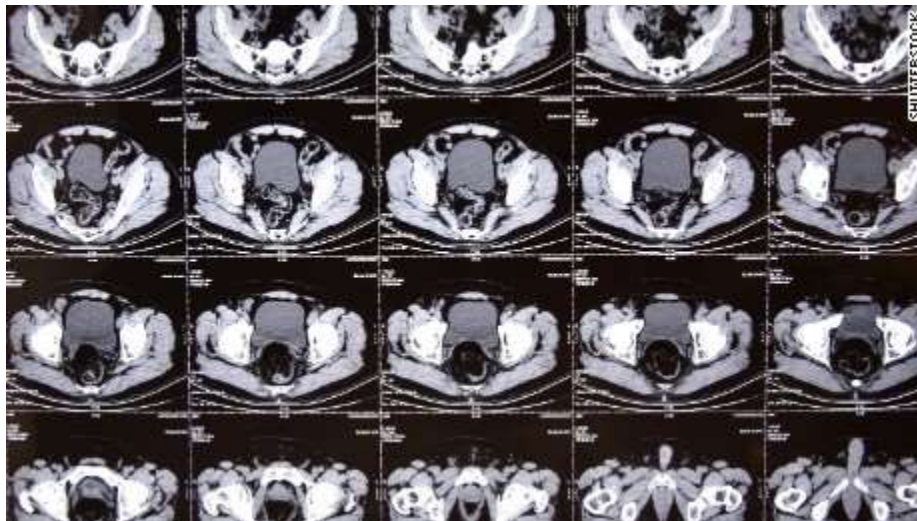


# Mt. San Antonio College Radiologic Technology Program

## CAT SCAN Clinical Instructor Handbook



# Computed Tomography- Clinical Instructor Handbook

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## **Program Mission**

The mission of the Computed Tomography (CT) Program is to prepare competent and professional entry level CT Technologist. Students will be provided with a comprehensive curriculum in the study and clinical practice of CT that addresses evolving technical skills, communication, and critical thinking. It is our goal to provide the necessary clinical and academic experiences to enable students to successfully earn ARRT CT certification.

The CT Program's mission is consistent with the College's mission in that it supports students in achieving their full educational potential in an environment of academic excellence.

## **Program Goals**

1. To provide educational experiences that prepare students to enter the healthcare community as CT Technologists
  - Program curriculum will be up to date with current California state certification educational requirements, ARRT educational requirements, and ASRT Computed Tomography curriculum
  - Clinical experience will be in compliance with California state law
  - Program faculty will be qualified and meet requirements to maintain ARRT credentialing
  - Program curriculum will maintain clinical affiliations enabling students to become competent entry-level CT Technologists
2. To prepare clinically competent entry-level CT Technologists
  - Students will develop workforce readiness skills
  - Students will apply accurate positioning skills and provide appropriate patient care
  - Students will select optimal technical factors
  - Students will utilize appropriate radiation protection and ALARA principles
  - Students will demonstrate academic and technical competence as an entry-level CT Technologists
3. To develop CT Technologists who utilize exceptional communication skills
  - Students will communicate effectively with patients, clinical staff, and peers

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- Students will demonstrate effective written and verbal communication skills in didactic and clinical settings
4. To develop CT Technologists who use critical thinking and problem-solving skills to perform job-related functions
    - Students will use critical thinking skills in both routine and non-routine clinical situations
    - Students will adapt standard procedures for non-routine patients
    - Students will analyze images to determine diagnostic quality and make modifications as needed
  5. To develop CT Technologists who perform CT procedures professionally
    - Students will exhibit professional work ethic, behavior, and attitude
    - Students will abide by the ASRT Code of Ethics
    - Students will use professional judgment when working with patients and others
  6. To encourage students to invest in continued personal and professional growth
    - Students will identify the advantage of belonging to professional organizations
    - Students will understand the need for continued professional development and growth
    - Students will participate in professional development activities
  7. Students will meet the employment demands of the medical community
    - Students will pass the ARRT certification exam in CT
    - Students will secure employment as a CT Technologist within one year of program completion

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## **Program Overview**

The Computed Tomography (CT) program at Mt. SAC is a two semester certificate program open to Technologist who possess a valid California Certified Radiologic Technologist (CRT) license and are certified and registered by the American Registry of Radiologic Technologists (ARRT) in one of the following supporting disciplines: Radiologic Technology, Nuclear Medicine (or NMTCB), or Radiation Therapy. The program provides a complete educational experience for registered Radiologic Technologists (RT's) who wish to expand their skills into the study of the theory and practice of CT. Students will have the opportunity to learn and develop competence in patient care, communication skills, critical thinking, and technical skills that will prepare the student to become a competent entry level CT Technologist.

The program curriculum is designed to meet the CT educational and clinical training requirements set forth by the ARRT. The educational standards established by the American Society of Radiologic Technologists (ASRT) are also incorporated into the curriculum. Educational activities include lecture, discussions, group activities, and hands-on clinical training at a clinical site.

The program includes:

- ARRT clinical experience requirements and content specifications
- ARRT 16 hour structured education requirement
- Course work in cross-sectional anatomy, pathology, patient care and safety, CT procedures, equipment, image evaluation, instrumentation, technique, physics, and quality assurance/quality control.

The program is completed during Winter and Spring semesters (22 weeks). Didactic courses are scheduled **two - four** days per week and require the student to be on campus. Clinical training will be conducted at affiliated healthcare institutions and there is no guarantee the student will be placed close to home. Hours for clinical training are **arranged with the clinical site** (days and times will vary depending on the site). No arrangements for part time status are available.

Applicants will be required to complete a background check, physical, drug test and provide proof of immunizations during the admissions process. For more information on those requirements please contact Paulette Engisch at [pengisch@mtsac.edu](mailto:pengisch@mtsac.edu) or (909) 427-4527.

Upon successful completion of the program, the student will receive a Certificate of Completion from Mt. San Antonio College. Technologist certified and registered by ARRT in the appropriate disciplines will be eligible to sit for the ARRT Computed Tomography certification examination.

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## **Computed Tomography & Role of the CT Technologist**

Computed Tomography (CT) is a sophisticated diagnostic imaging modality that captures cross-sectional images of the patient utilizing ionizing radiation and a computer. CT can be used to image many parts of the body, such as the head, neck, chest, abdomen, pelvis, spine, and extremities. CT plays a vital role in diagnosing trauma patients.

CT Technologists are highly-trained professionals who work with specialized x-ray equipment to produce diagnostic images of the body that will assist the radiologist in diagnosis and treatment of disease and injury. Technologists also ensure the safety and well-being of the patient. It is essential that the CT Technologist be knowledgeable in anatomy, can make judgments about the formation of the image, and be able to perform CT procedures in an efficient and competent manner. CT Technologists work closely with patients, fellow technologists, radiologists, and many members of the healthcare team. Professional duties include providing quality patient care, operating sophisticated equipment, performing routine & emergency procedures, recording a patient's clinical history, preparing patients for procedures, evaluating images for technical quality, assisting with interventional procedures, observing radiation protection measures, processing/reconstruction of images, and participating in quality assurance measures.

## **Clinical Instructor Qualifications & Duties**

### **Primary Qualifications of the Clinical Instructor**

1. Must hold American Registry of Radiologic Technologists current registration in radiography or equivalent (i.e., unrestricted CRT state license).
2. Must have 2 years full time experience in the professional discipline;
3. Must understand the clinical objectives and the evaluation system;
4. Must be knowledgeable of program goals;
5. Must be proficient in student supervision, instruction, and evaluation; and
6. Must maintain competency in the discipline and clinical instruction through continuing education, in-service training and/or the pursuit of advanced certifications and/or degrees.

### **Primary Duties of the Clinical Instructor**

1. Is knowledgeable of program goals;
2. Understands the clinical objectives and clinical evaluation system;
3. Understands the sequencing of didactic instruction and clinical education;
4. Provide students with clinical instruction and/or supervision;
5. Evaluates students' clinical competence;
6. Maintains competency in the professional discipline and instructional and evaluative techniques through continuing professional development;
7. Maintains current knowledge of program policies, procedures, and student progress;

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8. Provides students with an orientation to the clinical setting policies and procedures in regard to health and safety;
9. Participate in the assessment of the student's progress with College Faculty during scheduled clinical facility visitations;
10. Attends Advisory Meetings and/or CI Workshops as deemed necessary by the sponsoring institution; and
11. Informs the clinical staff of the JRCERT clinical staff requirements (see below).
12. Acts as Clinical Verifier for CT student (see Appendix IV)

### **Primary Duties of the Clinical Staff**

1. Understand the clinical competency system;
2. Understand requirements for student supervision;
3. Supports the educational process; and
4. Maintains current knowledge of program policies, procedures, and student progress.
5. Acts as Clinical Verifier for CT student (see Appendix IV)

*Clinical education shall be under the direct or indirect supervision of a qualified practitioner as the situation dictates, to ensure control of the quality, safety, and technical aspects of radiographic examinations and procedures in the clinical facility.*

## **Direct & Indirect Supervision Policy**

**State and federal regulations require that programs ensure students are properly supervised while performing medical imaging procedures in the clinical setting. The following direct and indirect supervision requirements assure patient safety and proper educational practices.**

### **Direct Supervision**

**CT procedures must be performed under the direct supervision of a qualified radiographer until a student achieves competency and any time a student is repeating unsatisfactory images/procedure.**

The program defines direct supervision as student supervision by a qualified radiographer who:

- reviews the procedure in relation to the student's achievement,
- evaluates the condition of the patient in relation to the student's knowledge,
- is physically present during the conduct of the procedure,
- reviews and approves the images/procedure, and
- approves the student's procedure prior to re-exposure on repeat exams.

### **Indirect Supervision**

**CT procedures may be performed under the indirect supervision of a qualified radiographer after a student achieves competency.**

The program defines indirect supervision as that supervision provided by a qualified radiographer who:

- is immediately available to assist students regardless of the level of student achievement.
- "Immediately available" is interpreted as the physical presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use on patients.

**Students violating this policy will be subject to probation and expulsion from the program. Complying with the policy is the student's responsibility.**



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## **Clinical Contract for Mt. San Antonio College CT Program**

*Students entering the clinical internship are expected to fulfill the following requirements:*

1. Students may not attend clinical unless the student has registered and paid for each clinical course. (\_\_\_\_\_)
2. Students must wear a radiation film badge to clinical at all times. Students who present to clinical without a badge cannot participate in training and will need to make up the hours missed. (\_\_\_\_\_)
3. Students must read and understand the Radiation Exposure Policy, and the indications for preparing an Incident Investigation Report. (\_\_\_\_\_)
4. Students must review, sign, and date the Radiation Exposure Report posted in the classroom each month. (\_\_\_\_\_)
5. Students must comply with Attendance Policy (\_\_\_\_\_) including the following:
  - a. All clinical hours missed, must be made up before the end of each session. (\_\_\_\_\_)
  - b. All make up hours must be made up during college business hours only. See Clinical attendance policy for details. (\_\_\_\_\_)
  - c. All schedule changes need to be approved by the program faculty and documentation must be submitted. (\_\_\_\_\_)
  - d. Make up hours cannot be made up during official college holidays. (\_\_\_\_\_)
  - e. Students must complete the required number of clinical hours per session. (\_\_\_\_\_)
  - f. No vacation or time off is allowed during clinical internship. (\_\_\_\_\_)
  - g. "Banking hours" (defined as making up hours before the absence) is not allowed. (\_\_\_\_\_)
  - h. Students must fill out an absence/make up form and submit the form to a program faculty member within 3 days of the absence (weekends do not count). (\_\_\_\_\_)
6. Students must earn 2 passing Clinical Evaluations in the Spring Semester and 1 passing Clinical Evaluation in the Winter intersession. (\_\_\_\_\_)
7. Students must complete the number of required competencies per session. See course syllabus for details. (\_\_\_\_\_)
8. Students must comply with the Clinical Attire Policy (\_\_\_\_\_)
9. No cell phone use (including texting) is allowed during clinical hours. (\_\_\_\_\_)
10. Students are required to submit clinical handbooks after each session. (\_\_\_\_\_)
11. Students must maintain professional and ethical behavior at all times. See the Clinical Code of Conduct for specific examples. (\_\_\_\_\_)
12. Students need to be current with physicals, immunizations, and CPR requirements to attend clinical. Students who are not current will be removed from clinical immediately and hours will need to be made up. (\_\_\_\_\_)
13. Students are responsible for ensuring all required paperwork (including physicals, CPR, drug testing, etc.) is submitted to the Clinical Coordinator before or on the date specified. Follow up is also necessary to assure clearance for clinical rotations. (\_\_\_\_\_)

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## **Clinical Attendance Policy**

**The following attendance requirements apply to RAD 7A and RAD 7B**

- Students must attend all required clinical hours. Clinical hours are arranged by the clinical instructor/site and may be scheduled between the hours of 6:30am-10pm Monday- Sunday.
  - RAD 7A requires 18 hours/week of arranged clinical hours
  - RAD 7B requires 24 hours/week of arranged clinical hours
  - **Modifying clinical schedule:** Approval from the program's clinical coordinator and the clinical facility's clinical instructor is required in writing prior to any change in a student's scheduled clinical hours. Clinical hours may be modified with mutual approval of all parties. Students subverting this process by making arrangements with clinical sites without prior approval from the college faculty will be subject to probation and dismissal from the program.
- Clinical hours must be logged on the clinical time sheet provided in the clinical handbook for each clinical course. The student is responsible for obtaining the clinical instructor's signature verifying the hours completed for the semester. Clinical handbooks must be turned in to the clinical coordinator to pass the course. Time sheets will be filed in the department for 5 years in compliance with state regulations.
- Students shall not attend clinical unless he/she has enrolled and paid for the course.
- Students shall not participate in more than 10 hours per day of clinical training.
- No personal vacations or time-off are allowed during scheduled clinical courses.
- Banking hours (making up hours before the absence) is not allowed.
- Absences
  - An absence/incident is described as an occurrence of non-attendance. (Ex: if a student is absent one day = one absence. If a student is absent three days in a row for an illness = one incident. One extended illness will not place the student on probation). A tardy occurs when a student is more than six (6) minutes late.
  - Tardies of more than six (6) minutes are to be made up with time equal to the amount of time lost due to the tardy.
  - If a student is late or absent, the student must call his or her clinical instructor before the tardy/absence occurs. The student should make every effort to speak directly with the clinical instructor (messages left with others may not be conveyed as expected).
  - Hours must be made up when the college is open (6:30 a.m- 10:00 p.m., Monday through Sunday). The college is closed on holidays (see the academic schedule for observed holidays).

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- All absences/tardies must be made up at the clinical facility where the absence occurred and within the applicable semester or inter-session (Not to exceed 10 hours per day of clinical training, and the total didactic and clinical involvement shall not exceed 40 hours per week. Hours exceeding these limitations due to making up of clinical hours must be voluntary on the student's part).
- In the event of an absence, the student is responsible for completing an Absence/Makeup Form and submitting it to the Clinical Coordinator or faculty member **within 3 days of the absence.**
- If the attendance policy is exceeded before the last day to drop with a "W," a grade of "W" will be assigned. If the policy is exceeded after the last day to drop with a "W," a grade of No Pass (NP) will be assigned.
- In the event of extenuating circumstances (ex. jury duty, court subpoena), the program reserves the right to make arrangements with the student. The faculty member and clinical instructor *must* meet with the student to discuss the circumstance and determine a possible solution.

<b>RAD 7A</b>	<b>RAD 7B</b>
<b>2</b> absences/incidents or tardies will necessitate probation status	<b>3</b> absences/incidents or tardies will necessitate probation status
<b>3</b> absences/incidents or tardies will necessitate no credit (NC) for the course due to the inability of the student to complete the course objectives. The student will not be able to continue in the clinical portion of the program.	<b>4</b> absences/incidents or tardies will necessitate no credit (NC) for the course due to the inability of the student to complete the course objectives. The student will not be able to continue in the clinical portion of the program.

## Clinical Attire Policy

**CT program students are required to adhere to the clinical attire policy and present an overall professional appearance while at the clinical education center. Non-compliance with the clinical attire policy will be recorded on the student's clinical evaluation form and the student will be placed on probation.**

### **All Students:**

- **Scrub type tops and pants only:** No other variations (skirt, shorts) are allowed. Scrubs must be of proper size, kept clean, and wrinkle free.
- **Lab coat:** A white, short or long sleeve lab coat may be worn over the attire if desired.
- **Long sleeve shirts:** May be worn under scrub tops. Shirt must be a solid color (black, grey, and white only), with no type of print, and must be tucked in and not visible below the scrub top.
- **Shoes:** Must be white or black athletic/tennis shoes or uniform shoes that can repel liquids, body fluids, etc.... No open-toe shoe, sandals, and shoes with holes may be worn at any time.
- **Socks:** Must be worn with shoes at all times.
- **Name badge:** Provided by college free of charge. If the facility provides the student with a hospital name badge, the student will not be required to wear both name badges. The student will need to return their hospital badge to the facility once their clinical rotation is over.
- **Tattoos:** Must not be visible at any time.
- **Body piercings:** Must not be visible at any time.
- **Earrings:** Must be small, not dangling.
- **Ear plugs/expanders:** Must be covered with a band-aid.
- **Fingernails:** Acrylic fingernails, long fingernails, and chipped fingernail polish are not allowed.
- **Personal hygiene:** Must maintain personal cleanliness to include mouth and body odor.
- **Fragrances, perfumes, aftershaves, & colognes:** Excessive use is not permitted.
- **Make up & hairstyles:** No excessive make-up or radical hairstyles are allowed.
- **Jewelry:** No excessive jewelry is allowed. (1 ring/ 1 bracelet/1 watch is permitted)
- **Electronic devices:** Use of electronic devices (e.g., cell phone, smart watch, ipad) is not allowed in clinical areas at any time. Devices may be used during designated breaks and lunch time only.

### **Men:**

- **Earrings:** Must not to be worn at any time.
- **Hair:** May be collar length maximum
- **Facial hair:** Mustaches, sideburns, and beards of any kind need to be kept neat and closely trimmed to the face.

**If the clinical facility's dress code is more restrictive than the Program's Clinical Attire Policy, the hospital code will supersede. All uniforms are subject to instructor approval.**

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## **Policy for Declared Pregnant Radiography Students**

Disclosure of a pregnancy by a radiography student or faculty member is a **voluntary** process. The student or faculty member is not under any regulatory or licensing obligation to declare the pregnancy. For the purpose of this document, the term worker includes program students and faculty working in controlled areas.

- **The voluntary declaration of pregnancy, if made, must be in writing**, dated, include the estimated date of conception, and be submitted to the Radiation Safety Officer (RSO). This document will become a permanent part of the worker's record.
- Just as a woman has the right to declare her pregnancy, **she also has the right to revoke the declaration. The written withdrawal of declaration** shall be submitted to the RSO.
- **Pregnant workers have the option for continuance in the program without modification of clinical duties.**

The program strongly recommends that workers voluntarily declare pregnancy so an additional radiation monitoring device may be issued and worn at waist level. Fetal radiation monitoring devices are simply added precautions and do not in any way convey any assignment in the clinical facility is especially hazardous during pregnancy. The RSO will maintain documentation of radiation doses for the pregnant worker and embryo/fetus. The radiation dose to the embryo/fetus during the entire pregnancy will not be allowed to exceed 0.5rem (5mSv).

**\*Pregnant workers shall not expect the issuance of a fetal radiation monitoring device unless the pregnancy has been declared by the worker.**

Pregnant students enrolled in CT Program clinical courses (RAD 7A & RAD7B) are encouraged to consult their personal physician regarding pregnancy and any potential risk to the embryo/fetus.

Declared pregnant workers will receive and discuss the following with the RSO:

- [Nuclear Regulatory Commission's "Occupational Dose Limits, Sec.20.1208, Dose to the Embryo/Fetus."](#)
- [The United States Nuclear Regulatory Commission Guide 8.13 Instruction Concerning Prenatal Radiation Exposure](#)
- [The United States Nuclear Regulatory Commission Guide 8.29 Instruction Concerning Risks from Occupational Radiation Exposure](#)

A student who voluntarily withdraws from the program due to pregnancy must provide a written withdrawal letter. A student may be readmitted during the appropriate semester provided (1) the student was in "good standing" at the time of withdrawal, and (2) the intent to re-enter the program is conveyed during the semester prior to the student's anticipated return.

During the completion of the coursework, the declared pregnant student shall meet all regular attendance requirements.

*It is agreed and understood that student shall indemnify and hold harmless Mt. San Antonio College, its Governing Board, employees and agents from and against any and all liability, loss, cost, expense (including reasonable attorneys' fees) or claim for injury or damages to student and/or student's embryo/fetus arising out of clinical assignment to a radiation area in connection to courses in the CT Program; excluding however liability, loss, cost, expense or claim attributed to the negligent acts or omissions of Mt. San Antonio College, its Governing Board, employees and agents in connection to the clinical assignment.*

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## **Student Conduct & Disciplinary Procedures**

### **College Standards of Conduct**

The following conduct shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student.

- Causing, attempting to cause, or threatening to cause physical injury to another person.
- Possession, sale or otherwise furnishing any firearm, knife, explosive or other dangerous object, including but not limited to any facsimile firearm, knife or explosive, unless, in the case of possession of any object of this type, the student has obtained written permission to possess the item from a College employee, which is concurred in by the College President/CEO.
- Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in Chapter 2 (commencing with Section 11053) of Division 10 of the California Health and Safety Code, an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.
- Committing or attempting to commit robbery or extortion.
- Causing or attempting to cause damage to College property or to private property on campus.
- Stealing or attempting to steal College property or private property on campus, or knowingly receiving stolen College property or private property on campus.
- Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the College.
- Committing sexual harassment as defined by law or by College policies and procedures.
- Engaging in harassing or discriminatory behavior based on disability, gender, gender identify, gender expression, marital status, nationality, race or ethnicity, religion, sexual orientation, or any other status protected by law.
- Engaging in intimidating conduct or bullying against another student through words or actions.
- Willful misconduct which results in injury or death to a student or to College personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the College or on campus.
- Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, College personnel.
- Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty.
- Dishonesty; forgery; alteration or misuse of College documents, records or identification; or knowingly furnishing false information to the College.
- Unauthorized entry upon or use of College facilities.
- Lewd, indecent or obscene conduct on College-owned or controlled property, or at College sponsored or supervised functions.
- Engaging in expression which is obscene; libelous or slanderous; or which so incites students as to create a clear and present danger of the commission of unlawful acts on College premises, or the violation of lawful College administrative procedures, or the substantial disruption of the orderly operation of the College.
- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
- Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any College policy or Administrative Procedure.

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- Harassment of students and/or College employees that creates an intimidating, hostile, or offensive environment.
- Violation of College rules and regulations including those concerning affiliate clubs and organizations, the use of College facilities, the posting and distribution of written materials, and College safety procedures.

## Academic Honesty Policy

All members of the academic community have a responsibility to ensure that scholastic honesty is maintained. Faculty have the responsibility of planning and supervising all academic work in order to encourage honest and individual effort, and of taking appropriate action if instances of academic dishonesty are discovered.

Honesty is primarily the responsibility of each student. The College considers cheating to be a voluntary act for which there may be reason, but for which there is no acceptable excuse

### **Cheating (Academic Dishonesty)**

The term "Cheating" includes but is not limited to:

1. Plagiarism
  2. Receiving or knowingly supplying unauthorized information
  3. Using unauthorized material or sources
  4. Changing an answer after work has been graded and presenting it as improperly graded
  5. Illegally accessing confidential information through a computer
  6. Taking an examination for another student or having another person take an examination for you
  7. Presenting another person's work as your own
  8. Forging or altering registration or grade documents
  9. Submitting collectively developed work as your own, unless specifically allowed by the professor

A professor who determines that a student has cheated may give the student a failing grade for the assignment and should report the alleged academic dishonesty to the Student Life Office, which will maintain a record of the report and appropriate action under the provisions of the Administrative Procedures on Student Discipline (AP 5520).

Students are advised that allegations of dishonesty are serious, and can lead to disciplinary sanctions including suspension and expulsion. (BP 4290, AP 4290)

**The program has a zero tolerance for students observed cheating. Students observed cheating will be dismissed from the program immediately.**

### **Plagiarism**

"Plagiarism is a direct violation of intellectual and academic honesty. Although it exists in many forms, all plagiarism refers to the same act: representing somebody else's words or ideas as one's own. The most extreme forms of plagiarism are the use of material authored by another person or obtained from a commercial source, or the use of passages copied word for word without acknowledgment. Paraphrasing an author's idea or quoting even limited portions of his or her text without proper citation is also an act of plagiarism. Even putting someone else's ideas into one's own words without acknowledgment may be plagiarism. In none of its forms can plagiarism be tolerated in an academic community. It may constitute grounds for a failing grade, probation, suspension, or expulsion."

"One distinctive mark of an educated person is the ability to use language correctly and effectively to express ideas. Faculty assign written work for the purpose of helping students achieve that mark. Each instructor will outline specific criteria, but all expect students to present work that represents the student's



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understanding of the subject in the student's own words. It is seldom expected that student papers will be based entirely or even primarily on original ideas or original research."

"Therefore, to incorporate the concepts of others may be appropriate with proper acknowledgment of sources, and to quote others directly by means of quotation marks and acknowledgments is proper. However, if a paper consists entirely of quotations and citations, the paper should be rewritten to show the student's own understanding and expressive ability. The purpose of the written assignment (i.e., development of communication and analytic skills) should be kept in mind as each paper is prepared. It should not be evaded through plagiarism."

*\*Adopted, with permission of California State University, Los Angeles, from their policy printed in the 1987-88 General Catalog*

## Code for Clinical Conduct

The following are examples of conduct for which a student may receive "No Pass" for the clinical course and shall constitute good cause for discipline, including but not limited to the removal, suspension or expulsion of a student.

1. Gross negligence or incompetence.
2. Failure to respect confidential nature of hospital records and information regarding patients.
3. Deliberate altering, removing, or destroying of hospital property.
4. Willful falsification of patient/student records.
5. A non-explanatory refusal to follow instruction from supervisors or other proper authority.
6. Physical attack on any person during clinical hours or on facility grounds.
7. Exceeding attendance policy as stated in the Student Handbook.
8. Theft.
9. Possession of dangerous drugs or alcohol. Reporting on duty or attempting to work while under the effect of drugs or alcohol.
10. Conduct compromising the life/safety/emotional well being of others.
11. Discourteous and/or disorderly behavior.
12. Malicious gossip or verbal attack on any hospital personnel or other students.
13. Soliciting or unauthorized selling on hospital premises.
14. Leaving the work area or department without permission from the person in charge.
15. Smoking or eating in unauthorized areas.
16. Unwilling to recognize own limitations & refusing assistance from technologists when appropriate.
17. Critiquing technologists, hospital staff, or physicians.
18. Working ineffectively with technologists and hospital staff in a team environment.

## Honor Code

Students will abide by the program's Honor Code which is designed to promote an atmosphere of ethical and responsible behavior and to reinforce the importance of honesty and integrity. This includes student performance on all assignments and examinations, as well as student conduct in the classroom and in the clinical setting. Violations of the Honor Code may also constitute



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violations of the Mt. SAC Standards of Conduct, the program's Code for Clinical Conduct, and the ARRT Standards of Ethics.

The ARRT, in alignment with its Standards of Ethics, supports programmatic implementation of Honor Codes in order to meet ARRT certification standards. All candidates for ARRT certification and registration are required to disclose whether they have ever had any license, registration, or certification subjected to discipline by a regulatory authority or certification board (other than ARRT), as well as any honor code violations that may have occurred while they attended school. All candidates must sign a written consent under the Family Educational Rights and Privacy Act (FERPA). This consent allows ARRT to communicate freely and openly with program directors and to obtain your educational records concerning violations of an honor code.

## **Purpose**

The objective of the Honor Code is to foster a sense of trust, responsibility, and professionalism among students and between students and faculty. The code's fundamental goals are to promote ethical behavior, to ensure the integrity of the academic enterprise, and to develop in students a sense of responsibility to maintain the honor of the healthcare professions.

## **Student Responsibilities**

Students will not:

1. Be in violation of the ARRT Standards of Ethics
2. Cheat, plagiarize, or engage in any other academic dishonesty with or without the aid of electronic devices;
3. Give or receive unpermitted aid during a quiz, examination, or assignment;
4. Impede other students to fair and equal access to educational opportunities;
5. Falsify records or eligibility requirements (e.g., clinical competencies);
6. Forge or alter any document (e.g., qualifications, patient care);
7. Abuse, neglect, or abandon a patient;
8. Engage in sexual contact without consent or harass any member of the community, including patients;
9. Conduct him/herself in a seriously obscene or offensive manner;
10. Practice in an unsafe manner or outside the scope of professional training;
11. Violate patient confidentiality (HIPAA);
12. Attempt, or commit theft of any item not belonging to the student (including patient's property);
13. Accept services in the clinical setting without a physician's order. Accepting free services constitutes stealing from the clinical setting.
14. Attend class or the clinical setting while under the influence of alcohol, drugs, or other substances.

# Computed Tomography- Clinical Instructor Handbook

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No code can explicitly enumerate all conceivable instances of prohibited conduct. In situations where the boundaries of proper conduct are unclear, the student has the responsibility to seek clarification from the appropriate faculty member(s), or dean(s). Each student has the responsibility to participate in the enforcement of this Code. Failure to take appropriate action is in itself a violation of the Code.

The student must agree to participate in the enforcement of this Honor Code, and prior to matriculation, must sign a statement agreeing to uphold its principles while enrolled in the Mt. SAC RT Program.

## Faculty Responsibilities

Each faculty member has the responsibility to participate in the clarification, promotion, and enforcement of the Honor Code. The faculty plays an integral role in the maintenance of the Honor Code.

### Program Procedures in the Event of Honor Code Violations

- A student failing to abide by the program's honor code constitutes good cause for discipline, including but not limited to the removal, suspension or expulsion of a student.
- Students do have an avenue of recourse in the event of Honor Code Violations. Mistakes can be made and, as with any other threat to a student's right to maintain enrollment, a means of due process is available. See the Due Process Policy on p. 20.

## ARRT Standards of Ethics

Students must abide by the [ARRT Standards of Ethics](#). Follow the link and review the standards carefully.

## Student Complaint & Grievance Process

### Student Complaints and Grievances

Students are protected against capricious, arbitrary, unreasonable, unlawful, false, malicious or professionally inappropriate evaluations or behavior by a faculty member, a staff member, an administrator or an official of the College or another student. Student complaints may be classified as grievances and fall into one of three categories: Academic, Non-Academic, and Discrimination. The forms and procedures for academic and non-academic grievances are located on the student life webpage under [Student Complaints and Grievances](#).

### Non-Grievance Student Complaints

A student who has a complaint, apart from those that require invoking the grievance procedure, shall submit the complaint using the program's student complaint forms. The forms are available on the program's website under the [Student Complaint Forms](#) Tab or the forms can be obtained from the Department Chair office. If the complaint is regarding a faculty member, the student shall complete and submit the form titled "[Student Complaint Form-Faculty](#)." If the complaint is not faculty related (e.g. cleanliness of classroom or complaint about office staff), the student shall complete and submit the form titled "[Student Complaint Form- Non-Faculty](#)."

- Non-Grievance Student Complaint Process

# Computed Tomography- Clinical Instructor Handbook

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- The student will be asked to provide the information regarding the complaint as thoroughly as possible. The complaint needs to be submitted within 10 business days of the alleged conflict or action to the RT Department Chair (DC). Complain forms completed online will be sent directly to the DC. Paper complaint forms need to be submitted to the DC via email or the form can be dropped off at the DC office.
- The DC will review the information provided, meet with the student within 10 business days, and initiate an investigation if needed. Every effort will be made to resolve the complaint; however, the resolution of all complaints may not be possible at the department level. Serious complaints may need to be forwarded to the appropriate personnel or department.
- If, after your complaint has been reviewed and investigated by the DC, the student is not satisfied with the outcome of the complaint, the student may contact the office of Student Life at (909) 274-4525 to pursue filing of a formal grievance.

## Probation & Dismissal Policy

Students enrolled in the CT program are responsible for adhering to the policies and regulations established by the Board of Trustees (see college catalog), the California Department of Public Health, the Technology and Health Division, RT courses, and the RT Program. Students should review the program and college policies included in the College Catalog and the RT Student Handbook. Students not complying with the aforementioned policies and procedures are subject to probation and/ or dismissal.

### Probation

A written probation notice is given to the student by their professor when it is necessary to inform the student that his/her academic progress, technical skill level, or behavior does not meet the course/program objectives or policies. A student may be placed on probation at any point during any semester/intersession. Indications for probation include, but are not limited to, the following:

1. Failure to meet specific course objectives, critical elements, and/or course policies identified in the course syllabus
2. Failure to adhere to clinical attendance policy.
3. Failure to adhere to the clinical contract. See page 9
4. Failure to submit clinical requirements within specified time frames (e.g. physical forms)
5. Failure to communicate effectively with physicians, staff, and patients in the clinical setting.
6. Demonstration of a lack of personal and professional integrity and ethics by failing to accept responsibility for his or her own actions.
7. Violation of the patient care and safety standards identified on the clinical evaluation.
8. Inability to competently apply technical skills in the clinical setting.
9. Violation of department protocol in the clinical setting.
10. Misconduct or any behavior deemed inappropriate in the clinical setting or classroom (e.g. harassment, stealing, disruptive talking, using cell phone during class, making special arrangements and/or schedule changes without prior approval from college faculty, etc).
11. Damaging phantoms or equipment.
12. Conducting repeat radiographs without direct supervision from a qualified practitioner. Conducting any radiograph without the appropriate level of supervision (direct or indirect).

# Computed Tomography- Clinical Instructor Handbook

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13. Use of electronic devices during class or clinical time, unless permitted by the professor or supervising technologist.
14. Violation of program policies

Students placed on probation will meet with their professor in conference and a plan for remediation will be developed. If the student fails to successfully complete the remediation plan, the student may be dismissed from the program.

## Indications for Dismissal

1. Failure to successfully complete a course specific remediation plan.
2. Failure to maintain a “C” or better in all required radiography classes.
3. Inability to communicate effectively with physicians, staff, and patients in the clinical setting.
4. Negligence or conduct contrary to accepted rules/standards of practice/ethics that might result in harm to a patient.
5. Chronic attendance policy violations.
6. Serious violations of the policies, procedures, and standards of care of the clinical setting to which the student is assigned.
7. Abandonment of assignment. Leaving an assigned clinical area prior to the end of the designated schedule without the permission of the clinical instructor.
8. Repeat violations of the program’s supervision policy (repeating radiographs without direct supervision from a qualified practitioner, and/or conducting *any* radiograph without the appropriate level of supervision [direct or indirect]).
9. Behavior that would necessitate repeat (more than one) probations for the same behavior / reason while enrolled in the program
10. Students who necessitate a fourth probation while enrolled in the program. Students are allowed a maximum of **2** probations (for different behaviors) while enrolled in the program.
11. Violation of the program policies (e.g. Academic Honesty, Honor Code, Code for Clinical Conduct)
12. Accepting free services of any kind while in the clinical setting.
13. Accepting any service/procedure/product in the clinical setting requiring a physician’s prescription without first obtaining a prescription from a physician.
14. Students who have been dismissed from any clinical site for legitimate and documented misconduct while enrolled in the program.
15. Repeated misconduct or any behavior deemed inappropriate in the clinical setting or classroom (e.g. harassment, stealing, disruptive talking, making special arrangements and/or schedule changes without prior approval from college faculty, etc).
16. Repeated damage of phantoms or equipment.
17. Repeated use of electronic devices during class or clinical time, unless permitted by the professor or supervising technologist

# Computed Tomography- Clinical Instructor Handbook

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18. Repeatedly demonstrating lack of personal and professional integrity and ethics by failing to accept responsibility for his or her actions.
19. Violation of course specific policies

Students who exhibit behaviors indicative of gross negligence will be subject to **permanent dismissal** from the program. Gross negligence is defined as an extreme departure from the standards of care, which under similar circumstances, would have been exercised by a student of the same level. Violation of the College and Program policies published in the college catalog or the student handbook may also be subject to **permanent dismissal**. In addition, if it is determined that a student is cheating, he or she will be subject to **permanent dismissal**.

## Due Process Policy

Students have an avenue of recourse should they “fail” to meet the course, program, or college policies and procedures. Mistakes can be made and, as with any other threat to a student’s right to maintain, enrollment, a means of due process is available.

### Due Process

In the event that a student violates any course, program, or college policy, and the nature of this violation requires disciplinary action, the following process will be followed:

1. When a faculty member observes behavior that appears to be a policy violation, he/she shall consult the Program Director or Department Chair, inform the student of the potential violation (documented in Report of Misconduct), and notify the student that he/she will not be able to continue class/clinical for the day of the violation or the following class/clinical day while an investigation is underway ([Per Ed. Code 76032](#)).
2. The Program Director or Department Chair will notify the student by email that s/he has received a Report of Misconduct. The notice will include a copy of the report and these Regulations for Radiologic Technology students.
3. The Program Director or Department Chair will gather all information related to the potential policy violation, including statements from the student, the accuser, and any witnesses, as well as assemble any other applicable data.
4. A hearing panel will be assembled comprised of any three (3) faculty members to include the Program Director or Department Chair (may not be the accuser). The hearing panel will review the evidence gathered.
5. The hearing panel will call the student in and give him/her the opportunity to answer the charges, respond to the accusation and present supporting evidence.
6. The hearing panel will inform the student in writing (hard copy and email) of the final determination, copying the division deans.
7. If the case is referred to the [Office of Student Life](#), the Director of Student Life will assist the student in understanding his/her due process rights and the grievance procedures. Discipline procedures are under the jurisdiction of the Student Life office. For questions, please contact the Office of Student Life at ext. 4525

# Computed Tomography- Clinical Instructor Handbook

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## **Dosimetry Program & Radiation Exposure Policy**

### **Dosimetry Program**

Mt. San Antonio College's Radiologic Technology Program uses, to the extent practicable, procedures and engineering controls based upon sound radiation protection principles to achieve occupational radiation doses that are as low as reasonably achievable (ALARA).

The Radiologic Technology Department is responsible for complying with 10 CFR 20 to ensure protection of students and faculty working in controlled areas and ensuring the public is protected. The program will monitor students and faculty to ensure dose limits found in 10 CFR 20 are not exceeded. For the purpose of this document, the term worker includes program students and faculty working in controlled areas.

### **Occupational Workers (Students & Faculty)**

- Radiation dose monitoring will be accomplished by providing a Thermoluminescent Dosimeter (TLD) to all workers. The dosimeters are processed by Radiation Detection Company and are exchanged on a monthly basis. Radiation dose reports are reviewed, signed, and dated by the Clinical Coordinator (CC) within 10 days (17 CCR, 30420) of receiving dose reports. The reports are then posted in the classroom for workers to review, sign, and date verifying they have reviewed their dose report each month. The signed dose reports are stored indefinitely by the CC.
- Control badges are used to monitor non-occupational dose inadvertently exposed during transit. Any amount of exposure to control badge is subtracted from the student/faculty badge reading.
- Combined occupational total effective dose (TEDE). Program workers are provided with one clinical badge throughout the program; thus, calculating combined TEDE is not necessary unless a worker is employed in a capacity that requires maintenance of an additional dosimeter. In that case, the worker is required to notify the RSO and provide the necessary information as indicated in the Radiation Exposure Policy/ Occupational Worker Responsibilities/Rules (see below). This notification will allow the CC to obtain and maintain concurrent occupational doses, and ensure combined doses do not exceed dose limits.
- During clinical orientation and in course RAD50, which occur **prior to** attending lab courses and clinical training, students are instructed on the following:
  - different types of patient and personnel protective devices including personnel monitoring devices
  - proper use, care, and placement of the radiation badge
  - monthly badge exchange procedure
  - use of control badges
  - how to read a dosimetry report
  - requirement that a radiation badge **MUST** be worn to attend lab and clinical training
  - consequences of attending lab and clinical training without wearing a badge, and of deceptive exposure of the badge
  - requirement to comply with the **Radiation Exposure Policy** and the **Radiation Safety Rules for Clinical Experience** (Appendix VI). The policies are designed to provide students with a basic knowledge of radiation protection practices, protect the student's health and safety from excessive radiation dose, and provide students with the instruction necessary to comply with the dosimetry program.

# Computed Tomography- Clinical Instructor Handbook

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## **Dosimetry Program & Radiation Exposure Policy (Continued)**

### **Pregnant Occupational Worker (Students & Faculty) & Fetal Dose**

- Declaration of Pregnancy. Procedures for declaring a pregnancy are included in the **Pregnancy Policy** (Appendix XI). Documentation related to a worker's declaration of a pregnancy is stored in the pregnant worker's file. A pregnant worker who declares a pregnancy is issued a fetal badge. The RSO maintains documentation of the dose to the pregnant worker and embryo/fetus.

### **Reports to Individuals**

- The RSO provides radiation dose reports to program students, graduates, and staff in accordance with CCR Title 17, 30255(b)(6).
  - Students, graduates, and staff may request dose reports at any time by submitting a written request to the Radiation Safety Officer or Program Director.
  - Reports will be furnished within 30 days from the time the request is made.
  - Annual dose reports will be automatically provided to monitored individuals if:
    - The individuals occupational dose exceeds 100mrem total effective dose equivalent or 100 mrem to any individual organ or tissue; or
    - The individual requests his or her annual dose

### **Radiation Exposure Policy**

This policy was designed to accurately monitor worker's occupational radiation exposure, and to protect their health and safety from excessive radiation dose. The [Nuclear Regulatory Commission's \(NRC\) Part 20, Standards for Protection Against Radiation](#) was used as the basis for this policy.

#### **Radiation Safety Officer (RSO) Responsibilities**

##### **The RSO must:**

- Monitor occupational radiation exposure to all workers in compliance with state and federal regulations. Monitoring is accomplished by supplying and requiring the use of Thermoluminescent Dosimeter (TLD) Badges by all workers.
- Ensure the Clinical Coordinator (CC) reviews, signs, and dates all personnel monitoring dosimetry reports within 10 days (17 CCR § 30420) of receipt to ensure the occupational dose limits specified in Subpart C of Title 10, Code of Federal Regulations, Part 20 (10 CFR Part 20) and program established investigational dose limits are not exceeded.
- Make Radiation Exposure Reports available to workers within 30 days of receiving the report. The CC posts the reports in the classroom and workers must review, sign, and date the Radiation Exposure Report to verify they have acknowledged and reviewed their radiation dose within 30 days of the CC receiving the report. Signed dosimetry reports are retained by the CC indefinitely.
- Investigate, perform an analysis, and take corrective action to prevent future occurrences of radiation exposure to a student or faculty member exceeding NRC occupational dose limits and program established investigational dose limits.
- Notify the CDPH-RHB of radiation incidents as specified in CCR Title 17, 30295.



# Computed Tomography- Clinical Instructor Handbook

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## **Dosimetry Program & Radiation Exposure Policy (Continued)**

### **Occupational Workers (Students & Faculty) Responsibilities/Rules**

#### **Workers must:**

- Wear the TLD Badge, a radiation monitoring device, provided by the program ANY time the worker is participating in x-ray laboratory or clinical training, including but not limited to simulation procedures or quality assurance.
- Wear the monitoring device on the collar, outside the apron at all times.
- Wear a second program issued radiation monitor at waist-level if the worker has declared a pregnancy.
- Make every attempt to minimize occupational exposure through consistent application of the Radiation Safety Rules for Clinical and Lab Experience. The rules are included in the Student Handbook, Clinical Handbooks, and are posted in the laboratory.
- Review, sign, and date the Radiation Exposure Report monthly to verify acknowledgment and review of monthly radiation dose.
- Report promptly to the RSO, via email/writing, when a situation arises that may affect the dose reading of the radiation monitoring device.
- Notify the RSO or CC if employed in capacity that requires maintenance of an additional dosimeter. This notification will allow the CC to obtain and maintain concurrent occupational doses, and ensure combined doses do not exceed dose limits.
- Promptly report to the RSO, or program faculty, any condition which may lead to or cause a violation of radiation exposure regulations, license conditions, or unnecessary exposure to radiation. This includes warnings made in the event of any unusual occurrence or malfunction that may involve exposure to radiation or radioactive materials. These situations are considered an exposure **emergency**.

### **NRC Radiation Dose Limits**

The following occupational dose limits for adults must not be exceeded:

- The total effective dose equivalent (TEDE) being equal to **5 rems (0.05 Sv) annually** ,  
**or,**
- The sum of the deep-dose equivalent and the committed dose equivalent to any individual organ or tissue other than the lens of the eye being equal to **50 rems (0.5 Sv) annually**.
- A lens (of eye) dose equivalent (LDE) of **15 rems (0.15 Sv) annually**.
- A shallow dose equivalent (SDE) to the skin of the whole body or to the skin of any extremity of **50 rems (0.5 Sv) annually**.
- The dose to a pregnant worker must not exceed **0.5 rem (5 mSv) for the entire pregnancy or 50 mrem (.5 Sv) per month**.
- Fetal dose equivalent for the entire pregnancy must not exceed **0.5 rem (5 mSv) or 50 mrem (.5 Sv) per month**.

### **Exceeding NRC Radiation Dose Limits**

In the event a worker receives a dose in excess of the NRC occupational dose limits, the Radiation Safety Officer (RSO) will meet with the worker to prepare an **Incident Investigation Report** and submit the



# Computed Tomography- Clinical Instructor Handbook

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## **Dosimetry Program & Radiation Exposure Policy (Continued)**

### **Exceeding NRC Radiation Dose Limits (continued)**

report to the NRC within 30 days after learning of the occurrence. The report will be forwarded to the NRC in accordance with the requirements of 10 CFR Part 20.2203. At a minimum, the report will include:

- Worker's name, social security number, and date of birth;
- An estimate of the worker's dose;
- The levels of radiation involved;
- The cause of the elevated exposures and/or dose rate; and
- Corrective steps taken or planned to ensure against recurrence, including the schedule for achieving conformance with applicable limits, ALARA constraints, generally applicable environmental standards, and associated license conditions.

A copy of the NRC report and the dose report will be provided to the student by the RSO within the 30 days after learning of the occurrence. The RSO will keep a copy of the report with the worker's dose report indefinitely and the CC will continue to monitor the affected worker's dose while enrolled or employed by the program.

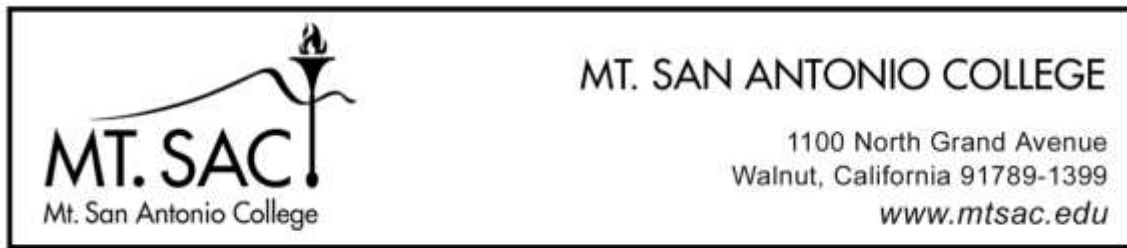
### **Investigational Dose Levels**

The program also monitors doses considerably less the annual NRC dose limits. The reason for establishing and monitoring investigational levels is to trigger an investigation. Through the investigation process, the RSO and CC will determine the cause of the dose and recommend practices or implement corrective action to maintain worker's exposure as low as reasonably achievable.

	<b>Level 1</b>	<b>Level 2</b>
Whole Body (Monthly)	250mrem	400mrem
Pregnancy (monthly)	25mrem	40mrem

### **Exceeding Investigational Dose Levels**

- If a worker exceeds the Level 1 exposure limit in a month, the RSO and the worker will meet to discuss and determine the possible cause of the exposure. The worker will be counseled on reducing their exposure in the clinical facility and/or lab. This meeting will be documented in writing and the documentation will be kept with the worker's dose report indefinitely. Also, the RSO will contact the Clinical Instructor or Lab Professor to make them aware of the student's high exposure.
- If a worker exceeds the Level 2 exposure limit in a month, the RSO will meet with the worker again to discuss and determine the cause of the high exposure. The worker will be counseled on reducing their exposure in the clinical facility and/or lab. This meeting will be documented in writing and the documentation will be kept with the worker's dose report indefinitely. Also, the RSO will contact the Clinical Instructor or Lab professor to make them aware of the student's high exposure.



*Department of Radiologic Technology*

*Radiation Safety and Protection Program*

*INCIDENT INVESTIGATION REPORT*

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## *Privacy Act Information: Not for Public Disclosure*

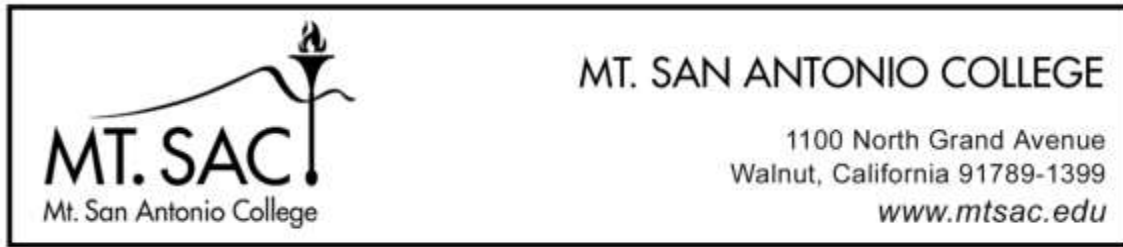
Student's Name: \_\_\_\_\_

Student's Social Security Number: \_\_\_\_\_

Student's Date of Birth: \_\_\_\_\_

# Computed Tomography- Clinical Instructor Handbook

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## *Department of Radiologic Technology*

### *Radiation Safety and Protection Program*

#### **INCIDENT INVESTIGATION REPORT**

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The on campus x-ray laboratory and the program's clinical education sites are California State registrants and are therefore subject to the reporting requirements of 10 CFR Part 20, section 20.2203. According to regulations imposed by the State of California Department of Public Health, reporting the following information to the U.S. Nuclear Regulatory Commission (NRC) is required when a student experiences an overexposure. **If a statement does not apply to this particular incident, please note the statement as not applicable (N/A).**

Student's name \_\_\_\_\_

Name of clinical facility where exposure took place \_\_\_\_\_

Estimated dose to the student \_\_\_\_\_

Level of radiation involved \_\_\_\_\_

Explain the cause of elevated overexposure and/or dose rate \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Describe corrective steps that have been taken or planned to ensure against recurrence?

Include the schedule for achieving conformance with applicable limits, ALARA constraints, generally applicable environmental standards, and associated license conditions. \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Computed Tomography- Clinical Instructor Handbook

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Have any other students received unusual dose reports? \_\_\_\_\_

Please list the various types of X-ray equipment the student worked with during the time period of elevated overexposure and/ or dose rate. \_\_\_\_\_

Signature of Clinical Instructor/Supervisor/Faculty \_\_\_\_\_

Print Name \_\_\_\_\_ Date \_\_\_\_\_

Signature of Radiation Safety Officer \_\_\_\_\_

Print Name \_\_\_\_\_ Date \_\_\_\_\_

Signature of Program Director \_\_\_\_\_

Print Name \_\_\_\_\_ Date \_\_\_\_\_

***\* This report shall be submitted by mail addressed to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001.***

## Computed Tomography- Clinical Instructor Handbook

CT Program Radiation Safety Rules – Clinical Experience	
<b>ALARA</b>	<ul style="list-style-type: none"> <li>As Low As Reasonably Achievable — making every reasonable effort to maintain exposures to ionizing radiation as far below the dose limits as practical — applies to patient and occupational dose</li> <li>Principles of ALARA must be practiced at all times</li> </ul>
<b>Student Supervision</b>	<ul style="list-style-type: none"> <li>All CT procedures must be performed under the direct supervision of a qualified CT technologist until the student achieves competency</li> <li>A qualified CT technologist must be physically present during the conduct of a repeat procedure and must approve the student's procedure prior to re-exposure</li> <li>CT procedures may be performed under the indirect supervision of a qualified CT technologist after a student achieves competency, unless it is a repeat procedure</li> </ul>
<b>Radiation Monitor</b>	<ul style="list-style-type: none"> <li>Thermoluminescent dosimeter (TLD) must be worn on the collar, outside the apron at <b>all</b> times</li> <li>Declared pregnant students are issued a second radiation monitor to be worn at waist-level</li> <li>TLDs are for occupational (training) only — not for personal use</li> <li>Review and initial monthly dosimetry reports</li> </ul>
<b>Where to stand during a CT procedure</b>	<ul style="list-style-type: none"> <li>Remain in the operating control console area protected by lead wall/glass during exposure</li> <li>Exceptions include some interventional studies when the student must wear protective apparel and be available to assist the patient and/or physician during the procedure</li> <li>Minimize the time of exposure, use protective shielding devices and apparel, and maximize distance from the radiation source and patient as is practicable</li> </ul>
<b>Holding patients/ image receptors during a CT procedure</b>	<ul style="list-style-type: none"> <li><u>Do not hold or support</u> a patient during any CT procedure when an immobilization method is the appropriate standard of care</li> </ul>
<b>Human Exposure</b>	<ul style="list-style-type: none"> <li>Exposing humans to x-ray during CT procedures for experimental purposes is not allowed. This includes practicing procedures on students.</li> <li>Humans may only be exposed to x-ray during CT procedures when ordered/prescribed by a licensed physician, physician assistant, or nurse practitioner</li> </ul>
<b>Exposure Techniques</b>	<ul style="list-style-type: none"> <li>Appropriate selection of mAs and kVp is critical to optimize radiation dose</li> </ul>
<b>Shielding</b>	<ul style="list-style-type: none"> <li>Use whenever possible</li> <li>Use when diagnostic objectives permit</li> <li>Use when gonads lie in or near the CT x-ray beam</li> </ul>
<b>Pregnant Patients</b>	<ul style="list-style-type: none"> <li>Ask women of childbearing age of the possibility of pregnancy prior to any CT procedure</li> </ul>
<b>Non-essential Persons</b>	<ul style="list-style-type: none"> <li>Clear the room of non-essential persons prior to conducting a CT procedure</li> </ul>

# Computed Tomography- Clinical Instructor Handbook

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## **Drug Testing Policy**

In accordance with the Mt. San Antonio College's Health Professions Drug Testing Policy, the Computed Tomography (CT) Program has implemented additional guidelines to assist students in complying with this policy. The Health Professions Drug Testing Policy is as follows:

As a part of their physical examination required by healthcare and emergency medical services agencies, students preparing for entry into the health professions programs may be required to submit the results of a drug screen test to their program as a condition of participation in the program. Physical examination results, including drug screening, should be submitted to the program based on procedures and timelines set forth by the program and prior to any direct clinical interaction. Drug testing is offered at the [Student Health Center](#) at Mt. SAC. Students will be given instruction on procedures upon acceptance and are responsible for the cost of the drug test.

The drug screening test must include at least a screening for amphetamines, barbituates, benzodiazepines, cocaine, marijuana, opiates and phencyclidine and be issued by a lab approved by the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) or the College of American Pathologists (CAP).

A student with a positive drug screen will be disallowed from clinical participation and any course requiring clinical participation.

A student excluded for a positive drug screen may request reconsideration for program entry the following year based on program readmission policies. A second positive drug screen would result in the student being disallowed for readmission to the Radiologic Technology Program.

Additional guidelines for CT Program students are as follows:

- Students may be subject to additional drug screen tests while enrolled in the program. The additional drug screen tests are required for participation in clinical training at various clinical sites.
- Students believed to be under the influence of any intoxicant while attending program courses (in accordance with the CT Program's Code for Clinical Conduct and the College Standards of Conduct) will be subject to drug testing at that time.
- All drug testing will be conducted at the student's expense.
- Failure to comply with any aspect of the drug testing policy will result in program expulsion.
- Students with a positive drug screening due to prescription medications will be required to submit a physician's note to support the positive drug screen results. The student will be responsible for presenting the positive drug screening results with the physician's note to the assigned clinical facility. The clinical facility will determine if the student will be allowed to participate in clinical training based on the facility's policies.
  - Students who are denied training by the clinical site cannot continue in the program.
  - The CT program is not obligated to secure a clinical training site for students who are declined by a site due to a positive drug screen.

# Computed Tomography- Clinical Instructor Handbook

## CT Clinical Evaluation

Student Name \_\_\_\_\_ Grading Period \_\_\_\_\_  
 Clinical Facility \_\_\_\_\_ Week: 6 8 16  
 Initials: Student \_\_\_\_\_ Clinical Instructor \_\_\_\_\_ Professor \_\_\_\_\_

Please rate the student based on his/her level of education/experience and review the evaluation with the student to support the students ongoing learning and development. **Comments are required for NI or CS ratings.**

**E= Excellent CA= Competent/Acceptable NI= Needs Improvement CS= Critically Substandard NA= Not Applicable**

Patient Care and Safety	E	CA	NI	CS	NA
1. Uses appropriate & effective written, oral & nonverbal communication with patients, the public & members of healthcare team					
2. Examines procedure orders for accuracy & makes corrections when applicable					
3. Executes CT procedures under appropriate level of supervision					
4. Demonstrates principles of assisting, transporting, transferring, positioning & immobilizing patients					
5. Differentiates between emergency & non-emergency procedures					
6. Recognizes life-threatening electrocardiogram tracing					
7. Uses personnel & radiation protection measures each exam warrants ( <i>optimizes for pediatric pts</i> )					
8. Applies standard & transmission based precautions, appropriate medical asepsis, & sterile technique					
9. Assesses patient, records clinical history, & demonstrates competent assessment skills through effective management of the patient's physical & mental status					
10. Provides patient-centered, clinically effective care for all patients					
11. Uses education strategies appropriate to the comprehension level of patient or family & answers patient questions knowledgeably					
12. Adapts procedure to meet age-specific, disease-specific & cultural needs of patient					
13. Examines demographic factors influencing patient compliance with medical care (gender, age, religion, disability, socioeconomic, lifestyle choices, sexual orientation, etc)					
14. Practices safe contrast administration and/or preparation procedures (including injector)					
Technical Skills	E	CA	NI	CS	NA
15. Demonstrates appropriate level of understanding of procedures					
16. Competently operates CT equipment & reports equipment malfunction					
17. Positions patient & gantry to achieve accurate demonstration of affected body part					
18. Selects accurate protocol & procedure parameters for each examination ( <i>optimizes for pediatric pts</i> )					
19. Selects technical factors producing quality diagnostic images with the lowest possible radiation exposure ( <i>optimizes for pediatric pts</i> )					

## Computed Tomography- Clinical Instructor Handbook

Technical Skills cont....	E	CA	NI	CS	NA
20. Initiates the scan					
21. Completes procedure in timely manner					
22. Demonstrates adequate skills in image processing					
23. Performs adequately under stressful situation					
24. Critiques images for optimal demonstration of anatomic region, exam completeness, patient ID, & image quality					
25. Determines corrective measures to improve inadequate images					
26. Demonstrates competence in computer skills					
Professionalism	E	CA	NI	CS	NA
27. Demonstrates professional work habits					
28. Interested & assertive in the clinical setting					
29. Assumes responsibility for own actions					
30. Recognizes own limitations & seeks assistance from technologists when appropriate (ex. repeating image)					
31. Takes initiative in pursuing learning opportunities in clinical setting					
32. Adheres to team practice concepts & works effectively with healthcare team					
33. Adheres to national, institutional & departmental standards, protocol, policies & procedures regarding patient care, providing x-ray procedures & reducing medical errors					
34. Complies with department & institutional policies, regarding response to emergencies, disasters & accidents					
35. Adheres to & integrates into clinical practice the Radiographers Practice Standards & Standards of Ethics					
36. Understands the purpose of clinical study is not to critique technologist, staff or physicians					

Comments:

☐

Check here if you recommend the student is placed on probation. Please contact Mt. SAC faculty.  
Reason(s) I recommend the student be placed on probation:



# Computed Tomography- Clinical Instructor Handbook

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## Clinical Experience RAD7A Syllabus WINTER – CT PROGRAM CRN- \_\_\_\_\_

(909)594-5611 P. Engisch x4527 M. Neel x4680 D. McLaughlin x4790

### **Clinical Assignment: 18 hours/week arranged between the hours of 6:30am-10pm**

#### **Monday- Sunday.**

*\* Students must submit their clinical schedule for the upcoming month by the 25<sup>th</sup> of the preceding month. For example, the student's schedule for February is due to the Clinical Coordinator on Jan 25<sup>th</sup>. If a student's clinical schedule is not received by the 25<sup>th</sup>, the student cannot attend clinical and hours will need to be made up. See Clinical Attendance Policy (p. 7).*

### **Course Description:**

Computed Tomography (CT) clinical experience in the radiology department of affiliated clinical sites under the supervision of a registered Radiologic Technologist, supervisor, or physician. Emphasis on Computed Tomography procedures of the head, neck, spine, musculoskeletal, chest, abdomen, pelvis, and special procedures. Image display, post processing, and quality assurance is included. Intended for students enrolled in Computed Tomography Certificate Program. Health physical, background check, drug test, and CPR certification is required. Prior to enrolling in this course, student must possess a valid California Certified Radiologic Technologist (CRT) license and be certified and registered by the American Registry of Radiologic Technologists (ARRT) in one of the following supporting disciplines: Radiologic Technology, Nuclear Medicine or Nuclear Medicine Technology Certification Board (NMTCB) certification, or Radiation Therapy.

### **Grading System and Rationale:**

To complete and receive credit for RAD7A, the student must:

1. Demonstrate an overall acceptable standard of behavior relative to personal and professional demeanor in accordance to the criteria stated on the evaluation instrument.
2. Fulfill all of the requirements outlined on the course syllabus (pp. 3-6) and all other requirements listed in this handbook
3. Obtain all appropriate signatures for various documents by the end of the semester to satisfy program requirements (e.g. time sheets, ARRT clinical experience progress sheet).
4. Apply for Computed Tomography Certification and Registration by logging into the [ARRT website](#)
5. Demonstrate competency in a **minimum of 3 different procedures** from the current ARRT CT Clinical Experience Requirement procedures list. Students must complete and log the minimum number of required procedure competencies for the clinical course

## Computed Tomography- Clinical Instructor Handbook

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before the session ends. Each student must submit a copy of their ARRT Clinical Experience Progress Sheet to verify a minimum of 3 sign-offs (3-5 reps of one procedure= 1 sign-off) for the semester. ***The ARRT Progress Sheet is due in Week 6; however, faculty may ask to see the student's progress sheet at any time during the semester. The student is responsible for logging procedures on a regular basis.***

- See **Appendix I** for the ARRT CT Clinical Experience Requirements. The document includes specific procedural requirements, general guidelines, examples, and a current list of CT procedures.
  - See **Appendix II** for ARRT Instructions on Documenting Clinical Procedures.
  - See **Appendix III** for a sample of an ARRT CT Clinical Experience Progress Sheet.
6. Earn one (1) passing Clinical Evaluation from the clinical facility where the student is training.
  7. Meet clinical attendance requirements. Regular attendance is required for all clinical courses (see Clinical Attendance Policy, p. 7). Missed hours must be made up within the same course session. Students cannot carry over owed hours to the next session.
  8. Submit their clinical handbook, with all required signatures, to the Clinical Coordinator at the end of the session.

***Failure to comply with these requirements will result in a grade of no pass (NP) for the clinical course.***

**Course Textbook:** No textbook is required for this course.

**Course Outline:** A course outline with weekly topics is not required for this course. See the course objectives below.

### **Course Objectives- RAD 7A**

1. Explain how a person's cultural beliefs toward illness and health affect his or her health status.
2. Recognize life-threatening electrocardiogram (ECG) tracing
3. Adhere to team practice concepts that focus on organizational theories, roles of team members, conflict resolution, and principles of interpersonal relationships.
4. Adhere to national, institutional, and departmental standards, policies, and procedures regarding care of patients, providing radiologic procedures and reducing medical errors.
5. Execute medical imaging procedures under the appropriate level of supervision.
6. Provide psychosocial support and patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity, or culture.

## Computed Tomography- Clinical Instructor Handbook

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7. Integrate the use of appropriate and effective written, oral, and nonverbal communication with patient, the public and members of the healthcare team in the clinical setting while maintaining patient confidentiality standards and meeting HIPAA requirements.
8. Integrate appropriate personal and professional values with patient care by adhering to the Radiographers Practice Standards and Standards of Ethics.
9. Respond appropriately to medical emergencies and describe the role of healthcare team members in responding to a local or national emergency.
10. Comply with departmental and institutional policies, regarding response to emergencies, disasters, and accidents.
11. Apply standard and transmission-based precautions, appropriate medical asepsis, and sterile technique.
12. Apply the principles of total quality management to include assessment, analysis, education, performance, evaluation, implementation, outcomes measurement, and documentation of quality performance standards.
13. Demonstrate competency in the principles of radiation protection standards, and use personnel and radiation protection measures each exam warrants.
14. Demonstrate competency in operating radiographic equipment and report equipment malfunctions.
15. Demonstrate safe, ethical, and legal practices.
16. Demonstrate the principles of assisting, transporting, transferring, positioning, and immobilizing patients with standard patient care and management procedures.
17. Demonstrate professional work habits.
18. Demonstrate competency in a minimum of 3 different procedures from the current American Registry of Radiologic Technologists CT clinical experience requirement procedures list. A minimum of 3 and a maximum of 5 repetitions of each chosen procedure must be completed and documented. Less than 3 will not count toward the minimum total of repetitions required.
19. Demonstrate competency in the use of picture archival and communications system (PACS), and recognize common problems associated with retrieving or viewing images within PACS.
20. Integrate the radiographer's practice standards into clinical practice setting.
21. Practice safe contrast administration and preparation procedures.
22. Position the patient and gantry to achieve accurate demonstration of the affected body part.
23. Operate the beam restrictor to limit radiation exposure and improve image quality.
24. Use accurate procedure parameter selections for each procedure protocol.
25. Use patient and family education strategies appropriate to the comprehension level of the patient or family.
26. Determine corrective measures to improve inadequate images.
27. Examine demographic factors that influence patient compliance with medical care.

## Computed Tomography- Clinical Instructor Handbook

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28. Examine procedure orders for accuracy, and make corrective actions when applicable.
29. Differentiate between emergency and non-emergency procedures.
30. Assess the patient, record clinical history, and demonstrate competent assessment skills through effective management of the patient's physical and mental status.
31. Adapt procedures to meet age-specific, disease-specific, and cultural needs of patients.
32. Select appropriate technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
33. Critique images for appropriate anatomy, accuracy of positioning, image quality, and patient identification.

### **Student Learning Outcomes (SLO's):**

1. The student will demonstrate effective oral communication skills in the clinical setting.
2. The student will determine corrective measures to improve inadequate images.
3. The student will position the patient and gantry to achieve accurate demonstration of the affected body part.

# Computed Tomography- Clinical Instructor Handbook

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## Clinical Experience RAD7B Syllabus WINTER – CT PROGRAM CRN- \_\_\_\_\_

(909)594-5611 P. Engisch x4527 M. Neel x4680 D. McLaughlin x4790

**Clinical Assignment: 24 hours/week (18 hours on finals week 16) arranged between the hours of 6:30am-10pm, Monday- Sunday.**

*\* Students must submit their clinical schedule for the upcoming month by the 25<sup>th</sup> of the preceding month. For example, the student's schedule for May is due to the Clinical Coordinator on April 25<sup>th</sup>. If a student's clinical schedule is not received by the 25<sup>th</sup>, the student cannot attend clinical and hours will need to be made up. See Clinical Attendance Policy (p. 7).*

### Course Description:

Continued Computed Tomography (CT) clinical experience in the radiology department of affiliated clinical sites under the supervision of a registered Radiologic Technologist, supervisor or physician. Emphasis on Computed Tomography procedures of the head, neck, spine, musculoskeletal, chest, abdomen, pelvis, and special procedures. Image display, post processing and quality assurance is included. Intended for students enrolled in Computed Tomography Certificate Program. Health physical, background check, drug test, and CPR certification is required. Prior to enrolling in this course, student must possess a valid California Certified Radiologic Technologist (CRT) license and be certified and registered by the American Registry of Radiologic Technologists (ARRT) in one of the following supporting disciplines: Radiologic Technology, Nuclear Medicine or Nuclear Medicine Technology Certification Board (NMTCB), or Radiation Therapy.

### Grading System and Rationale:

To complete and receive credit for RAD7B, the student must:

9. Demonstrate an overall acceptable standard of behavior relative to personal and professional demeanor in accordance to the criteria stated on the evaluation instrument.
10. Fulfill all of the requirements outlined on the course syllabus (pp. 3-6) and all other requirements listed in this handbook
11. Obtain all appropriate signatures for various documents by the end of the semester to satisfy program requirements (e.g. time sheets, ARRT clinical experience progress sheet).
12. Apply for Computed Tomography Certification and Registration by logging into the [ARRT website](#)
13. Demonstrate competency in a **minimum of 25 different procedures** from the current ARRT CT Clinical Experience Requirement procedures list. Students must complete and log the minimum number of required procedure competencies for the clinical course before the session ends. Each student must submit a copy of their ARRT Clinical

## Computed Tomography- Clinical Instructor Handbook

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Experience Progress Sheet to verify a minimum of 25 sign-offs (3-5 reps of one procedure= 1 sign-off) and a minimum of 125 repetitions for the semester. **The ARRT Progress Sheet is due in Week 8 & Week 16; however, faculty may ask to see the student's progress sheet at any time during the semester. The student is responsible for logging procedures on a regular basis.**

- See **Appendix I** for the ARRT CT Clinical Experience Requirements. The document includes specific procedural requirements, general guidelines, examples, and a current list of CT procedures.
  - See **Appendix II** for ARRT Instructions on Documenting Clinical Procedures.
  - See **Appendix III** for a sample of an ARRT CT Clinical Experience Progress Sheet.
14. Earn two (2) passing Clinical Evaluation from the clinical facility where the student is training.
  15. Meet clinical attendance requirements. Regular attendance is required for all clinical courses (see Clinical Attendance Policy, p. 7). Missed hours must be made up within the same course session. Students cannot carry over owed hours to the next session.
  16. Submit their clinical handbook, with all required signatures, to the Clinical Coordinator at the end of the session.

***Failure to comply with these requirements will result in a grade of no pass (NP) for the clinical course.***

**Course Textbook:** No textbook is required for this course.

**Course Outline:** A course outline with weekly topics is not required for this course. See the course objectives below.

### **Course Objectives- RAD 7B**

1. Explain how a person's cultural beliefs toward illness and health affect his or her health status.
2. Recognize life-threatening electrocardiogram (ECG) tracing.
3. Adhere to team practice concepts that focus on organizational theories, roles of team members, conflict resolution, and principles of interpersonal relationships.
4. Adhere to national, institutional, and departmental standards, policies, and procedures regarding care of patients, providing radiologic procedures, and reducing medical errors.
5. Execute medical imaging procedures under the appropriate level of supervision.
6. Provide psychosocial support and patient-centered, clinically effective care for all patients regardless of age, gender, disability, special needs, ethnicity, or culture.

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7. Integrate the use of appropriate and effective written, oral, and nonverbal communication with patient, the public and members of the healthcare team in the clinical setting while maintaining patient confidentiality standards and meeting HIPAA requirements.
8. Integrate appropriate personal and professional values with patient care by adhering to the Radiographers Practice Standards and Standards of Ethics.
9. Respond appropriately to medical emergencies and describe the role of healthcare team members in responding to a local or national emergency.
10. Comply with departmental and institutional policies, regarding response to emergencies, disasters, and accidents.
11. Apply standard and transmission-based precautions, appropriate medical asepsis, and sterile techniques.
12. Apply the principles of total quality management to include assessment, analysis, education, performance, evaluation, implementation, outcomes measurement, and documentation of quality performance standards.
13. Demonstrate competency in the principles of radiation protection standards and use personnel and radiation protection measures each exam warrants.
14. Demonstrate competency in operating radiographic equipment and report equipment malfunctions.
15. Demonstrate safe, ethical, and legal practices.
16. Demonstrate the principles of assisting, transporting, transferring, positioning and immobilizing patients with standard patient care and management procedures.
17. Demonstrate professional work habits.
18. Demonstrate competency in a minimum of 25 different procedures from the current American Registry of Radiologic Technologists CT clinical experience requirement procedures list. A minimum of 3 and a maximum of 5 repetitions of each chosen procedure must be completed and documented. Less than 3 will not count toward the minimum total of 125 repetitions required.
19. Demonstrate competency in the use of picture archival and communications system (PACS) and recognize common problems associated with retrieving or viewing images within PACS.
20. Integrate the radiographer's practice standards into clinical practice setting.
21. Practice safe contrast administration and preparation procedures.
22. Position the patient and gantry to achieve accurate demonstration of the affected body part.
23. Operate the beam restrictor to limit radiation exposure and improve image quality.
24. Use accurate procedure parameter selections for each procedure protocol.
25. Use patient and family education strategies appropriate to the comprehension level of the patient or family.
26. Determine corrective measures to improve inadequate images.
27. Examine demographic factors that influence patient compliance with medical care.

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28. Examine procedure orders for accuracy, and make corrective actions when applicable.
29. Differentiate between emergency and non-emergency procedures.
30. Assess the patient, record clinical history, and demonstrate competent assessment skills through effective management of the patient's physical and mental status.
31. Adapt procedures to meet age-specific, disease-specific, and cultural needs of patients.
32. Select appropriate technical factors to produce quality diagnostic images with the lowest radiation exposure possible.
33. Critique images for appropriate anatomy, accuracy of positioning, image quality, and patient identification.

### **Student Learning Outcomes (SLO's):**

1. The student will demonstrate effective oral communication skills in the clinical setting.
2. The student will determine corrective measures to improve inadequate images.
3. The student will position the patient and gantry to achieve accurate demonstration of the affected



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## **Time Sheet Checklist**

To ensure time sheets are accurately filled out, each student must complete the following checklist.

### **Check each box as each item is completed**

- ☐ Insert first and last name
- ☐ Insert name of current hospital
- ☐ Insert clinical hours for each day
  - When an absence occurs in clinical, insert an “A” for absent in the box for that day
  - Insert make-up hours in the appropriate box
  - Do NOT schedule hours when a “Holiday” is in a box.
  - All clinical hours need to be made up in the same session. “Carrying over” of clinical hours to the next session is not allowed.
- ☐ At the end of the week, calculate and insert the “week total” hours
- ☐ At the end of the session, verify that the total hours for the Winter equals 108 hours
- ☐ At the end of the session, verify time sheet accuracy and sign/date the time sheet. The student signature/date is required and indicates the information on the time sheet has been reviewed by the student for accuracy.
- ☐ At the end of the session, ask the Clinical Instructor to review the time sheet and sign/date the bottom of the time sheet

***\* A sample time sheet is provided on page 41***



## RADIOLOGY PROGRAM CLINICAL TIME SHEET

<b>Student Name:</b> <b>Jane x-ray Student</b>	
<b>Hospital:</b> <b>Care Med. Ctr.</b>	
<b>Semester/Session:</b> <b>Fall</b>	<b>Year:</b> <b>2018</b>
<b>Rad 7A</b>	

<b>Attendance codes:</b>	<b>A = absent</b> <b>T = tardy</b>
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Week #	Dates (week of)	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.	Sun.	Week Total	C.I. initials
1	1/7— 1/13/18		6		6	6			18	
2	1/14 — 1/20/18	Holiday	6		6	6			18	
3	1/21— 1/27/18		6		4	2	6		18	
4	1/28— 2/03/18				8	8	2		18	
5	2/04 — 2/10/18	5	5			8			18	
6	2/11 — 2/17/18			6	6	Holiday		6	18	
			S	A	M	P	L	E		
		CONT	INUE	TO	LOG	HOURS	FOR	ENTIRE	SESSION)	

<b>Semester Total Hours</b>	108
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Signature "I declare that the information on this timesheet is true and accurate to the best of my knowledge."

**Student:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Clinical Instructor:** \_\_\_\_\_

**Date:** \_\_\_\_\_

# Computed Tomography- Clinical Instructor Handbook

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## **Probation Report**

This is the document used when a student is placed on probation. The program faculty is responsible for completing this form. There will be times when the student is placed on clinical probation that the clinical instructor will need to sign this form to approve of their involvement in the process.

Student Name \_\_\_\_\_ Status \_\_\_\_\_

Date \_\_\_\_\_ Course \_\_\_\_\_

**Course/Program Policy being addressed:**

**Failure to adhere to RAD \_\_\_\_\_ Course Policy listed below:**

**Areas of improvement necessary/Student's responsibility:**

- 

**Faculty's responsibility:**

- 

The above plan has been discussed and mutually agreed upon. It is also understood that if \_\_\_\_\_ is late or absent from RAD \_\_\_\_\_ again, \_\_\_\_\_ will be dismissed from the Program. In addition, reaching probationary status for attendance in any other course while enrolled in the program constitutes dismissal from the program. See Probation/Dismissal/ Readmission Policy for additional information.

Student Signature: \_\_\_\_\_

Faculty: \_\_\_\_\_

Date: \_\_\_\_\_

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# Computed Tomography- Clinical Instructor Handbook

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## Student Injury Policy

Because of the unique nature of clinical instruction, students are protected under the state Worker's Compensation Plan. The plan is provided free of charge to the student in the event of an injury occurring in the clinical education setting.

Pursuant to the Workers' Compensation Appeals Board and Labor Code Guidelines, Keenan and Associates, our third party administrators for industrial injuries, have directed that Mt. SAC maintain control for the first thirty (30) days from the date of the injury. In other words, for the first thirty (30) days, injured students shall seek treatment at designated work injury clinics for all industrial related injuries occurring during clinical education.

The Clinical Instructor and the student must complete and submit the necessary paperwork within 24 hours of the reported injury. Thoroughly completing the necessary paperwork and following the step by step directions in the "Quick Reference Guide for Student Injuries" below is of utmost importance.

### Quick Reference Guide for Student Injuries

**Step 1: The student must report the injury to the Clinical Instructor *immediately***

**Step 2: The Clinical Instructor must fill out the following forms:**

1. "Manager's Report of Employee Injury Form" (yellow paper)
2. "Sharps Injury Report Form" (only if applicable)
3. "Worker's Compensation Claim Form"
4. "Industrial Injury Medical Treatment Authorization Form" (yellow ½ sheet)

**Step 3: The student must seek treatment at one of the following work injury clinics and take the "Industrial Injury Medical Treatment Authorization Form" (yellow ½ sheet):**

- **U.S. HealthWorks**  
801 Corporate Center Dr. Suite 130  
Pomona, CA 91768  
(909) 623-1954  
Monday through Friday  
7:30a.m.—6:00 p.m.
- **U.S. HealthWorks 24 Hour Facility**  
17487 E. Hurley St.  
City of Industry, CA 91744  
626-961-1152  
Open 7 days • 24 Hours

*Directions (from Mt. SAC):  
Temple Ave.—East to  
South Campus Dr.—Left to  
Corporate Center Dr.—Left  
Left into Industrial Park  
(Next to KB Homes)*

*Directions (from Mt. SAC):  
Grand Ave.—South to  
Diamond Bar Blvd.—Left (will turn  
into Mission Blvd.) to  
Garey Ave.—Right  
On corner of Gary and Mission*

**Step 4: The student must submit the paperwork completed by the Clinical Instructor (step 2 above) to [Mt. SAC's Technology and Health Division Office](#) within 24 hours of the injury.**



## MEMORANDUM ADMINISTRATIVE SERVICES

### EMPLOYEES

**FROM:** Michael Gregoryk, Vice President, Administrative Services

**DATE:** March 2016

**SUBJECT:**  **MEDICAL PANEL FOR WORK INJURY TREATMENT** 

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Pursuant to the Workers' Compensation Appeals Board and Labor Code Guidelines, Keenan and Associates, our third party administrators for industrial injuries, have directed that we maintain control for the first thirty (30) days from the date of the injury. In other words, for the first thirty (30) days, injured employees go to the **U.S. HEALTHWORKS MEDICAL GROUP, KAISER ON THE JOB, or ST. JOSEPH HEALTH** for all industrial related injuries occurring between the hours of 7:30 a.m. and 6:00 p.m. If you are injured after 6:00 p.m. or on the weekend, please go to USHW, CITY OF INDUSTRY. If you have a pre-designated personal physician on file before the date of injury, ***notify Administrative Services*** prior to seeking treatment. Any employee can pre-designate a personal physician by submitting a completed "Personal Physician Selection" form to Administrative Services.

If you are ***off campus*** on college business during your regular work hours or your ***office is located off campus***, additional maps to all other **U.S. HEALTHWORKS MEDICAL GROUP** facilities are attached for your convenience.

If you are injured on the job, ***report the injury to your supervisor or manager*** as soon as possible. If medical treatment is necessary, obtain a medical authorization form and go to the medical facility. Medical authorization forms may be obtained from the secretary of your area, the Health Services Office, or from the Administrative Services Office in Building 4, Room 105. Unless you take the signed authorization form when you seek treatment, you may be charged for the visit.

**PLEASE NOTE:** After your first treatment at the doctor/clinic, future doctor's appointments are not considered authorized time off under Labor Code 45192 and as such, you are not eligible for salary continuation benefits. Workers' compensation payments are only due when a physician has certified that an employee is unable to work. By definition, a doctor's appointment does not fall into this category and the employee would not receive workers' compensation payment when the appointment is scheduled during working hours.

**SUBJECT:**  ***MEDICAL PANEL FOR WORK INJURY TREATMENT*** 

March 2016

Page 2

***The Administrative Services Office should be notified of a reported work related illness or injury as soon as possible. Call Administrative Services, Extension 4230.***

The manager must complete a ***Manager's Report of Employee Injury*** within **24 hours** and turn it in to the Administrative Services Office, Building 4, Room 2555. The employee must complete an ***Employee's Claim for Workers' Compensation Benefits*** form as soon after treatment as he/she is able. Forms are available at Administrative Services.

# Computed Tomography- Clinical Instructor Handbook

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## **Industrial Injury Medical Treatment Authorization**

To:Dr./Hospital: \_\_\_\_\_

Address: \_\_\_\_\_

The following employee has authorization to receive medical services in accordance with the terms of the Workers' Compensation laws.

Employee: \_\_\_\_\_

Date of Injury: \_\_\_\_\_

Nature of Injury: \_\_\_\_\_

Authorized By: \_\_\_\_\_

Date: \_\_\_\_\_

COMPLETE THIS SIDE IN FULL AND SEND WITH EMPLOYEE.

### ***BILLING INSTRUCTIONS – See Reverse Side***

Form B-920 7/98

### **INSTRUCTIONS TO DOCTOR:**

1. Keenan & Associates is the administrator for the District's Workers' Compensation Program.
2. Prepare "Physician's & Surgeon's Report of Injury" (Workers' Compensation Form) in triplicate.
3. Mail original and one copy of Form to Keenan & Associates at location shown below.
4. Mail one copy of Form to employer.
5. Mail all bills in duplicate to Keenan & Associates at the following address:

2355 Crenshaw Boulevard, Suite 200  
Torrance, CA 90501

Or

P.O. Box 4328  
Torrance, Ca 90510

# Computed Tomography- Clinical Instructor Handbook

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## MT. SAN ANTONIO COLLEGE Manager's Report of Employee Injury

**IMPORTANT: This form is to be completed by employee's manager and immediately submitted (within one business day) to Administrative Services, Building 4, Room 105.**

NAME OF INJURED \_\_\_\_\_ SOCIAL SECURITY # \_\_\_\_\_  
JOB TITLE/DEPARTMENT \_\_\_\_\_ BIRTHDAY \_\_\_\_-\_\_\_\_-\_\_\_\_

HOME ADDRESS \_\_\_\_\_ TELEPHONE \_\_\_\_\_  
NUMBER, STREET, CITY, ZIP CODE

DATE OF ACCIDENT \_\_\_\_/\_\_\_\_/\_\_\_\_ HOUR \_\_\_\_\_ A.M. \_\_\_\_\_ P.M.

DATE REPORTED TO MANAGER \_\_\_\_/\_\_\_\_/\_\_\_\_ HOUR \_\_\_\_ A.M. \_\_\_\_\_ P.M.

ACCIDENT LOCATION \_\_\_\_\_  
BE SPECIFIC BUILDING, PARKING LOT, ADDRESS, CITY, COUNTY,  
ETC.

EMPLOYEE WORK HOURS: HOURS PER DAY \_\_\_\_ DAYS PER WEEK \_\_\_\_ TOTAL WEEKLY  
HOURS \_\_\_\_\_

EMPLOYEE STATUS – Check One: REGULAR FULL-TIME \_\_\_\_ REGULAR PART-TIME \_\_\_\_

HOURLY AS NEEDED \_\_\_\_ VOLUNTEER \_\_\_\_ CLINICAL \_\_\_\_ WORK EXPERIENCE \_\_\_\_

HIRE DATE \_\_\_\_/\_\_\_\_/\_\_\_\_ SALARY RATE \$\_\_\_\_,  
10 OR 12 MONTH EMPLOYEE \_\_\_\_

TIME EMPLOYEES BEGAN WORK \_\_\_\_ a.m. \_\_\_\_ p.m.

WHAT WAS EMPLOYEE DOING AT TIME OF INJURY? \_\_\_\_\_

\_\_\_\_\_

HOW DID ACCIDENT/ILLNESS/EXPOSURE OCCUR? \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



# Computed Tomography- Clinical Instructor Handbook

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## **Manager's Report of Employee Injury (continued)**

APPARENT NATURE OF INJURY (PLEASE CHECK): ☐ Abrasion ☐ Contusion ☐ Strain/Sprain

☐ Cut ☐ Dislocation ☐ Concussion ☐ Internal

☐ Other (explain) \_\_\_\_\_

INJURED PART OF BODY (PLEASE CHECK): ☐ Head ☐ Finger ☐ Arm ☐ Abdomen

☐ Neck ☐ Eye ☐ Leg ☐ Hand ☐ Back ☐ Chest ☐ Face ☐ Foot

☐ Other (explain) \_\_\_\_\_

**DID INJURY INVOLVE SHARPS (NEEDLES)?** YES \_\_\_\_\_ NO \_\_\_\_\_

**\*\*IF YES, PLEASE COMPLETE THE SHARPS INJURY FORM**

DID EMPLOYEE HAVE MEDICAL AID? YES \_\_\_\_\_ NO \_\_\_\_\_

IF YES, WHERE? \_\_\_\_\_

NAME/ADDRESS OF FACILITY OR HOSPITAL \_\_\_\_\_

MSAC HEALTH CENTER YES \_\_\_\_\_ NO \_\_\_\_\_

DID INJURED LEAVE WORK? YES \_\_\_\_\_ NO \_\_\_\_\_ DATE \_\_\_\_/\_\_\_\_/\_\_\_\_ TIME \_\_\_\_  
am/pm

DID INJURED RETURN TO WORK? YES \_\_\_\_\_ NO \_\_\_\_\_

NAME OF WITNESS(ES) \_\_\_\_\_

WHAT STEPS HAVE BEEN TAKEN TO PREVENT SIMILAR ACCIDENTS? \_\_\_\_\_

WHAT FURTHER STEPS DO YOU RECOMMEND? \_\_\_\_\_

MANAGER'S NAME (PRINTED) \_\_\_\_\_ EXT. \_\_\_\_\_

MANAGER'S SIGNATURE \_\_\_\_\_ DATE \_\_\_\_\_

# Computed Tomography- Clinical Instructor Handbook

## Sharps Injury Report

<b>Procedure:</b> <ul style="list-style-type: none"><li><input type="radio"/> Draw venous blood</li><li><input type="radio"/> Draw arterial blood</li><li><input type="radio"/> Injection, through skin</li><li><input type="radio"/> Start IV/set up heparin lock</li><li><input type="radio"/> Unknown/not applicable</li><li><input type="radio"/> Other _____</li></ul>	<ul style="list-style-type: none"><li><input type="radio"/> Heparin/saline flush</li><li><input type="radio"/> Cutting</li><li><input type="radio"/> Suturing</li></ul>	<b>Did the exposure incident occur:</b> <ul style="list-style-type: none"><li><input type="radio"/> During use of sharp</li><li><input type="radio"/> Between steps of a multistep procedure</li><li><input type="radio"/> After use and before disposal of sharp</li><li><input type="radio"/> While putting sharp into disposal container</li><li><input type="radio"/> Sharp left, inappropriate place (table, etc.)</li><li><input type="radio"/> Other _____</li></ul>
---	---	---

<b>Potentially infectious materials involved:</b>  Type: _____ _____ Source: _____ _____ _____	<b>Identify sharp involved:</b> (if known)  Type: _____  Brand: _____  Model: _____  e.g. 18G needle/AB Med/"no stick" syringe	<b>Did the device being used have engineered sharps injury protection?</b>  <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> Don't know  <b>Was the protective mechanism activated?</b>  <input type="radio"/> Yes-fully <input type="radio"/> Yes-partially <input type="radio"/> No  <b>Did the exposure incident occur:</b> <input type="radio"/> Before <input type="radio"/> During <input type="radio"/> After <input type="radio"/> Activation
--	---	--

<b><u>Exposed employee:</u></b> If sharp had no engineered sharps injury protection, do you have an opinion that such a mechanism could have prevented the injury? <input type="radio"/> Yes <input type="radio"/> No Explain: _____ _____ _____ _____	<b><u>Exposed employee:</u></b> Do you have an opinion that any other engineering, administrative or work practice control could have prevented the injury? <input type="radio"/> Yes <input type="radio"/> No Explain: _____ _____ _____
---	--

Personal protective equipment being used at the time of the exposure: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Actions taken following incident (decontamination, clean-up, etc.): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Appendix I**  
**ARRT CT Clinical Experience**  
**Requirements**



CLINICAL EXPERIENCE REQUIREMENTS

ARRT BOARD APPROVED: **JANUARY 2017**  
IMPLEMENTATION DATE: **JULY 1, 2017**

# Computed Tomography

Candidates for certification and registration are required to meet the Professional Requirements specified in the *ARRT Rules and Regulations*. ARRT's *Computed Tomography Clinical Experience Requirements* describe the specific eligibility requirements that must be documented as part of the application for certification and registration process.

The purpose of the clinical experience requirements is to verify that candidates have completed a subset of the clinical procedures within a discipline. Successful performance of these fundamental procedures, in combination with mastery of the cognitive knowledge and skills covered by the examination, provides the basis for the acquisition of the full range of clinical skills required in a variety of settings.

The job responsibilities typically required of staff computed tomography technologists are delineated through a periodic practice analysis. This results in a "task inventory." An advisory committee then determines the number of clinical procedures required to demonstrate adequate candidate experience in performing the tasks on the inventory.

Candidates for Computed Tomography certification and registration must document performance of a minimum of 125 repetitions of computed tomography procedures according to the criteria noted below. Procedures are documented, verified, and submitted when complete via an online tool accessible through My ARRT Info account on [arrt.org](http://arrt.org). ARRT encourages individuals to obtain education and experience beyond these minimum requirements.

Completion of each procedure must be verified by an ARRT certified and registered technologist (post-primary certification not required) or an interpreting physician. The verification process is described within the online tool.

## Specific Procedural Requirements

The clinical experience requirements for CT consist of 59 procedures in six different categories:

- A. Head, Spine, and Musculoskeletal
- B. Neck and Chest
- C. Abdomen and Pelvis
- D. Additional Procedures
- E. Image Display and Post Processing
- F. Quality Assurance

Candidates must document the performance of complete, diagnostic quality procedures according to the following requirements:

- Choose a minimum of 25 different procedures out of the 59 procedures on the following pages.
- Complete and document a minimum of three and a maximum of five repetitions of each chosen procedure; less than three will not be counted toward the total.
- A minimum total of 125 repetitions is required.
- No more than one procedure may be documented on one patient. For example, if an order requests chest, abdomen and pelvis scans for one patient, only one of these may be documented for clinical experience documentation.
- Computed Tomography procedures performed in conjunction with a PET or SPECT attenuation correction scan or a Radiation Therapy planning procedure are not eligible for CT Clinical Experience documentation.



## General Guidelines

To qualify as a complete, diagnostic quality CT imaging procedure, the candidate must demonstrate appropriate:

- evaluation of requisition and/or medical record
- preparation of examination room
- identification of patient
- patient assessment and education concerning the procedure
- documentation of patient history including allergies
- preparation and/or administration of contrast media when indicated
- patient positioning
- protocol selection
- parameter selection
- initiate scan
- image display and archiving
- documentation of procedure, treatment, and patient data in appropriate record
- patient discharge with postprocedure instructions
- CDC Standard Precautions
- radiation safety

and evaluate the resulting images for:

- image quality (\*e.g., motion, artifacts, noise)
- optimal demonstration of anatomic region (e.g., delayed imaging, reconstruction algorithm, slice thickness)
- exam completeness

Attention: Your certification and registration process has requirements to complete clinical procedures including activating actual CT scans, known as "initiating the scan" or "making the exposure." You are responsible for ensuring state laws allow you to complete this requirement.

## Examples

Candidate A: This person works in a specialized setting and completes 25 different procedures (the minimum) from three of the six categories. To complete 125 repetitions, each of the 25 procedures was performed five times.

Candidate B: This person works in a facility that does most types of CT scans, so completing a wide variety of procedures was quite feasible. A total of 30 procedures from all six categories were completed and documented. Although most of these procedures were performed three times (the minimum), several of them were performed four or five times each until the candidate reached at least 125 procedures.

\* The abbreviation "e.g.," is used to indicate that examples are listed in parentheses, but that it is not a complete list of all possibilities.



## Procedures

### A. Head, Spine, and Musculoskeletal

1. head without contrast
2. head with contrast\*
3. trauma head
4. vascular head (CTA/CTV)\*
5. brain perfusion\*
6. pituitary fossa\*
7. temporal bones/IACs
8. orbits
9. sinuses
10. facial bones/mandible
11. cervical spine
12. thoracic spine
13. lumbar spine
14. spinal trauma
15. upper extremity
16. lower extremity
17. shoulder and/or scapula
18. bony pelvis and/or hips
19. musculoskeletal trauma
20. vascular extremity/runoff (CTA/CTV)\*

### B. Neck and Chest

1. soft tissue neck
2. vascular neck (CTA/CTV)\*
3. chest without contrast
4. chest with contrast\*
5. HRCT
6. lung nodule study
7. low dose lung screening
8. chest trauma\*
9. vascular chest (e.g., PE, CTA/CTV, aorta)\*
10. heart (e.g., calcium scoring, coronary angiography\*)

### C. Abdomen and Pelvis

1. abdomen/pelvis without contrast
2. abdomen/pelvis with contrast\*
3. liver (multi-phase)\*
4. kidneys (multi-phase)\*
5. pancreas (multi-phase)\*
6. adrenals
7. enterography study
8. appendicitis study
9. renal stone protocol (without IV contrast)
10. abdominal trauma\*
11. vascular abdomen (CTA/CTV)\*
12. intravenous urogram/IVU\*
13. bladder
14. pelvic trauma\*
15. vascular pelvis (CTA/CTV)\*
16. colorectal studies (rectal contrast)

### D. Additional Procedures

1. biopsies
2. drainages
3. aspirations
4. pediatric (12 and under)
5. arthrography
6. discography
7. myelography

### E. Image Display and Post Processing

1. geometric, distance, or region of interest (ROI) measurements
2. multiplanar reconstruction (MPR)
3. 3D rendering (MIP, SSD, VR)
4. retrospective reconstruction in a new DFOV

### F. Quality Assurance

1. calibration checks
2. CT number and standard deviation (water phantom)

\* The use of iodinated IV contrast is mandatory to document this procedure.

## Appendix II

### ARRT Instructions

#### Documenting Clinical Procedures

The clinical experience requirements are tailored for each discipline, so it's important to know what does and does not count. Be sure to review the computed tomography requirements in detail, and call ARRT's Clinical Requirements Department at (651) 687-0048, ext. 8570, with any questions.

All procedures must be completed within a 24-month period prior to submitting your final documentation for review to your supervisor(s) and continuing with the application process. This is so that your experience is recent and demonstrates current practice. Any logged procedures that exceed that timeframe will automatically expire and you will need to document and verify new procedures before your requirements are completed. Also, you'll want to make sure that you have performed all the procedures when you indicate, as submitting false documentation to ARRT as part of the application process is a violation of the *Standards of Ethics* and may result in sanctions up to and including revocation of ARRT certification and registration in all disciplines and ineligibility for any additional ARRT certifications and registrations. You will need to provide contact information for the individual(s) who can verify that you completed each procedure as you log the procedure into the system. Then once all procedures have been logged, you'll need to provide contact information for a supervisor at each facility who can confirm the procedures were completed.

Occasionally, candidates may not be able to complete a procedure because of medical, facility or employer policy limitations. If you find yourself in this position, you can request an exemption and propose an alternate mechanism to demonstrate your knowledge and ability to perform the procedure. Please note that exemptions may only be granted for one or two types of required procedures and ARRT has sole discretion to grant or deny requests. Requests are made by submitting a letter to ARRT's Clinical Requirements Department that includes the following:

- An explanation of your current situation;
- The reason the exemption is necessary; and
- An explanation and source information of the educational activities you have completed to meet the intent and take the place of the requirement.

Letters should be mailed to the Clinical Requirements Department at 1255 Northland Drive, St. Paul, MN 55120, or faxed to (651) 994-8510. Please allow up to two weeks for your request to be reviewed. If the exemption is approved, you will be notified and your Progress tab will be updated to reflect the exempted procedure(s). If you have any questions, please call (651) 687-0048, ext. 8570.

As you get started, you may want to consider using this [daily worksheet](#) to help you keep accurate information, then log procedures in the online system on a consistent basis. The longer you wait, the greater the chance that a printed worksheet might be misplaced, which means additional work for you. Also, the more frequently you enter procedures, the more helpful your Progress tab will be. It provides a snapshot of where you're at throughout the process, allowing you to easily identify what's left to complete

#### Logging Procedures into the Online System

Before you begin logging your procedures in the system be sure you have the appropriate information on-hand to make the process as easy-to-complete as possible. This includes:

- Type of procedure

- Date and time the procedure was performed (NOTE: It doesn't matter if you use the procedure start or end time, as long as you consistently use the same reference point for all procedures.)
- Contact information for the individual who can verify that you completed the procedure (including first name, last name and email address); for computed tomography, this can be a licensed physician, supervisor or Registered Technologist (post-primary certification and registration not required)
- Contact information for the facility at which the procedure was completed (including facility name, phone number, address, city, state and postal code)
- Reference number (NOTE: For your convenience in identifying internal patient or scanning identifiers. This number may be optional. Please don't include any private health information of patients.)

Once you enter a procedure, you'll have the ability to edit it until it is verified as described below.

## Establishing Verifiers

Each procedure you log must be verified by an individual who meets the specific verification qualifications for the discipline you're applying for. This system of checks and balances helps assure ARRT that each procedure was completed, while providing flexibility for candidates who may work a variety of shifts or at different facilities and may not always have a single individual available to verify each procedure completion. Note that if you're completing procedures at multiple facilities, you'll likely have multiple verifiers.

As you prepare to log your procedures, you'll want to make sure you have the first name, last name and email address of the individual who will be verifying that procedure on hand. It's also a good idea to check in with the individual beforehand so that it's clear what's expected and to ensure he/she meets the qualifications outlined above.

Simply select "Add New" from the Select Verifier drop-down menu and insert the required details. Then, if you need to edit any verifier information, just go to the Manage Verifiers & Facilities tab. Note, however, that you'll only be able to edit this information until the verifier has been approved by the ARRT to verify your procedures (see below for additional information on the verifier qualification process).

About an hour after a procedure has been logged, that verifier will receive an email from ARRT indicating that he/she has been designated as a verifier. A link will direct the individual to create an account (or log in, if an account already exists), and once logged in, he/she will have to enter some additional information – including home address, phone number, credentials and whether or not he/she is a supervisor, as well – and ARRT will need to approve the individual as a verifier. The approval process generally takes no more than two business days. Note that you will still be able to log procedures during this time; however, the procedures will not be counted in your overall progress until the verifier is approved and the procedures are verified.

Each verifier will receive a subsequent email from ARRT letting him/her know whether the verifier status has been approved for your procedures. If approved, the verifier can log into his/her account and follow the steps to either verify or reject the procedure(s) waiting and, when finished, you'll receive an email from ARRT letting you know that the verifier has completed the task and your Progress screen was updated.

In the event that a verifier is not approved, you will both receive an email letting you know why and outlining the steps you'll need to take to move forward. Generally, the reason a verifier is not accepted is because he/she doesn't meet the criteria noted in the Logging Procedures section above.

When creating an account, verifiers will be able to select how often they want to receive alert emails. If you notice that some procedures aren't being verified as quickly, it's likely because the verifier has chosen to be notified at lengthier intervals.



You may be wondering what will happen if one of your verifiers leaves employment at your facility or is unable to continue verifying your procedures. Any procedures that have already been verified are locked and do not need to be re-verified. Any procedures logged but not yet verified can be edited; just click the "edit" link that corresponds to the procedure on the Log Procedures tab to edit the verifier connected to that procedure.

## **Inputting Facility Locations**

For each procedure, you will also need to input information about the facility at which it was completed. This includes the facility name, phone number, address, city, state and postal code, so be sure you have that information on hand.

Like verifier information, facility information can be added when you're logging a procedure (again, by selecting "Add New" from the Select Facility drop-down menu). If you need to make any edits, you can do so by clicking on the Manage Verifiers & Facilities tab.

## **Monitoring Progress**

Completing your clinical experience requirements is a process that can take a few weeks or up to 24 months. To help you monitor where you're at – and what you have left – the Progress tab will be a helpful resource.

At a glance, you'll be able to gauge how far along you are, how many procedures have been logged and verified, and if any procedures are set to expire soon. In addition, you'll see a breakdown of your overall progress based on the number of procedures that have been verified and accepted by ARRT. And you'll be able to print this information for your records. NOTE: Some disciplines require a minimum number of procedures before they will count towards the overall progress total.

## **Obtaining your Supervisor's Signature**

Congratulations! You've logged all of your procedures and they have been verified – but what's next? On the Progress tab, a button will appear once the requirements have been met that allows you to submit the procedures to your supervisor(s) for final review. Click on the button, enter the required contact information (including title, first name, middle name, last name, credentials, employment relationship, work email and phone number) and click submit on the bottom of the page. Note that once you submit the procedures for final approval, your procedure log will lock and you won't be able to make any changes.

An email will be sent to your supervisor(s) indicating that they need to review your documented procedures. Once that sign-off is received by ARRT, you'll receive an email letting you know that you can continue on with the process. The next time you log in to your account, the application link will be accessible when you click on the "Pursue Postprimary" under the "Complete Business" menu. Fill out the online form, submit it with your payment (and any ethics and/or testing accommodations documentation, if applicable) and you'll be one step closer to certification and registration in computed tomography.



## Appendix III

## Sample ARRT CT Clinical Experience Progress Sheet

## Computed Tomography Requirements Documentation

558808

## Structured Education Progress

100% COMPLETE

## ACTIVITIES

Credits Accepted: 36.00 / 16.00

Credits Logged: 36.00

## TIMING

Structured Education Submitted: 5/24/2017

Structured Education Completed: 5/25/2017

## Clinical Experience Progress

100% COMPLETE

## REPETITION OF PROCEDURES SUMMARY

Repetitions Logged: 131

Repetitions Pending Verification: 0

Verified &amp; Accepted Repetitions: 131 / 125

Head and Neck		
Head Without and/or With Contrast	5/3-5	<input type="text"/>
Sinuses	3/3-5	<input type="text"/>
Facials (Orbits, Mandible)	5/3-5	<input type="text"/>
Temporal Bones / IACs	0/3-5	<input type="text"/>
Trauma Head	5/3-5	<input type="text"/>
Vascular Head (CTA)	4/3-5	<input type="text"/>
Soft Tissue Neck	5/3-5	<input type="text"/>
Vascular Neck (CTA)	5/3-5	<input type="text"/>

## Spine and Musculoskeletal

Lumbar	5/3-5	<input type="text"/>
Cervical	5/3-5	<input type="text"/>
Thoracic	0/3-5	<input type="text"/>
Spinal Trauma	5/3-5	<input type="text"/>
Upper Extremity	0/3-5	<input type="text"/>
Lower Extremity	4/3-5	<input type="text"/>
Pelvic Girdle; Hips	0/3-5	<input type="text"/>
Musculoskeletal Trauma	0/3-5	<input type="text"/>
Vascular Extremity (CTA)	0/3-5	<input type="text"/>

## Chest

Chest Without and/or With Contrast	5/3-5	<input type="text"/>
HRCT	4/3-5	<input type="text"/>
Vascular Chest (e.g., PE, CTA, Aorta)	5/3-5	<input type="text"/>
Chest Trauma	0/3-5	<input type="text"/>
Lung Nodule Study	0/3-5	<input type="text"/>
Heart (e.g., Calcium Scoring, Coronary Angiography)	0/3-5	<input type="text"/>

## Abdomen and Pelvis

Abdomen Without and/or With Contrast	5/3-5	<input type="text"/>
Liver (Multi-Phase)	0/3-5	<input type="text"/>
Kidneys (Multi-Phase)	0/3-5	<input type="text"/>
Pancreas (Multi-Phase)	0/3-5	<input type="text"/>
Adrenals	0/3-5	<input type="text"/>
Enterography Study	0/3-5	<input type="text"/>
Appendicitis Study	0/3-5	<input type="text"/>
Renal Stone Protocol (Without IV Contrast)	5/3-5	<input type="text"/>
Abdominal Trauma	0/3-5	<input type="text"/>
Vascular Abdomen (CTA)	5/3-5	<input type="text"/>
CT Intravenous Urogram/IVP	0/3-5	<input type="text"/>
Pelvis Without and/or With Contrast	5/3-5	<input type="text"/>
Bladder	0/3-5	<input type="text"/>
Pelvic Trauma	0/3-5	<input type="text"/>
Vascular Pelvis (CTA)	0/3-5	<input type="text"/>
Colorectal Studies (Rectal Contrast)	0/3-5	<input type="text"/>

## Special Procedures

Biopsies	5/3-5	<input type="text"/>
Drainage	0/3-5	<input type="text"/>
Aspirations	3/3-5	<input type="text"/>
CT Arthrography	0/3-5	<input type="text"/>
Diskography	0/3-5	<input type="text"/>
Myelography	0/3-5	<input type="text"/>
Colonography or Virtual Colonography	0/3-5	<input type="text"/>
Brain Perfusion	3/3-5	<input type="text"/>
Radiation Therapy Planning	0/3-5	<input type="text"/>
Transplant Studies	0/3-5	<input type="text"/>

## Image Display and Post Processing

Geometric or Distance Measurements	5/3-5	<input type="text"/>
Region of Interest Measurement (ROI)	5/3-5	<input type="text"/>
Retrospective Reconstruction	5/3-5	<input type="text"/>
Multiplanar Reconstruction (MPR)	5/3-5	<input type="text"/>
3D Rendering (MIP, SSD, VR)	5/3-5	<input type="text"/>

## Quality Assurance

Calibration Checks	5/3-5	<input type="text"/>
CT Number and Standard Deviation (Water Phantom)	5/3-5	<input type="text"/>
Linearity	0/3-5	<input type="text"/>
Spatial Resolution	0/3-5	<input type="text"/>
Contrast Resolution	0/3-5	<input type="text"/>

# WHAT IS A CLINICAL VERIFIER?

As part of earning an ARRT credential using the postprimary eligibility pathway, candidates must complete and document certain clinical procedures. ARRT requires an eligible professional to verify each procedure. It's up to each candidate to find willing and eligible people to act as verifiers.

## VERIFIER ELIGIBILITY REQUIREMENTS

Verifiers must work at the facility where the candidate performs the clinical procedures or be affiliated with the facility through an educational program. Other eligibility requirements for verifiers differ, depending on the discipline of the credential the candidate is pursuing. Check the Clinical Experience Requirement (</arrt-reference-documents/by-document-type/clinical-experience-requirements>) document for the discipline you are pursuing to learn more.

## VERIFIER RESPONSIBILITIES

If you're acting as a clinical verifier, be sure to carefully review any procedures the candidate submits. While you don't need to have witnessed the procedures, make sure you check for the following:

- The candidate completed the procedure according to ARRT's clinical experience requirements (</arrt-reference-documents/by-document-type/clinical-experience-requirements>) for their discipline AND your facility protocols
- The candidate was employed at your facility (or was authorized to perform the procedures at your facility on the dates entered)
- The candidate was working on the day and time that they said they performed the procedures

- Your facility has the necessary equipment to perform the procedure the candidate stated they performed

In addition to the above, you as a verifier might have even more stringent requirements. For example, you might decide that candidates must perform procedures with no mistakes, or you might want candidates to perform several procedures before you begin verifying. That's up to you.

Keep in mind: If you're an ARRT Registered Technologist (R.T.) verifying the procedures of a colleague, you're held to the same Standards of Ethics as the person completing the procedure. R.T.s submitting false reports—or who falsely verify someone else's experience—could become part of an ethics investigation. Ultimately, that could result in sanctions, including revocation of your certification and registration.

## REPORTING YOUR VERIFICATIONS

Once someone nominates you as a verifier, you'll receive a welcome email from ARRT. It will direct you to complete a brief verifier application form. We'll let you know once we authorize you as a verifier. After that, you can create a verifier account (for non-R.T. verifiers) or you can use your arrt.org login credentials to access your verifier screens (for verifiers who are also R.T.s)

The first time you're asked to verify clinical procedures for a new candidate, or for any candidate who's pursuing a new credential, we'll ask you to sign an electronic agreement confirming that you understand your responsibilities as a verifier.

When you have procedures from the candidate to review and verify, we'll send you emails at the rate you request. You don't need to wait for an email, though. You can log in anytime to review—and approve or deny—new procedures. Remember, candidates can't apply for their new credentials until all their procedures are verified.

## START VERIFYING PROCEDURES NOW

If you've already been approved as a verifier and want to review procedures now, use one of the links below:

- R.T. Verifier login (</account/complete-business/verifier-login>) (if you're also an R.T.)



- Non-R.T. Verifier login (</partners/non-r-t-verifier-login>) (if you're not an R.T.)

## QUESTIONS?

Call our Clinical Requirements department at 651-687-0048, ext. 8570.

## ARRT

Mailing Address Only

1255 Northland Drive  
St. Paul, MN 55120-1155

651.687.0048

## QUICK LINKS

[FAQs \(/contact/frequent-questions\)](/contact/frequent-questions) | [Handbooks \(/arrrt-reference-documents/by-document-type/handbooks\)](/arrrt-reference-documents/by-document-type/handbooks) | [Discipline Documents \(/arrrt-reference-documents\)](/arrrt-reference-documents) | [Governing Documents \(/about/about-us/governance\)](/about/about-us/governance) | [Forms \(/forms\)](/forms) | [Videos \(/video-library\)](/video-library) | [Terms \(/terms-of-use\)](/terms-of-use) | [Privacy \(/privacy-policy\)](/privacy-policy) | [Trademark \(/trademark-guidelines\)](/trademark-guidelines) | [Jobs \(/about/jobs-at-arrrt\)](/about/jobs-at-arrrt) | [Contact \(/contact/call-or-mail-us\)](/contact/call-or-mail-us)

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