A watch, no more than 2 small rings per hand are allowed if they do not endanger the student or the patient. Body piercings above the collar or facial piercing are not allowed. Ear piercing with small stud type earnings are acceptable (not to exceed 2 per ear). No dangling or hoop earrings or large hole ear piercings are allowed. A choker type necklace or chain may be worn. All dangling necklaces/medals must always be worn inside the uniform.

Nails:

Fingernails must be kept clean and neatly trimmed for the safety of the patient as well as the student. No acrylic/artificial (ex: gels and wraps) or colored nails may be worn at any time during clinical assignments. Neutral polish only.

Personal Cleanliness and Hygiene:

Clothes, body, and hair must be kept clean. No scented perfumes or after-shave may be worn. Fingernails must be kept clean and neatly trimmed for the safety of the patient as well as the student. No acrylic/artificial (ex: gels and wraps) nails may be worn at any time during clinical assignments, and nail polish must be neutral in color. Students must maintain a neat and well-groomed appearance, free of offensive body and mouth odors-maintaining appropriate hygiene, both in clinical and classroom environments.

Students may be asked to leave the clinical site if in the opinion of the Clinical Supervisor or Program Faculty; their attire does not meet dress code standards. Any clinical time lost must be made up per make up time policy.

***Any change in Program Dress Code Policy must be approved by the RT Advisory Committee**

Cell Phone:

PURPOSE:

The use of a personal cell phone, Bluetooth, Blackberry, iPhone, iPod, or other personal electronic device (PDA) for personal use may present a hazard or distraction to the student. This policy is meant to ensure that the use of these devices will not disrupt operations and supports patient safety, service, and the educational experience afforded in the clinical setting.

Unless otherwise authorized, personal cell phones and other personal electronic devices must be in the silent or vibration mode at all times, in all patient care areas and while interacting with patients and visitors. In addition to telephone services, many cell phones or personal electronic device providers offer additional functions and/or services including, but not limited to text messaging, web browsing, digital photography, audio-visual, and television. Students shall not use any of these services except during breaks and lunches and in non-patient care areas. Students' use of a cell phone or other digital electronic device camera may never be used for patient photography.

Failure to abide by this policy may result in a student conference form and excessive violations will lead to a Performance Improvement Plan which could result in additional disciplinary action up to and including dismissal from the program.

Request for Exchange of Clinical Education Assignment for Special Circumstances

A student may petition for an exchange of clinical education assignment or site. This shall be done in advance of the event and shall be done in writing to the Radiography Program Director. The Director will respond to the student accordingly.

Examples of Special Circumstances include:

a. Military assignment
b. Religious commitments or assignment
c. Business commitments
d. Financial hardship

Registration, Time, and Attendance

Students are required to register for each course prior to the start of the semester. Failure to register will result in the student, upon arriving at their clinical site, being required to leave the premise until registration for the course occurs, and four (4) hours have elapsed. Time missed will need to be made up according to the make-up policy.

Each clinical course in the radiography program is designed to provide you with an adequate amount of clinical time to gain experience and practice in radiographic procedures. The time and attendance requirements for each semester are provided in the clinical Canvas shell.

Absent/Tardy/Leaving Early:

All clinical days a student is absent/tardy/leave early are to be noted on the attendance record. This would include illness, personal days, funerals, etc. All required clinical hours missed must be accounted for, documented, and total the requirement set forth in each clinical course. The accuracy and validity of clinical records are essential for maintaining accreditation.

Students who are late, absent, or leave early from clinical training are required to submit a Clinical Absence/Tardy survey within the same day of the occurrence. The Clinical Absence/Tardy survey can be found in the clinical canvas shell or here. In addition, students are required to call the clinical preceptor to inform them of their missed clinical time at least thirty minutes (30) prior to the start of their clinical rotation.

Each Absence, Tardy, or Leaving Early are documented through the absence survey. A total of three Absents, Tardy, or Leaving Early will result in a deduction of 5% in the professionalism section in the clinical canvas course.

Make-Up Hrs.:

All absences must be made up at the clinical affiliate/rotation in which the absence occurs. Approval for makeup time must be arranged with the Clinical Preceptor and Clinical Supervisor within two (2) weeks of the occurrence. No absence or deficient time may be carried over to the next semester or clinical rotation unless approved by the Clinical Coordinator and Program Director. Make-up time must be approved prior to its occurrence otherwise the time will not count towards clinical hours. Make-up time will not occur in quarter hour up to half-hour increments. No make up time can occur while the college is closed. Refer to the current academic calendar for precise dates of holidays and school closures: Academic Calendar

Clinical sick absences are to be made up at minimum, a 4 hour block of time, and preferably a full 8 or 8.5 hr shift. Students are not permitted to intern for more than 10 hours on any rotation. Approval is required before making up missed time by the Clinical Preceptor and Clinical Supervisor.

Time missed due to leaving early (less than 4 hrs.), can be added to a scheduled shift, and time must not exceed the maximum 10 hr. shift. Approval is required before making up missed time by the Clinical Preceptor and Clinical Supervisor.

All clinical absences shall be accounted for before students are allowed to sit for the ARRT national certification examinations. No student will be permitted to graduate unless all clinical absences have been made up. Instead, the student will be extended an incomplete grade for the clinical portion of the course in which the absence/s occurs. The student will then be given a specifically designated time period in which to successfully complete all the clinical requirements.

Failure to comply with the make-up hrs. policy will result in disciplinary actions.

Time Sheets/Timecards

Documentation of clinical hours will be based upon the quarter-hour (i.e. 0700, 0715, 0730, and 0800). Students are required to arrive prior to their scheduled shift and leave the premises at the end of their scheduled shift. **Hospital/Clinic time policy does not supersede the program policy**.

A time clock is located at a clinical site within each county. If the site at which a student is assigned has a time clock, then the student must clock “in” and “out”; in addition to documenting their “in” and “out” times on the required timesheets, then have it initiated by a technologist.

Clinical Schedule Change

The clinical supervisor needs to be aware of students' clinical schedules for liability reasons and Clinical Supervisor (CS) requirements. Therefore, all clinical schedule changes must be approved by the Clinical Preceptor and Clinical Supervisor before they occur. (See policy, Clinical Internship Schedule # 3)

Tardiness:

Students are expected to be in their assigned work areas, in the proper attire, prior to the beginning of the scheduled shift (i.e. at 0700 for a 7:00 AM assignment). If the student is not at their assignment work area at the beginning of the shift they will be considered tardy. In the event of clinical tardiness or absence, the student is required to contact the Clinical Preceptor thirty (30) minutes prior to their assigned shift on the assigned day. Students who are late, absent, or leave early from clinical training are required to submit a Clinical Absence/Tardy survey within the same day of the occurrence. The Clinical Absence/Tardy survey can be found in the clinical canvas shell or here.

If a student is tardy they may be allowed, upon Clinical Preceptor's approval, and notification of the Clinical Supervisor to make up the time lost at the end of the shift. Any lost time not performed at the end of a shift will be deducted and reflected in the clinical timesheet. Students are not permitted to intern for more than 10 hours on any rotation.

Excessive absences, tardies, leaving early or any missed clinical time (more than two occurrences) shall result in a student conference discussion and will be documented with a written student conference form. Excessive absences could result in dismissal from the program. Falsification of timesheets will lead to dismissal from the radiography program.

Sickness/Extended Illness

Three (3) consecutive days of absence will require the completion of the Return from Illness form. Students will not return to the program without the attending physician's signature affixed to the document. Extended illness or acute hospitalization that will break the continuity of a student's program will require the student to withdraw from the program and may be considered for re-entry the following year.

Jury Duty

Contact the Program Director as soon as you receive a jury summons. A letter of support will be written by the Program Director to submit to the court for a postponement in your jury duty.

Students are **strongly** encouraged to postpone any jury duty assignments until the program is completed. A lengthy court assignment may require the student to withdraw from the program and re-enter at a later date.

Recognized Holidays

First and Second-year students will observe the below holidays set by the SBCC academic calendar. Students will not be scheduled for these holidays.

Labor Day (Observed)	September
Veterans Day (Observed)	November
Thanksgiving (Observed)	November
Christmas (Observed)	December
New Year's (Observed)	January

Martin Luther King Day	January
Lincoln's Birthday (Observed)	February
Washington's Birthday (Observed)	February
Spring Break	March/April
Memorial Day (Observed)	May
Juneteenth (Observed)	June
Independence Day (Observed)	July

*SEE COLLEGE CALENDAR FOR EXACT DAY OF HOLIDAY

Clinical Course Grading

Clinical education evaluations and grades for RT 191, 192, 293 and 294 are calculated as follows: Let discuss

Clinical Schedules (Clinical Records, Policies, and Procedures)	10 %
Clinical Time Sheets	10 %
Clinical Competencies	20 %
Clinical Progress Evaluations	20 %
Clinical Experience Records (Class Participation)	20 %
Clinical Site/Preceptor Evaluation	5 %
Professionalism, Homework, Clinical Assignments and Clinical Journal Assignments	15 %
	100%

Clinical Evaluation and Grading:

The program shall promote successful student outcomes and ensure a clinical experience which progresses through a series of additive tasks by setting certain student performance standards. The successful completion of these tasks shall be documented using multiple evaluation criteria: clinical evaluations, clinical competency grades, clinical record keeping, reflection assignments, and other related activities. This criteria will be used to clinically grade the students during their five clinical semesters. During the last semester, terminal competencies will be added to the evaluation process and must be completed to finish the program.

It is necessary to pass all clinical rotations to continue in the program. All clinical courses are graded on a “Pass” “No Pass”. It is necessary to complete all assignments and score 75% or higher on the Clinical Course to receive a passing grade for each clinical course. Failure to meet the requirements will result in a PIP, up to dismissal from the program.

Midterm/Final Clinical Progress Evaluations Scoring

The clinical evaluation is designed to provide constructive feedback to a student upon 10 categories. Categories include:

1. Patient Care
2. Communication
3. Professionalism and Ethics
4. Equipment Handling
5. Positioning Skills
6. Critical Thinking and Adaptability
7. Accountability
8. Radiation Protection
9. Organization
10. Sensitivity and Understanding

Each category will be scored with a:

1. Exceeds expectations (E)
2. Meets expectations (ME)
3. Need improvement (NI)
4. Failure (F)

Students are encouraged to reflect upon their earned score, strive to improve in each category for the midterm and final evaluation.

Grading will be based upon the following.

1. A maximum of 30 points will be awarded if the student receives ME or E expectations in all categories on their midterm and final evaluation
2. For each Needs Improvement (NI), 2 points will be deducted the maximum 30 points for each NI.

a. 1 NI = 28 points or 93%
b. 2 NI = 26 points or 86%
c. 3 NI = 24 points or 80%
d. 4 NI = 22 points or 73%

3. For each NI on the Midterm evaluation, students will be counseled on the areas that need improvement. The student will have until the end of the semester to improve each NI to a score of ME or an E. Failure to meet or exceed expectations will result in a Performance Improvement Plan (PIP).

4. A Failure (F) score in any of the 10 categories on the midterm or final will result in a Performance Improvement Plan (PIP)
5. A 75% or better must be earned to receive the weighted total of 20% category "Clinical Progress Evaluation" or 20% of the clinical course grade.
6. By signing the midterm evaluation, the student agrees to any and all of the necessary improvements as discussed by the CP and CS, and documented within the evaluation.
7. By signing the final evaluation, any documented NI in the evaluation will result in a PIP.

Clinical Performance Objectives:

Evaluation of Requisition

The student will be able to:

a. Select appropriate image size and identify procedures for the exam to be performed.
b. Upon request, recall the patient's age and name of the patient.
c. Identify patients' mode of transportation to the clinical area.
d. Pronounce the patient's name.
e. Recall the patient's admitting diagnosis.
f. Recall the ordering physician's name.

Physical Facilities Readiness

The student will be able to:

a. Provide a clean radiographic table.
b. Exhibit orderly cabinets and storage space.
c. Provide appropriately sized imaging receptors when available.
d. Provide emesis basins and have drugs ready.
e. Locate syringes and needles as necessary.
f. Turn machine "ON" and be prepared for exposures.
g. Turn the tube in the position necessary for the exam.
h. Resupply linens if appropriate.

Patient and Technologists Relationship

The student will be able to:

a. Select and correctly identify each patient.
b. Assist the patient to the radiographic room.
c. Assist the patient to the radiographic table.
d. Keep the patient clothed and/or draped for modesty.
e. Talk with the patient in a concerned, professional manner.
f. Give proper instructions for moving and breathing.
g. Have the patient gowned properly.
h. Follow proper isolation procedures when appropriate.

Positioning Skills

The student will be able to:

a. Position the patient correctly on the table (prone or supine, head at appropriate end).
b. Align center of part to be demonstrated to the center of the imaging receptor.
c. Center central ray to the center of the imaging receptor.
d. Oblique the patient correctly if required.
e. Angle the central ray to the imaging receptor.
f. Remove unwanted anatomical parts from the radiographic area.

Equipment Manipulation

The student will be able to:

a. Turn tube from horizontal to vertical
b. Move the bucky tray and utilize locks
c. Identify and utilize locks
d. Insert and remove cassettes from the bucky tray and spot image device
e. Operate console for automatic exposure controls (e.g. chest)
f. Select appropriate factors at the control panel
g. Demonstrate proper use of a technique chart
h. Properly measure the patient with calipers
i. Identify the image with "R", "L", and other appropriate identifications
j. Fill syringes using aseptic technique
k. Direct mobile unit
l. Operate controls for mobile units
m. Selection of proper imaging receptor
n. Adopt technique for changes in SID/FFD, grid ratio, collimation, etc.

Evidence of Radiation Protection

The student will:

a. Cone or collimate properly
b. Use gonadal shields, when appropriate
c. Demonstrate utilization of lead apron and gloves, if appropriate
d. Wear the TLD as required by the institution and radiation safety requirements.
e. Select proper exposure factors
f. Adjust exposure technique for motion, when appropriate

Image Evaluation Objectives

Radiograph(s) Demonstrates:

1. Anatomical Part(s): Part is shown in the proper perspective.

2. Proper Alignment:
a. Imaging plate centered
b. Anatomical part centered
c. Tube centered
d. Patient oblique or rotated correctly

Standard Radiographic Exposure: Radiographic Techniques
a. Chart was used correctly for selection of technique.
b. Compensation of factors for Pathology.
c. Correct exposure used to produce the image. (Proper density and contrast)

Image Identification and/or Other Identifications

a. "R", "L", in the correct location
b. Minutes or hour markers/annotation visible
c. Patient information and date can be identified
d. Correct annotation

Radiation Protection

a. Cone or collimation limits visible
b. No repeats
c. Gonad shields in place

Competency Forms and Sign-off Procedure:

A qualified Radiologic Technologist must sign off all competency forms. A qualified Radiologic Technologist/Clinical Preceptor has earned an ARRT & CRT credentials, a minimum of two years full time work experience, and must be a staff employee of the clinical site. No Registry Technologists can sign students off on their competencies.

Prior to requesting a "Competency Examination Sign-off" the student must complete the 3 levels of competency. Student's progress through each of the levels at different time intervals, but all students must participate in the three levels prior to requesting a competency sign off.

How to request a Competency Examination?

Three proficiency levels occur prior to requesting a competency sign off.

Three Proficiency Levels

Level 1 (Observation with limited hands on): The students must take part in the completion of the procedure. If the clinical instructor feels that the student did nothing more than "stand around", the clinical instructor shall ask that student to participate in more procedures. In this level the students must review the hospital procedure manual, help set up the equipment, and assist in the completion of the examination.

Level 2 (Hands on with assistance): The student must actively take part in the completion of the procedure. The clinical instructor may offer advice, supplement patient interaction (verbal & non-verbal), and assist with repositioning, when necessary, but the setup, the handling of the patient, the initial positioning, the execution of the procedure, the completion of paperwork, and the annotation and distribution of the images must be done by the student. If the clinical instructor feels that they had to provide more assistance than necessary, and that the study would have been compromised without much of their input, the clinical instructor should ask the student to participate in more procedures.

Level 3 (Hands on without assistance): The student must complete the procedure with observational supervision only. The clinical instructor should not provide assistance to the student with the exception of critically ill patients who may need assistance moving. If the clinical instructor feels the need to step in to avert a compromised study, the supervisor will do so, and the procedure needs to be repeated.

After a student has mastered level 3 (for a certain examination) they may ask a qualified clinical instructor to observe and complete the competency form for that examination.

For examinations that are uncommon such as: Sternums, Scapula's etc… a student can simulate the examination (at the end of their clinical training) with the supervision of a qualified clinical instructor. According to the ARRT guidelines, a maximum of 10 procedures can be simulated. Every effort should be made by the student to earn their competencies on a patient. Competency simulations will only occur in the last clinical semester.

No student will be asked to perform at a proficiency level in which they do not feel comfortable with.

Student Clinical Workbook:

Each student is required to purchase the Clinical Workbook packet that identifies and introduces the student to the various clinical forms and documents they will participate in during their training program. Included in this manual are the following introductions, information, and policies:

1. A brief explanation of each assignment area identifying the unique learning experiences of the assignment.
2. The specific learning objectives are identified for each assignment together with a list of the duties and responsibilities of both the student and the Clinical Preceptor.
3. Individual references that differentiate between the expected learning and competencies to be achieved between the first- and second-year students assigned to the clinical rotation.
4. Clinical education, clinical supervision, and repeat examination requirements.

Review of Complete Images and Repeat Exams

All student images must be checked before the completion of an exam.

1. Responsibility for checking student images falls to the following:
a. Clinical Preceptors,
b. Floor supervisors and/or
c. Staff technologist assigned to the student.

2. If there is a question regarding the necessity of repeating an image, the above responsible person shall sign the front of the requisition assuming responsibility from the student if the exam is questioned at a later date.

a. It is the student's responsibility to ask for such verification, and if it is not forthcoming to indicate the same on the request.
b. If a student is required to repeat an image the student must be required to see the image in order to correct any positioning or technical factor problem.

3. Examinations that need to be repeated shall be repeated by the person who performed the examination originally. Students shall not repeat examinations for technologists and technologists shall not repeat examinations for students.

4. All repeat radiographs must be performed under the **direct supervision** of a qualified radiographer, meaning the radiographer is present and with the student during the repeat examination, regardless of the student's competency level.

5. Repeat exams shall be documented on a repeat log sheet and initiated by the technologists supervising the repeat.

Student Image Quality Control:

Responsibility

The following individuals are responsible for checking student's images:

1. Clinical Preceptors
2. Floor supervisors and/or
3. Staff technologist assigned to the student

Procedures:

If there is a question regarding the necessity of repeating an image, the above responsible person shall sign the student repeat log, assuming responsibility from the student if the exam is questioned at a later date. It is the student's responsibility to ask for such verification, and if it is not forthcoming to indicate the same on the request.

If a student is required to repeat an image the student must be allowed to see the first image in order to correct any positioning or technical factor problem. The repeated examination must be performed under the direct supervision of a licensed technologist. The technologist should review the positioning and technique before the exposure is taken.

Repeat Examinations:

1. The examination shall be repeated by the person who performed the original exam.
2. Students shall not repeat examinations for technologists.
3. Repeat exams shall be recorded in the 'repeat log' noting the supervising technologist and the reason for the repeat.

Use of Fluoroscopy by Student Radiographers:

In accordance with the CDPH-RHB state law pertaining to the use of fluoroscopy, student technologists **may not** independently perform fluoroscopic procedures that involve the positioning of patients or energizing the fluoroscopy tube under any circumstances.

Radiologic technologists possessing a current Fluoroscopic certification may assist a radiologist or physician who is permitted by the State as an Operator and Supervisor in Radiography and Fluoroscopy with the limitations defined by the fluoroscopy permit only.

Students will document each fluoroscopy procedure including:

1. Date
2. Procedure
3. Time of procedure
4. Technologist Fluoroscopy permit number
5. Technologist initials

Any student found performing fluoroscopy on patients as a means of previewing routine positions, such as IVU, KUB, GI overheads, etc., will be subject to disciplinary action up to and including dismissal.

Clinical Visitations, College Faculty (Clinical Supervisors):

During each semester that students are assigned to a clinical education site, college faculty shall visit the First- and Second-Year students on a weekly or bi-weekly basis. The goals for the clinical visits shall include:

1. Meet with students to discuss clinical progress.
2. Observe students in the clinical environment.
3. Observe students during patient procedures.
4. Review the student's clinical workbook and sign with the date affixed.
5. Discuss the positioning/procedure progress. Quiz student’s on related materials.
6. Review competencies with the student discussing CR, size IP, and anatomy seen etc.
7. Meet with Clinical Preceptors to review students' progress.
8. When appropriate, meet with the Radiologist and staff technologists.
9. Assess whether the clinical education is being integrated in an organized manner and in accordance with each specific course and program requirements.
10. Assess whether students are following required procedures regarding patient handling, radiographic procedures, and radiation biology.

Section VII: Student Health

SBCC Health Technologies and Human Services Policy Statement

Infection Control:

The risk of infection among patients and personnel is minimized through the strict attention aid infection control measures.

Procedure for Implementation:

Isolation Patients

a. The Department of Diagnostic Imaging should be informed when isolation patients are to be sent to the department.
b. Recommended isolation precautions must be adhered to as outlined within the Infection Control Manual.

Hand Washing

a. Hand washing is the most important procedure in preventing the spread of infection. Personnel should wash their hands when reporting to and leaving work.
b. Hands should be washed when entering and leaving isolation rooms and between ALL patient contacts.

Surgical Scrubs

Clean preparation, which is approved for use as a surgical hand scrub, should be used (according to FDA approved label instructions) before all invasive procedures, e.g., Angiograms, Myelograms, Arthrograms, Drainage Procedures, and Biopsies.

Injections

a. The site must be cleansed with alcohol or an appropriate solution prior to injection.
b. Needles and syringes must be disposed of in labeled 'Sharps' containers.
c. Major injection sites (Lumbar Punctures, Arthrograms, Angiograms, Drainage Procedures, Biopsies, etc.) should be shaved and prepared with the appropriate solution. Sterile drapes must surround the site.

Insertion of Catheters

a. Catheter insertion should be done with an aseptic technique. Traffic in the room

should be kept to a minimum.

b. The injection site must be shaved, prepared with the appropriate solution, and draped with sterile towels.

c. Hand washing must be done in a clean sink with a surgical scrub by the physician and the scrub technologist.

d. The cleaning of equipment should be done at a dirty sink. All equipment should be disposable when possible.

e. Procedures for cleaning the equipment should follow the manufacturer's recommendations.

Barium Enema

a. All barium mixing and preparation should be done within the clean area.

b. Hands should be washed before and after all barium studies.

General Cleaning

a. All equipment and instruments coming into contact with contamination (e.g., blood, feces, urine, isolation patients) must be cleaned after each case. All other items coming into direct contact with patients should be cleaned at least once each day. Surfaces will be cleaned/disinfected using either the hospital approved environmental disinfectant or 70% alcohol.

a. Wipe off gross contamination.

b. Whip wet surface thoroughly with alcohol.

c. Allow surface to air-dry.

b. All cleaning of dirty equipment should be done at a sink within an area labeled "dirty area".

c. Bathrooms should be cleaned daily.

d. Wheelchairs and litters should be cleaned once each week.

Standard Precautions:

Should be used when having contact with ALL patient's blood and/or body fluids.

a. GLOVES should be worn for performing all invasive procedures, touching body substances or handling items or surfaces soiled with blood or body fluids. Change should occur after each substance contact.
b. GOWNS should be worn with judgment when potential contamination with body fluids is anticipated (as in the treatment of major trauma or major drainage).
c. MASKS AND EYEWEAR should be worn during procedures likely to generate droplets of blood or other body fluids (sectioning or intubation).
d. NEEDLES and sharps must be disposed within puncture-resistant containers. Needles should not be recapped by hand.

N-95 Respirator

a. Protecting students from exposure of all types of respiratory hazards is an important issue. Clinical sites that provide students fit testing of the N95 respirator, the student will be allowed to enter a respiratory isolation room and participate in a radiographic procedure(s). Students shall not enter any respiratory isolation room requiring the protection of the N95 respirator if the clinical site does not provide fit testing of the respirator.

Employee Orientation and Responsibilities:

a. Each new employee should be oriented to the department's infection control policy with special regard to personal hygiene and his or her personal responsibility to Infection Control.
b. A record will be kept in each employee folder to document infection control orientation.
c. All open sores (boils, cuts, wounds) especially on the hands, should be reported to the department supervisor. They will determine what action or special precautions are to be taken.

Sterility/integrity of items:

a. Check instruments or tray covers for broken or tampered seals.
b. Check instruments and trays for the expiration date prior to use. Check gas or steam indicator tape around trays or instrument packages indicating sterility was met. Steam and gas tape should be evenly covered with striped marks.
c. When trays or instruments are opened, check the internal gas or steam indicator for change; the indicator should be evenly colored with markings.
d. Instruments or trays should never be used if there is the slightest doubt of sterility.

Hepatitis/HIV Precautions:

The Health Technologies and Human Services faculty agrees with and adopts the National Center for Disease Control's guidelines for control of the spread of the human immunodeficiency virus and Hepatitis B, and related hepatitis viruses.

All students as health care and service providers need to know and practice precautions to protect themselves and their patients from exposure to the Hepatitis viruses and the human immunodeficiency virus (HIV) which causes AIDS and AIDS-Related Complex (ARC). Blood and body secretions from all individuals are considered potentially infectious. Therefore, preventive measures will be taught throughout the HT/HS programs.

Specific recommendations based on CDC guidelines are:

Use appropriate barrier precautions routinely to prevent skin and mucous membrane exposure when contact with blood or other body fluids of any patient/client is anticipated. (These substances include vaginal, seminal, pleural, synovial, cerebrospinal, oral secretions, feces, pericardial and amniotic fluid, and any body tissue.)*

Wear latex gloves for touching blood and body fluids, mucous membranes, or non-intact skin of all patients/clients, or for handling items or surfaces soiled with blood or body fluids, including linen that may be soiled with secretions. Gloves should be changed using correct asepsis after contact with each patient/client, and hands washed thoroughly and immediately.

Wear a mask and protective eyewear during procedures likely to generate droplets of blood or other body fluids to prevent exposure of mucous membranes of the mouth, nose, and eyes. Gowns should be worn during procedures likely to generate splashes of blood or other body fluids. Wash hands and other skin surfaces immediately and thoroughly if contaminated with blood or other body fluids.

Take precautions to prevent injuries caused by needles, scalpels, and other sharp instruments. To prevent needle stick injuries, do not recap needles by holding a needle cap in hand; rather direct needle into the cap on the instrument tray. Do not purposely bend or break needles by hand, remove from disposable syringes, or otherwise manipulate by hand. After use, place all sharp instruments in a puncture-resistant container for disposal, located as close as possible to the use area. (If syringes are used for repeated injections, do not recap after use, but rather place the unsheathed needle into a "sterile field" between injections, and dispose of it in an appropriate "sharps" container.)

Although saliva has not been implicated in HIV transmission, to minimize the need for emergency mouth-to-mouth resuscitation, have mouthpieces, resuscitation bags, or other ventilation devices available for use in areas where the need of resuscitation is predictable.

Although pregnant women are not known to be at greater risk of contracting HIV infection during pregnancy, the infant is at risk of infection resulting from perinatal transmission. Because

of this risk, pregnant women should be especially familiar with and adhere strictly to precautions to minimize risks.

Check your hands for any cuts, abrasions or breaks in the skin and cover with a waterproof dressing. Refrain from direct patient/client contact if you have an exudative lesion or weeping dermatitis until the condition resolves.

If accidental contact occurs, an immediate evaluation of the patient/client within legal parameters must be made for AIDS or Hepatitis B. If AIDS is confirmed, AZT treatment should be initiated. H-BIG (Hepatitis B immune globulin) is indicated to provide immediate protection from Hepatitis B. Hepatitis B vaccine, Heptavax-B, or Recombivax HB are available to provide active immunity to Hepatitis B infection. Clinical studies have shown that 85 to 96 percent of those vaccinated evidence immunity. Side effects have been minimal in vaccine trials. The most common complaint has been arm soreness; a few individuals have reported rash, nausea, joint pain, and low-grade fever. No long- term reactions to the vaccine have been reported.

* Though the CDC does not include nasal secretions, urine, and vomitus (unless contains visible blood), barrier precautions are required whenever working in a dental operatory, diapering young children, or in an acute care setting handling these body secretions.

Student Health:

Prior to admission into the program, all students are required to pass a physical examination. Any student who does not meet the health standards required by the sponsoring institution will not be admitted into the program.

Once enrolled in the Radiology Program, health care is available to the student through the Student Health Center and Workman's Compensation. Health insurance and medical expenses incurred during training are not covered by the hospital. Students are responsible for their own primary care, hospital coverage, pharmaceuticals, dental and eye care.

Latex Allergy:

Latex gloves have proved effective in preventing transmission of many infectious diseases to health care workers. For some workers, exposure to latex may result in allergic reactions. Students who have an allergy to latex are required to provide a note from their physician/ nurse practitioner stating that they have a latex allergy. The note is to be given to the clinical coordinator.

SBCC Substance Abuse Policy:

Santa Barbara City College has clear policies regarding substance abuse. The Radiology Program adheres to the campus policy regarding substance abuse for both students and faculty.

Substance Abuse Policy

The Drug-Free Schools and Communities Act Amendments of 1989 required colleges to implement a drug prevention program, which includes the annual dissemination of the college's policy on alcohol and drug use.

Santa Barbara City College is committed to the success of each student and, as a college, we realize that the use of alcohol and drugs can be a major impediment to success. There are both physical and psychological health risks associated with drug and alcohol use, including decreased immunity, exhaustion, decreased muscle coordination, depression, confusion, and paranoia, among other conditions. In most cases, anyone who uses drugs and abuses alcohol can expect a decline in the quality of their life.

Through the Health Services and Wellness Program and the Student Athletic Assistance Program (SAAP), SBCC offers classes, educational programming, resources, and counseling, as well as referrals to community service agencies, counseling, and rehabilitation programs.

According to the Standards of Student Conduct, possession, use, or distribution of illicit drugs and alcohol on college property or during campus-related activities are subject to disciplinary action. This can be up to, and including, expulsion from SBCC, as well as punishment under California State Law.

Reasonable Accommodation and Undue Hardship Limitations

“Reasonable accommodation” is a critical component of the Americans with Disabilities Act's (ADA) assurance of nondiscrimination. ADA indicates that reasonable accommodation is any change in the work environment or in the way things are usually done that results in equal employment opportunity for an individual with a disability. The employer is not required to lower quality or quantity standards to make an accommodation. Nor is an employer obligated to provide personal use items, such as glasses or hearing aids, as accommodations.

The employer is not required to provide an accommodation if it will impose an undue hardship on the operation of its business. **Undue hardship** is defined by the ADA as an action that is:

"excessively costly, extensive, substantial, or disruptive, or that would fundamentally alter the nature or operation of the business."

The Radiology School will make a reasonable accommodation to the known physical or mental limitations of a qualified applicant, student or employee with a disability unless it can show that the accommodation would cause an undue hardship on the operation of its business.

1. Examples of reasonable accommodation include:

a. Making existing facilities used by employees or students readily accessible to, and usable by, an individual with a disability

b. Job restructuring

c. Modifying work schedules

d. Reassignments to a vacant position

e. Acquiring or modifying equipment or devices

f. Adjusting or modifying examinations, training, materials, or policies

g. Providing qualified readers or interpreters

In determining undue hardships, factors to be considered include the nature and cost of the accommodation in relation to the size, the financial resources, the nature and structure of the employer's organization, as well as the impact of the accommodation on the facility.

Actions That Constitute Discrimination (ADA)

The Radiology School will not perform any action(s) which is/are in violation of the American Disabilities Act (ADA). The ADA specifies that the following types of actions that may constitute discrimination:

1. Limiting, segregating, or classifying a student applicant in a way that adversely affects career opportunities for the student applicant because of their disability.
2. Participating in contractual or other arrangements of relationship that subjects a school applicant with a disability to discrimination.
3. Denying admission to a qualified individual because they have a relationship or association with a person with a disability.
4. Refusing to make reasonable accommodation to the known physical or mental limitations of a student applicant with a disability unless the accommodation would pose an undue hardship on the school.
5. Using qualification standards, entrance tests, or other selection criteria that screen out or tend to screen out an individual with a disability unless they are job-related and necessary for the school.
6. Discriminating against an individual because they have opposed an admission practice of the school or filed a complaint, testified, assisted, or participated in an investigation, proceeding, or hearing to enforce provisions of the American Disabilities Act.

Section VIII: Radiation Safety

Radiation Protection Program "ALARA" & Reporting:

"Not long after the discovery of ionizing radiation, it became clear that exposure to high doses of such radiation was detrimental to human health. After the bombings that ended World War II, the United States moved toward further investment in both nuclear weaponry and nuclear energy for civilians. The Nuclear Regulatory Commission (NRC), laid out increasingly stringent safeguards to protect both civilians and nuclear workers. This effort culminated in the ALARA (As Low As Reasonably Achievable) protocol, which eventually became adopted as the gold standard of nuclear safety."

Michael Baumer, March 14, 2015

The intent of the ALARA program is to maintain exposure to radiation at levels that are as low as achievable (ALARA. This radiation safety program is based on the premise that radiation exposure is not risk-free and therefore exposure should be kept to levels below the limits permitted by the State of California, the NRC, and other regulatory agencies. ALARA is critical to our radiation protection philosophy.

There are three major principles that assist in maintaining ALARA and can help prevent both unnecessary exposure and overexposure: time, distance, and shielding.

1. Time: Minimize the time spent near a radiation source to only what it takes to get the job done
2. Distance: maximize your distance from a radiation source as much as you can. The greater the distance, the lower the dose
3. Shielding: put something between you and the radiation source.

Procedure

1. Every 3 months radiation detection badges are returned for processing and reading.
2. All readings are recorded by the computer and are checked to see whether or not an individual exceeded the quarter's ALARA levels.
3. Exposure over 100 mRem/qtr. (1 mSv/qtr.) will prompt an investigation.
4. A notice will be generated informing the individual of the exceeded level.
5. The investigation must also include notification of the Department of Public Health, Radiologic Health Branch, Certification Unit with follow up required by Title 22. (See appendix)

a. Exposures above 1250 mRem (12.5 mSv) and below 5000 mRem (50 mSv) in a single quarter exposure are reported to the California Department of Public Health Services and the Radiation Safety Committee of the clinical site within 30 days.

b. Exposures above the 5000 mRem (50 mSv) but less than 25 Rem (.25 Sv)will be reported to the California Department of Public Health Services within 24 hours.

c. Exposure rates 5x in excess of the annual exposure dose limit will be reported to

the California Department of Public Health immediately.

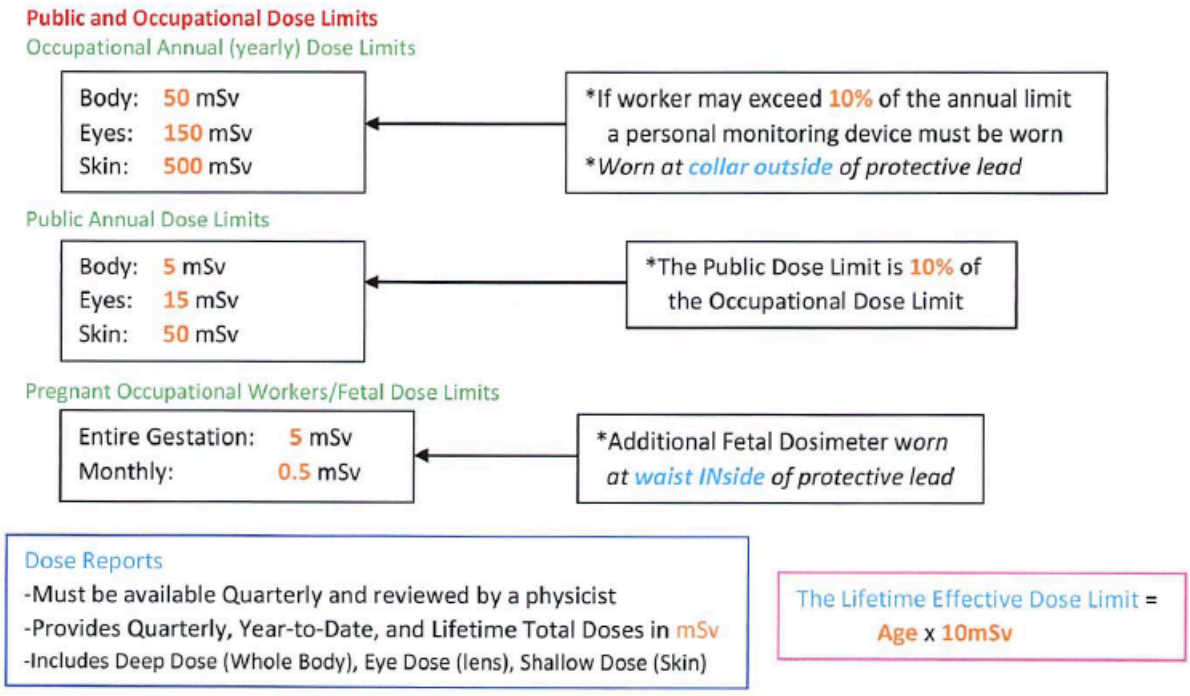
6. Copies of all notices, investigations, etc. will be maintained in the ALARA binder and the individual's personnel file.

Dose Limits:

	Per year	Per quarter year
Whole body deep	5 Rem (.05 Sv) 5000mRem (50 mSv)	1.25 Rem (.0125 Sv) 1250 mRem (12.5 mSv)

Investigation limit:

	Per quarter year
Whole body deep	100 mRem =1 mSv



Radiation Safety On-Campus and at Clinical Sites:

No students will be permitted to participate in skills labs or clinical rotations at any time without a personal monitor. If a lab or clinical rotation is missed, it must be made up later with instructor approval.

1. The operator must be aware of and implement all applicable requirements of the California Radiation Control Regulations.

a. No student shall be used to hold an X-ray patient or imaging plate except in an emergency, and no person shall be regularly used to hold patients (Title 17, Section 30308cl).

b. Careful collimation shall be used to restrict the x-ray beam to the size of the image receptor, or area of interest, whichever is smaller (Title 17, Section 30308c3).

c. The operator must make use of the appropriate operator protection devices provided, e.g. lead apron, lead shield, etc. (Title 17, Section 30307 & 30308).

d. Students will always wear personnel monitoring devices when in the lab, hospital, or clinic. The monitoring device must be worn on the collar outside of the apron when a lead apron is worn (Title 17, Section 30307 I 30309).

e. The operator is responsible for clearing the x-ray room of non-essential persons prior to generating x-rays (Title 17, Section 30308c2).

f. Gonadal shielding shall be used on all patients who have not passed the reproductive age during procedures in which the gonads are in the direct beam, except in cases in which this would interfere with the diagnostic procedure (Title 17, Section 30308c4).

2. The operator must adhere to any special radiation safety instructions relating to a specific machine or procedure.

3. Any unusual occurrence or apparent malfunction of the x-ray apparatus that may involve exposure to radiation shall be reported to the Instructor or Supervisor responsible for that section.

4. Never place yourself in the direct path of the x-ray beam. You should always stand behind the control booth during an exposure.

5. Never permit yourself or fellow students to serve as “patients” for the purpose of demonstration or test exposures.

Radiation Monitoring:

Personnel whole body radiation dosimeters for radiation monitoring are furnished for Diagnostic and Fluoroscopy students. The Thermoluminescent Dosimeter (TLD) badge is to be worn at all times during activities where radiation is present, including skills labs and clinical rotations. TLD badges are to be worn at the collar level. Students are responsible for the cost to replace lost TLD badges. Students are required to contact their clinical supervisor to inform them of their lost TLD as soon as they are aware it is lost.

The original exposure reports will be kept on file in the RSO office where students may check their exposure levels. A copy of the exposure report will be posted in the Radiology lab. Personal information including Social Security numbers and birth dates are excluded from the report. An associated student identification number (K#) will be used in place of identifying information

It is the policy of Santa Barbara City College to evaluate exposure to personnel on a quarterly and cumulative basis.

Material and Methods:

1. The TLD badge is always to be worn during activities where radiation is present, including skills labs and clinical rotations.
2. The TLD badges shall be positioned on the front of the body between the waist and neck; when the lead apron is worn, the badge shall be positioned on the collar outside of the apron.
3. All TLD badges are to be exchanged quarterly with RSO.

Personal Monitor Reporting:

1. When the personal monitoring reports are received from Landauer Technology, they are reviewed by the RSO and subsequently by the Program Director. If any readings exceed the allowable limits of Section 30265, Title 17, (California Control Regulations):

a. The individual is notified in writing by the RSO.
b. An investigation of the overexposure is undertaken to determine the reasons for overexposure and to ensure that it does not reoccur.
c. Exposures above 1250 mRem and below 5000 mRem in a single quarter exposure are reported to the California Department of Public Health Services and the Radiation Safety Committee of the clinical site within 30 days.
d. Exposures above the 5000 mRem but less than 25 REM will be reported to the California Department of Public Health Services within 24 hours.
e. Exposure rates 5x more than the annual exposure dose limit will be reported to the California Department of Public Health immediately.

2. The personal monitoring records are maintained by the college forever in the office of the RSO. These records are made available to students each quarter and a record of

their exposure is available upon request at the time or after graduation.

3. The quarterly cumulative exposures are posted in the Department Lab each quarter and kept in a file with the RSO.
4. A copy of each current report is posted for review and a copy of these records are available to students.

Radiation Area Monitoring:

The need for area monitoring shall be evaluated and documented.

1. The school has two fully energized x-ray rooms that are the only source of radiation. The lab contains the required Title 10 Code of Federal Regulations Part 20, Subpart B section 20.1101 and CCR Title 17 section 30253 (a) posting outside the entrances to both rooms of the energized lab is a red light “caution x-ray” sign, which is energized when the x-ray machines are energized. There is also a posted sign “caution x-ray” located outside the rooms and inside the lab located by the control panel.
2. The program’s Radiation Safety Officer (RSO) is responsible to inspect the light signs and make sure they are in proper working order each semester before using the labs. They are also responsible to maintain the posted signs and make sure they have not been removed.

We do not work with any radioactive material therefore radiation area monitoring for particulate and gamma radiation is not necessary or required.

Instrument Calibration and Maintenance

Instruments used to verify compliance with regulatory requirements must be appropriate for use and calibrated at required frequencies. Specify instruments to be used and procedures to verify conformity.

Various instruments are used in the lab in our QC program to take standard measurements on the equipment such as PBL accuracy, collimation accuracy, density, and contrast levels with DR. All instrument calibration and maintenance of the equipment is done by an outside agency as needed for compliance with registration.

Maintenance of the machine should be addressed. This may be addressed in part by the operator's manual from the manufacturer.

Due to minimal use of the equipment and budget constraints the equipment is not on a routine preventative maintenance program. The equipment is used only twice a week while classes are in session with an Instructor present. The performance of the x-ray equipment is evaluated with image production on a daily basis and repairs are made as deemed necessary.

Fluoroscopy Regulations:

In accordance with California Title 17 § 30423. Radiologic Technologist Fluoroscopy Permit School regulations:

Approved California radiologic technology fluoroscopy schools shall require that each student who graduates from the school complete the fluoroscopy coursework and clinical training specified in subsection (f).

(f) Subject to subsection (h), fluoroscopy coursework and clinical training shall include:

(1) Coursework comprising no less than 40 hours of instruction that fully covers the content categories listed in the document "Content Specifications for the Fluoroscopy Examination"* published November 2010 by the American Registry of Radiologic Technologists (ARRT), which is hereby incorporated by reference. The school shall use the detailed listing of topics identified in that document to ensure the categories are addressed.
(2) Supervised clinical training of at least 40 hours in duration during which fluoroscopic procedures are performed. Procedures may be performed only if a holder of a current and valid radiology supervisor and operator certificate issued pursuant to section 30466, a fluoroscopy supervisor and operator permit issued pursuant to section 30466, or a radiologic technologist fluoroscopy permit issued pursuant to section 30451 is physically present to observe, verify, and correct as needed the performance of the individual operating the fluoroscopy equipment during the procedures. Performance, for purposes of this paragraph, means, and is limited to, the individual's competence to use fluoroscopy equipment effectively and safely.

(3) Subject to subsection (h), documentation of clinical training as specified in subsection (f)(2) shall include an orientation check-off of each fluoroscopic room or portable fluoroscopy device prior to initial use. The check-off document shall, as it pertains to the particular room or device, include items necessary for safe and effective use of the equipment as determined by the school or affiliated clinical site. Documentation of procedures performed shall include the name of the procedure, the date the procedure was performed, the facility name, including the physical location, where performed, and the name and certificate or permit number of the person observing and verifying performance.
(g) After December 31, 2014, subsections (a) through (d) shall no longer apply. On and after January 1, 2015, subsections (e) through (g) apply.
(Retrieved from: California Code of Regulations 5/2020)

Medical X-Ray Procedures (Title 17, Sections 40407, 30308, And 30309

Protective aprons shall be worn in the fluoroscopic room by all staff, including students.

1. The operator of a mobile x-ray unit shall stand at least six (6) feet from the patient and well away from the useful beam. The student operator **must** wear a protective apron.
2. When required, personnel monitoring devices shall be worn at or near the collar and outside the lead apron during fluoroscopic procedures.

3. Whenever possible, the tube side of a C-arm shall be located below the patient to reduce scatter to personnel.

Radiation Dose – Evidence of Excessive Dose:

All students' dosimeter reports will be monitored by the Radiation Safety Officer (RSO) and Program Director for excessive radiation doses. If a student exceeds 100 mRem during any monitored quarter, the faculty will investigate the causes for the high dose level. The investigation can include interviews with the student, the Clinical Education Facility Supervisor, Clinical Coordinator, and/or other relevant individuals. Previous reading for the student will be evaluated.

The objective of the investigation will be to learn why the student received the excessive dose and to determine what type of corrective action may be needed. A report of the information obtained from the interviews and other sources with subsequent recommendations will provide the corrective action initiated. The corrective action will be enforced, and the results of the investigation and corrective action will be placed in the student's file for future reference.

Notice of Excessive Radiation Dose

Dosimeter reporting period

Student Name

Today's Date

Dosimeter Badge Type: Radiation Quality (Photon, x-ray or gamma-ray)

Total accumulated radiation measured in lifetime dose equivalent (mRem)

Deep (DDE)

Eye (LDE)

Shallow (SDE)

These readings were reported to the Radiography Program by Landauer.

Report of excessive radiation dosage discovery/corrective action:

Student Signature

Date

RSO Signature

Date

Program Director Signature

Date

Internal Audit Procedures:

The Registrant must audit the Radiation Protection Program on an annual basis. Documentation of the annual audits may be requested during an inspection. The following items should be addressed depending on the scope of the radiologic health protection problems:

1. Identification of inspection types and program audits conducted, to include radiation machines, personnel, and procedures.

a. All students and faculty are monitored for radiation on a quarterly basis using Thermoluminescent Dosimeter (TLD) personal monitors. The reports are sent to the school and reviewed by the Radiation Safety Officer (RSO) for minimum and maximum exposure levels every three months. After reviewing the documents, they are initiated and dated by the RSO and posted in the Lab for the students to review.

b. The Radiation Safety Program is reviewed annually along with the Policies and Procedures Manual. All documents are reviewed and revised by the Program Director, RSO, and faculty.

2. Identification of the individual(s) who are responsible for performing inspections and/or audits. RSO, the Program Director, and the faculty all participate in the review of documentation and the Policies and Procedures used for Radiation Protection.

3. Identification of where and at what intervals the inspections and/or audits are conducted. The audits of radiation monitoring records are done every three months with a review of the personal monitoring reports. Reports are posted in the lab for review by every student. Additionally, the Policies and Procedures are reviewed and revised annually as needed.

4. Procedures for conducting the inspections and/or audits.

a. Every summer the staff meets for review of the Policy and Procedures Manual and the Radiation Safety Program.

b. The Radiology lab is used by the students for the positioning of phantoms and videotaping positioning techniques on one another in RT 101, 102, 103, and 220. The equipment is not used for the purpose of exposing humans. The equipment is maintained, inspected, and tested by students in RT 220. When a problem is identified, outside Physicists or Electricians are called to service the equipment.

Student Pregnancy:

The following policy has been adopted for the radiation protection of the fetus of the expectant student while assigned to the clinical portion of her training program. In the event a student becomes pregnant it is her right to inform the program faculty in writing or withhold the information.

POLICY GUIDELINES

1. Pregnant students may voluntarily notify the Radiation Safety Officer at the earliest opportunity of their condition so that appropriate radiation safety measures can be discussed and instituted if so desired. In order for a student to declare pregnancy:

1.1 The student must fill out a Declaration of Pregnancy Form and give the form to the Radiation Safety Officer acknowledging the pregnancy.

1.2 Declaration of pregnancy must include the anticipated date of delivery.

2. Upon declaration of pregnancy, the Radiation Safety Officer will:

2.1 Review the student's radiation exposure levels and the options to do one of three things:

2.1.1 temporarily discontinue the program with the ability to return after the birth of the child

2.1.2 continue with adjusted rotations

2.1.3 continue without adjusted rotations.

2.2 Review all appropriate and applicable principles of proper radiological safety related to personnel with the student.

2.3 Review and adjust, if desired, the student's clinical assignments to minimize her potential exposure and assure compliance with the Maximum Permissible Dose (MPD) established for the embryo and fetus in occupationally exposed women.

2.4 Notify all appropriate radiology department personnel of the expectant status of the student in order to ensure proper clinical training while maintaining standards of radiological safety practice.

2.5 If a student decides to continue in the program based on information provided, they must sign a waiver which releases SBCC and the hospital from any responsibility for any possible complication associated with the pregnancy and

3. During the entire gestation period, the MPD equivalent to the fetus from occupational exposure of the expectant mother may not exceed 0.5 rem or 0.05 rem in any given month.

3.1 Radiation safety reports will be monitored monthly to ensure compliance with this recommended MPD.

3.2 Additional changes in the clinical assignments may be instituted in order to ensure compliance with this recommended MPD standard.

3.3 The student will be required to purchase and wear an additional TLD badge at the waist level. The Radiation Safety Officer (RSO) will closely monitor badge readings. If the readings reach a total of 0.5 rem or 0.05 rem in any given month, a leave of absence will be mandatory.

4. At any time upon written notice to the RSO, the student can withdraw their Declaration of Pregnancy. The declaration remains in effect until the declared pregnant woman withdraws the declaration in writing or is no longer pregnant
(Title 10 of the Code of Federal Regulations, Part 20.1003).

If the student does not inform the RSO of her pregnancy, the above measures cannot be taken. These measures are for the benefit of the student and the baby. Without the student's cooperation, the approved, the usual and standard safety precautions cannot be implemented.

Pregnancy Screening Prior To Diagnostic Procedures:

It is the policy of the School of Radiologic Technology that steps will be taken to ensure that female patients of childbearing age (12-50 years old) are not pregnant prior to the performance of any diagnostic, therapeutic, and/or interventional procedures that expose the patient to ionizing radiation.

Procedure

1. Signs are posted in the waiting rooms and injection areas in English and Spanish that tell the patient they should inform the technologist if they are pregnant or think they might be.
2. The technologist also asks the patient if there is a chance they could be pregnant prior to performing the procedure.
3. In those cases where the patient states they are pregnant or are unsure of whether or not they are pregnant, the technologist informs the physician on duty.
4. The physician will then determine the appropriate course of action.

Pregnancy Policy Awareness

Female students enrolling in the Santa Barbara City College Radiography Program are not required to report their pregnancy to any school official. Any student may seek additional information regarding the health of a pregnant student or of the baby, as it relates to the demands of the course of study, by contacting their personal physician, the Radiation Safety Officer, or the Program Director. Radiation Safety and a Pregnancy Policy are published in the Student Policy and Procedure Manual which is posted on the SBCC Radiology website at http://sbcc.edu/radiology.

The student's signature below indicates that they are aware that the Program Pregnancy Policies exist. The availability of additional information and reading materials and/or forms may be requested from the Radiation Safety Officer (RSO) or Program Director at any time from any interested party.

Name (print)	Student K number
Signature	Date
Radiation Safety Officer	Date
Program Director Signature	Date

Voluntary Declaration of Pregnancy

In accordance with Title 10 of the Code of Federal Regulations, Part 20, I hereby declare my pregnancy to the Santa Barbara City College Radiographic Imaging Department Radiation Safety Officer (RSO). This declaration authorizes the RSO to evaluate the dose received by the embryo/fetus from my occupational exposure to ionizing radiation and to assist me in limiting that dose to 0.5 rem (500 mrem). I understand that this limit is intended to provide an extra measure of protection for the embryo/fetus since it may be more sensitive to ionizing radiation than an adult. The 0.5 rem limit will be applied from the estimated date of conception, until the end of the pregnancy. I will comply with any restrictions imposed on my use of ionizing radiation by the RSO in order to meet this limit.

Expected DOB

Name (print)

Student K number

Signature

Date

Radiation Safety Officer

Date

Program Director Signature

Date

Privacy Act Statement: The information requested on this form is essential for the maintenance of records for individuals potentially exposed to ionizing radiation, as required by the Code of Federal Regulations, Title 10, Part 20. The Privacy Act of 1974 protects certain information.

Radiation Safety Officer's Receipt of Pregnancy Declaration

By signing this statement, I acknowledge receipt of the voluntary declaration of pregnancy.

Name of Student (Print)

I have evaluated her prior exposure (internal and external) to ensure appropriate limits to control the dose to her unborn child have been established and are in accordance with limitations stated in Policies and Procedures Manual as well as the ALARA. The appropriate monitoring is being provided.

Radiation Safety Officer

Date

Pregnancy Release Form

I,_____, a student participating in the Radiography Program at Santa Barbara City College, notified the school of my existing pregnancy on_____. I will remain in the program until the end of this semester and therefore release Santa Barbara City College and the individuals or facilities affiliated with the program from the responsibility of any adverse effects upon my pregnancy that may appear to be caused by radiation exposure.

It is clear to me that, statistically, there is a small probability that clinical or school lab radiation exposure will in any way adversely affect my pregnancy. I take full responsibility to protect myself in accordance with recommendations in the National Council on Radiation Protection and Measurement (NCRP) Report #53. Furthermore, I will absorb the cost of a second radiation monitor to be worn under the lead apron at waist level and will wear the lead apron whenever needed.

I acknowledge that the _____, my present clinical affiliation, has been notified and has advised me of their specific procedures.

Name (print)	Student K number
Signature	Date
Radiation Safety Officer	Date
Program Director Signature	Date

Magnetic Resonance Imaging (MRI) Safety

Purpose:

The SBCC RT program assures that students employ proper safety practices including MRI Screening. The program is required to establish a magnetic resonance imaging (MRI) safety screening protocol and all students must complete the MRI orientation and screening which reflect current American College of Radiology (ACR) MR safety guidelines prior to the clinical experience. This process assures that students are appropriately screened for magnetic field or radiofrequency hazards. Anyone who enters the MRI environment, even infrequently, must be properly trained and informed to ensure their safety and the safety of patients and other facility staff. The online video assignment orientation prepares students for magnetic resonance safe practices.

Policy:

1. Prior to the first semester of the program, and prior to rotation through any of the clinical sites, first year students will complete an orientation on MRI safety. Students watch an Introduction to MRI Safety video. The video has questions embedded in the recording that covers all MRI safety procedures and protocols. The video assignment tool allows for tracking of those students who complete this video orientation, and which questions they missed, if any. Students are then required to sign an attestation acknowledging they have been orientated to MRI Safety. The document is uploaded in canvas as part of the student's electronic file that is stored indefinitely in their cohort canvas shell.

2. Students complete a "Magnetic Resonance (MR) Environment Screening Form for Individuals". This form will be kept as part of the student's file. Based on their answers on the form, if there is any reason for concern that a student should not enter an MRI area, an MRI Technologist or Radiologist will be consulted prior to allowing the student into the MRI area. The document is uploaded in canvas as part of the student's electronic file that is stored indefinitely in their cohort canvas shell.

3. A student may choose to rotate to MRI as part of their special imaging modality rotations in their second year of their clinical assignment. A copy of the screening form will be provided to the student's clinical site if requested.

Documentation of Compliance

1. Completion of Introduction to MRI Safety Playposit Video Assignment

2. Completion of Magnetic Resonance (MR) Environment Screening Form for Individuals

General Safety Precautions:

To ensure the safety of students, patients, and employees in Radiology, proper safety precautions shall be maintained against fire and explosion.

Procedure

General Safety:

- No patient shall be left unattended when on the radiology table.
- Appropriate immobilization of the patient shall be required to prevent the patient from falling from the radiology table.
- Any defects in transportation equipment will be immediately noted and reported. Contaminated needles are to be placed in Sharp boxes located in all radiographic rooms. Smoking, eating, or drinking is prohibited in the radiology room and corridors.

Electrical:

- All electrical defects will be immediately reported to the Supervisor.
- Serious malfunctions of radiology equipment will be reported. The equipment will be taken out of service until repairs are made.
- When closing the radiology room for the day, the equipment will be turned off and the main equipment breaker will be put in the OFF position.
- Prior to replacing fuses, light bulbs, or removing any cover or panel, the main equipment breaker must be turned to the OFF position.
- Electrical safety inspections are conducted by the Engineering/Biomed Department and documented in their records.
- If a serious problem exists, the room will be closed to all personnel and patients

Mechanical:

- Technologists will make daily checks of the X-ray tube, bucky, indicator light, interlocks, and table movements to ensure correct operation.
- Mobile equipment will be checked to ensure the wheel, tube column and locks are in working condition.
- Patient safety will be considered, and care exercised when tilting the table and moving tabletops. All wheelchairs and gurneys are cleaned and checked for mechanical defaults weekly and problems are fixed by the Engineering Department
- Any malfunctions found will be reported to the Supervisor for the necessary repair.

If serious problems exist, the room will be closed to all personnel and patients.

Fire and Explosion:

In the event of fire:

- Remove the patient in danger.
- Close the door.
- Activate the fire alarm.

Telephone extension (see hospital phone book) and give your location on phone. Extinguish

fire by using the nearest fire extinguisher.

Fire Safety

It is the policy of most hospitals that all personnel in the department receive initial training and orientation as well as periodic in-services as required on fire response and that such training shall be documented, and records maintained.

Procedure

In the event of Fire, the patient/personnel are to be removed from any danger. The electrical supply is to be turned off by turning off equipment and unplugging or shutting off the main breaker switch. All doors are to be closed and all lights left on.

Do not allow papers, etc., to accumulate in storage areas and lounge areas. Do not fail to report defective wiring of electrical devices, using hazard notice forms.

In Case of Actual Fire (See Hospital Fire Plan): Know "**RACE**"

Rescue/**R**emove patients/personnel to safety.

Alarm/**A**lert-Pull fire alarm-report CODE RED to the telephone operator

Contain fire-**C**lose doors

Extinguish/**E**scape-extinguish a small fire by using nearest fire extinguisher-Escape a large fire

Know Locations of Fire Extinguishers And What "**Pass**" Stands For:

Pull Pin

Aim

Squeeze

Sweep

Know Fire Alarm Signal for Your Area Know Locations of Fire Alarm(S)

Know Locations of Oxygen Shut Off Valves Know Locations Of Exit Routes

Glossary of Titles and Roles:

There are several individuals you will be working with in your journey to become a Radiologic Technologist. To better assist you with the titles and roles we have put together a brief summary.

Program Director: A college faculty member who oversees the entire operation of the Radiologic Technology Program. This individual ensures the program is in compliance with requirements set forth by the CDPH-RHB, JRCERT and the college.

Clinical Coordinator: A college faculty member who oversees the clinical education of students in the Radiologic Technology Program. This individual helps with the onboarding process and supports the Clinical Supervisors with policy requirements that help the program stay in compliance with the JRCERT.

Adjunct/Staff Instructor: A college faculty member that assists with the curriculum development/implementation, supervision, instruction, evaluation, and academic advising for students. They provide an expertise of industry experience and help facilitate the growth of students.

Clinical Supervisor: A college faculty member who assists with overseeing the clinical education of students in the Radiologic Technology Program. Clinical Supervisors make regular visits to Clinical Education Centers to meet with the students and Clinical Preceptors, Clinical Supervisors also work closely with the Clinical Coordinator and Program Director to ensure students are in compliance with JRCERT and CDPH-RHB standards and legal requirements.

Clinical Education Center: Is a Medical Imaging Department approved by the Joint Review Committee on Education in Radiologic Technology (JRCERT) and affiliated with Santa Barbara City College. The Clinical Education Center is also recognized by the California Department of Public Health Radiologic Health Branch (CDPH-RHB). Registered students in the program can only be assigned to the recognized Clinical Education Centers for their clinical experience.

Clinical Preceptor (CP): Is a registered Radiologic Technologist assigned to supervise, guide, and evaluate the Radiologic Technology Program students assigned to their department. Clinical Preceptors are employees of the Clinical Education Centers, are assigned the position of Clinical Preceptor by their employers, and in some cases time equivalent to their duties to schedule, teach, supervise, and evaluate students.

Clinical Staff: Are employees of the Clinical Education Centers and assist with the supervision, guidance and evaluation of students enrolled in the SBCC Medical Imaging Program.