

# SANTA FE COLLEGE

Gainesville, Florida



## Computed Tomography Program

## Student Handbook

2016 Edition

# AGREEMENT

I certify that I have received a copy of the Santa Fe College Computed Tomography Program Student Handbook. I further certify that I have read and agree to follow the standards outlined in the Handbook and realize that any deviation from these standards will be cause for counseling procedures to be implemented. I understand that these standards apply to each and every course within the CT Program. I understand that I am responsible for providing my own medical insurance if I desire coverage and maintaining a current CPR certification. I understand that prior to being assigned to a particular clinical site. I may be required to undergo background and drug screenings at my own expense in addition to the screening required by Santa Fe College..

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Printed Name

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Student's Signature

Date

## **Americans with Disabilities Act (ADA)**

If you are a student with a disability: In compliance with Santa Fe College policy and equal access laws, I am available to discuss appropriate academic accommodations that you may require as a student with a disability. Requests for academic accommodations need to be made during the first week of the semester (except for unusual circumstances) so arrangements can be made. You must be registered with Disabilities Resource Center (DRC) in S-229 for disability verification and determination of reasonable academic accommodations. For more information, see

[http://www.sfcollege.edu/student/drc/index.php?section=faculty\\_resources/rights\\_responsibilities](http://www.sfcollege.edu/student/drc/index.php?section=faculty_resources/rights_responsibilities)

## **Discrimination/Harassment Policy**

SF prohibits any form of discrimination or sexual harassment among students, faculty and staff. For further information, refer to College Rule 2.8 at [http://dept.sfcollege.edu/rules/content/media/PDF/Rule\\_2/2\\_8.pdf](http://dept.sfcollege.edu/rules/content/media/PDF/Rule_2/2_8.pdf)

## **Student Rights & Responsibilities**

The purpose of this document is to provide students with a general overview of both their rights and responsibilities as members of the Santa Fe College community. For a complete list of students' rights and responsibilities go to [http://www.sfcollege.edu/studentaffairs/index.php?section=policies/student\\_rights](http://www.sfcollege.edu/studentaffairs/index.php?section=policies/student_rights)

Additionally, I give my permission to be photographed by the program/college for faculty and/or clinical affiliate purposes of identification. If needed, I agree to participate in college/program promotional activities, which might include a photograph or video to be posted on the college or program website.

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Student's Signature

Date

**PERMANENT HANDBOOK COPY**

## **FOREWORD**

The following overview of program requirements, ethical standards, and regulations has been formulated as a guide for the Computed Tomography Program student. It is the student's responsibility to carefully study this handbook to learn what is expected of him or her and what he or she can expect from the program.

It is the responsibility of the college to provide instruction and to advise and counsel students on program requirements, graduation, and eligibility requirements to sit for the post-primary national certification examination offered by the American Registry of Radiologic Technologists. It is the student's responsibility to see that these requirements are met. Failure to meet these requirements may result in termination of a student from the program or delay of graduation.

Program policies must meet the requirements for accreditation at the professional, state, and institutional levels, and the rights of students and faculty, individually and collectively, must be respected. Suggestions regarding policies may be offered to the program at any time. We continue to seek to improve the program, and we welcome input from students, clinical affiliates, faculty, and the Advisory Committee.

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# **SANTA FE COLLEGE**

## **COMPUTED TOMOGRAPHY PROGRAM**

The program's curriculum is based on the American Society of Radiologic Technologists' Curriculum Guide for Computed Tomography Programs, which can be accessed online at [www.asrt.org/docs/educators/ed\\_curr\\_2013ctadptd\\_010913.pdf](http://www.asrt.org/docs/educators/ed_curr_2013ctadptd_010913.pdf). Further, it is designed to meet the standards of the Southern Association of Colleges and Schools (SACS), and the Florida State Department of Education. The curriculum and program policies follow the guidelines stated in the Santa Fe College Student Planner (handbook), College Catalog, and the College Rules Manual.

The CT Program is designed for medical imaging professionals who are current registrants of the American Registry of Radiologic Technologists (ARRT) in Nuclear Medicine Technology (N), Radiation Therapy (T), and/or Radiography (R). Nuclear Medicine Technologists who are current registrants of the Nuclear Medicine Technology Certification Board are eligible for admission to the program as well.

### **Mission Statement**

In addition to supporting the mission and goals of Santa Fe College, the mission of the CT Program is to provide a comprehensive, competency-based curriculum to prepare a diverse group of graduates with the skills needed to perform quality computed tomography procedures and provide the patient with the best possible care.

### **Program Goals**

1. Students will demonstrate competency in the performance of the CT procedures required to sit for the ARRT's post-primary computed tomography certification examination.
2. Students will demonstrate effective communication skills with patients.
3. Students will apply critical thinking and problem solving skills to the practice of CT scanning.
4. Students will grow and develop professionally.
5. The program will continuously monitor its effectiveness.

Students complete one term of combined academic study and clinical experience. Program courses have listed course goals, objectives, and competencies, which must be satisfied before the student matriculates. Students who complete the program will be awarded an Advanced Certificate in Computed Tomography by Santa Fe College and will have met the clinical experience requirements for eligibility to sit for the post-primary examination for CT certification

given by the American Registry of Radiologic Technologists (ARRT). All ARRT requirements for the computed tomography certification examination must be met before the graduate is eligible to sit for the test. Eligibility requirements can be accessed through the ARRT's Web site at: <http://www.arrt.org/index.html?content=certification/certgenelig.htm>

The CT Program is conducted in cooperation with the following healthcare organizations and their associated clinics: Lake City Medical Center, Ocala Regional Medical Center, UF Health, the Gainesville Veterans Affairs Medical Center, and the Lake City Veterans Affairs Medical Center. The program has approved clinical affiliation agreements with these facilities.

# ACADEMIC STANDARDS AND PROCEDURES

## I GENERAL INFORMATION

- A. All students are enrolled in two online didactic courses and follow clinical education schedules prepared by the program faculty for the clinical course.
- B. The curriculum, including course descriptions, is listed at the end of this handbook.
- C. Reports of students' academic and clinical progress are maintained by the program.
- D. Course policies and procedures are stated in individual course syllabi.
- E. Students are responsible for purchasing the required texts, e-book, and course materials.
- F. Students are asked to keep the program informed of their current address and telephone numbers so that they can be contacted in case of college closings or clinical events that would warrant notification of individual employees and students.
- G. All SF College rules and policies set forth in the College Student Planner (handbook), the Santa Fe College Catalog, and the College Rules Manual apply to the CT Program. The College Rules Manual is available online at <http://www.sfcollege.edu/rules/> The catalog is available online at <http://www.sfcollege.edu/docs/catalog/>

## II STANDARDS OF ACADEMIC ACHIEVEMENT

- A. Students must maintain an overall 2.0 grade point average or above as published in the college's Standards of Progress to remain in good standing with the college.
- B. Students must also maintain a 2.0 grade point average or above in all professional courses to remain in good standing with the program.
- C. The passing grade for CT Program courses is a minimum of 75% for the didactic courses and 80% for the clinical course. Final grades are based upon the criteria listed in each course syllabus. Additionally, specific requirements that must be met in order for the student to successfully complete the course are listed in each course syllabus.
- D. Unsatisfactory clinical or academic progress will be brought to the student's attention by the appropriate faculty member, and suggestions will be made to rectify the problem. Continued unsatisfactory progress will result in further student counseling as identified on page 8 of this handbook.

### III Ethical Standards and Academic Integrity Policy

- A. Enrollment in each of the courses in the CT Program requires and implies adherence to professional standards of practice and patient confidentiality. The program is committed to upholding the Code of Ethics set forth by the American Society of Radiologic Technologists. The ASRT Code of Ethics can be accessed online at [www.asrt.org/docs/practice-standards/codeofethics.pdf](http://www.asrt.org/docs/practice-standards/codeofethics.pdf)
- B. Santa Fe College and the Computed Tomography Program expect students to exhibit high levels of integrity in all activities. The college reserves the right to deny admission to or remove students from any program if they have a record of misconduct or demonstrate behavior that would jeopardize their professional performance.
- C. **Academic dishonesty will not be tolerated.** Academic dishonesty includes, but is not limited to cheating on an assignment or examination; using materials during a quiz or examination other than those specifically permitted by the course instructor; stealing, accepting, or studying from stolen quizzes or examination materials; plagiarism; forgery of signatures; falsification of official documents; falsification of data and falsification of clinical records. Students who violate these standards of academic integrity may receive a failing grade for the assignment or for the course.
- D. The program polices related to academic dishonesty are in keeping with, and supported by, the SF College Student Conduct Code as published in the SF College Catalog and the College Rules Manual.
- E. The Computed Tomography Program is supportive of and in compliance with Santa Fe College policy and equal access laws as well as the Americans With Disabilities Act. The program director and program faculty are available to discuss appropriate academic accommodations that a student may require as an individual with a disability or special needs. Students must be registered with the Disabilities Resource Center (DRC) in S-229 for disability verification and determination of reasonable academic and clinical accommodations.
- F. SF College is committed to maintaining a work and educational environment free of discrimination and harassment with respect to race, creed, color, religion, age, disability, sex, marital status, national origin, political opinions or affiliations, and veteran status. SF College prohibits discrimination in educational programs, services, and activities. Further explanation and information can be found in the College Rules Manual online at <http://www.sfcollege.edu/rules/>

# STUDENT COUNSELING AND DUE PROCESS

Student counseling serves to promote, assist, and maintain superior student performance. The main purpose is to provide feedback to the students regarding their performance and to specifically identify areas of strength, performance deficiencies, and/or behavior affecting their status as a CT Program student. To this end, the following steps in counseling are presented:

## I STEPS IN COUNSELING PROCEDURE

- A. Suggestions will be made by the faculty to the student regarding deficiencies and non-compliance with the standards outlined in this handbook. These suggestions will be documented and signed (by both student and faculty) and placed in the student's file.
- B. If the student does not conform to the informal suggestions made in step A above, a meeting will be held with the student and one or more academic/clinical faculty members.

At this meeting, the following issues must be addressed:

1. Steps to be taken to identify the deficiency and correct it.
2. Deadlines or time limits on all steps.
3. Consequences of not meeting the steps or deadlines.
4. The student may be required to submit an action plan to resolve the situation.

The content of the meeting will be documented and signed by all involved parties. The student will receive a copy, and a copy will be placed in his/her file.

- C. At the completion of the deadlines, one of the following two (2) things will happen:
  1. If all conditions are met, the student will be allowed to continue in the program.
  2. If all conditions are not satisfied, the deficiencies still existing will be noted and the student will be dismissed from the program.

## II APPEAL IN COUNSELING

Although the program policy as stated in this handbook may not be appealed, students who wish to verify the **accuracy** of the administration of a specific program policy must follow the steps outlined in the document that follows entitled: *Health Sciences Programs Procedure/Policy Appeal Process*.

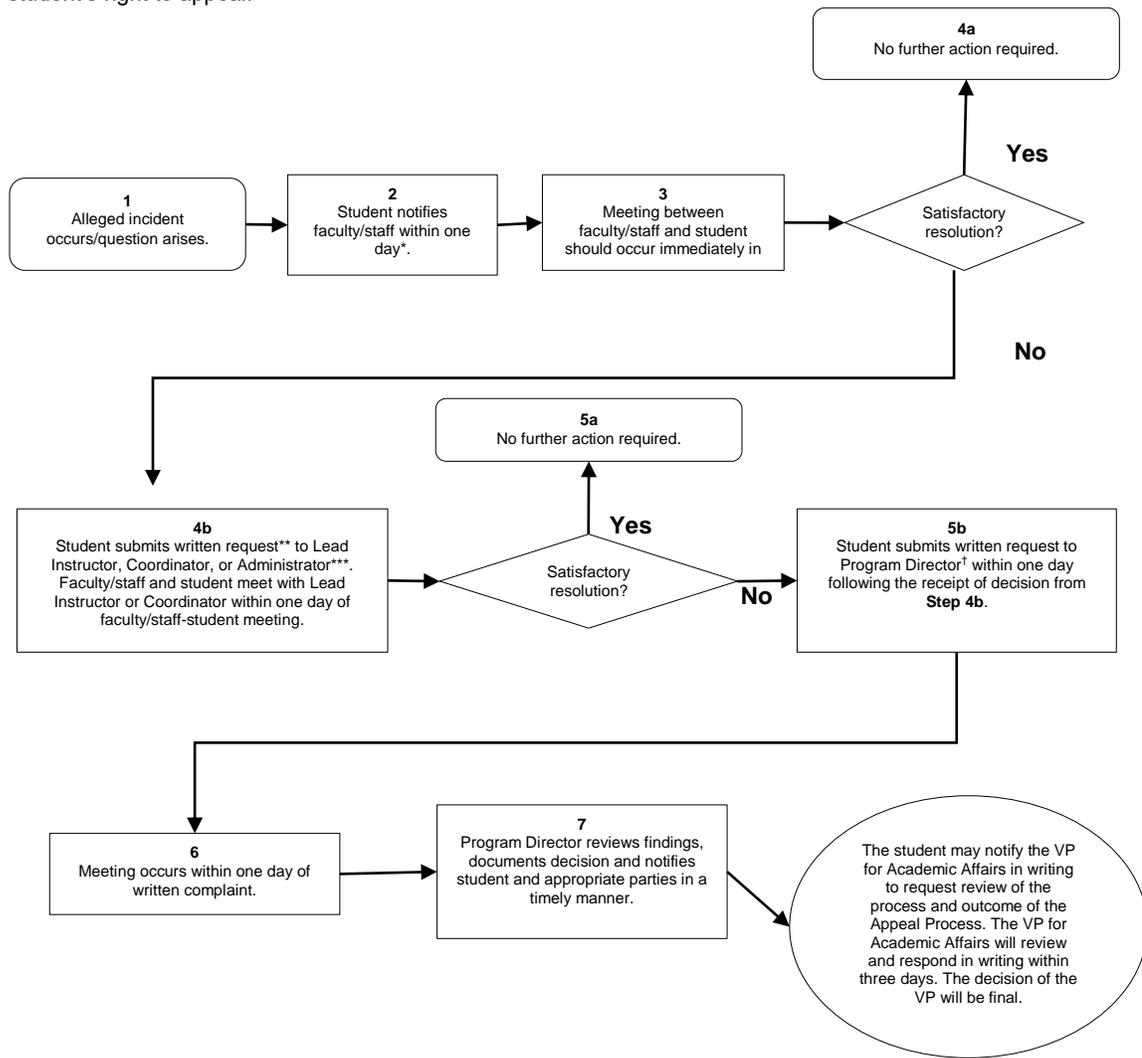
### **III PERSONAL COUNSELING**

If students desire further counseling for academic or for personal matters they are encouraged to contact the Santa Fe College Counseling Center in Building S, Room 254 or by phone at 395-5508. The Counseling Center has a very informative Web site located at <http://www.sfcollege.edu/counseling/>

Assistance for students encountering difficulty is also available through the Team Health Program in Building W. The staff is available by phone at 395-5689. Additionally, the staff can be contacted through the Health Sciences Counseling Office in Building W, Room 002.

# Health Sciences Programs Procedure/Policy Appeal Process

SFCC Health Sciences Programs: Cardiovascular Technology, Dental, Nursing, Diagnostic Medical Sonography, Respiratory Care, Surgical Technology, Radiologic Programs and Health Sciences Counseling, follow College Rules, policies and procedures, including SFCC Student Conduct Code Rule 7.23, Student Complaint Procedure: Students and Administration: Rule 7.36, and Student Records and Support: Right to Privacy Rule 7.20. Included in these rules is the section under challenge of accuracy which states that grades can only be corrected for accuracy. All Health Sciences Programs have specific published policies, procedures and guidelines. These policies directly relate to each program's objectives and specific professional standards. Students enrolled in Health Sciences Programs have access to these policies and acknowledge receipt and intent to comply with all policies and procedures by signature. Therefore, no policy may be appealed under this process. However, if a student is concerned about the administration and outcomes of a specific policy or procedure, this appeal process should be utilized. An appeal only relates to an individual student's perceived violation of the application of a program policy or procedure and resulting outcomes. Appeals may not be submitted by one student on behalf of another student. The sequential nature of the professional courses with associated mandatory clinical rotations requires that this due process appeal be handled as expeditiously as possible. Therefore, the specific time frame outlined in this appeal process, reflects the immediacy and is in the best interest of the student and program. The Program Director will review findings, document the decision and will notify the student and appropriate parties in writing within three days after receiving a student complaint in writing. A student may request a review by the Vice President for Academic Affairs of the administration and outcome of the appeals process. The request must be submitted in writing to the Vice President within two days after receiving notification of the Program Director's decision. The Vice President will review and notify the student and Program Director of the decision within three days of receiving the student's written request for review. The decision of the Vice President will be Final. Failure to comply with the procedure outlined below may result in forfeiture of the student's right to appeal.



\* All time references are in terms of working days.

\*\* Written Request Forms are available in W-201 (forms must be obtained and initiated by the student).

\*\*\* If positions exist within particular program or designee, if applicable.

## **Related Narrative for Health Sciences Programs Procedure/Policy Appeals Process (8/06)**

### **Step 2 - The student notifies the faculty/staff within one day.**

The time reference will be a working day for the particular faculty member or staff member in question. For example, if a part-time faculty member teaches a course on Monday-Wednesday-Friday in which the student is enrolled, the student should notify the part-time faculty member at the next class day following Step 1.

### **Step 3 - Meeting between Faculty/Staff and student should occur immediately in order to resolve the question.**

"Immediately" means the first mutually agreeable time and date for both the faculty/staff and student. The meeting should take place as soon as possible at a time that is feasible for both parties (faculty and student).

### **Step 4B - Student submits written request to Lead Instructor, Coordinator, or Administrator. Faculty/staff and student meet with Lead Instructor or Coordinator within one day of Faculty/Staff-student meeting.**

Note: Student complaints about Program Directors as administrators or as faculty will be directed to the Associate Vice President of Academic Affairs – Room F-253 (if necessary) for resolution within the context of Rule 7.36.

Forms related to the student's written request (Step 4B) are available in W-201. Students must pick up these Written Request Forms in W-201 and will be asked to sign a log when they do so. If the student does not fully complete the log, the student will not receive the form. Written Request Forms will not be distributed in any other manner. Faculty will not distribute Written Request Forms. Staff notifies appropriate Program Director that a student has signed out a form.

If one or more of the parties in Step 4B is unavailable to the student, it is the student's responsibility to submit the Written Request Form during the specified time period to the next highest person in the chain. (The chain from low to high is Lead Instructor, Coordinator, and Program Director.) Note that on days when they are out of the office, Coordinators and the Program Director will have Designees. Students may obtain the name(s) of designee(s) from Health Sciences staff. If a Program Director becomes involved in the process, the Associate Vice President of Academic Affairs assumes the appeal process administration.

The person to whom the Written Request Form is submitted needs to arrange the meeting within one day of the faculty/staff meeting. The person setting up the meeting (Lead Instructor, Coordinator, or Program Director) is responsible for attempting to secure the attendance of the Faculty/Staff at the Step 4B meeting. Persons who cannot be present at this meeting will be eliminated from Step 4B due to the critical nature of meeting this step's time frame.

Health Sciences staff will not accept a Written Request Form from a student to give to a Lead Instructor, Coordinator, or Administrator. Staff will also not accept a Written Request Form to give to the Program Director. If no Program Director is on-site or available, forms are to be given to the Health Sciences Administrative Assistant (or designee). It is the student's responsibility to hand-deliver the Written Request Form to the appropriate individual in the chain.

### **Step 7 - The Program Director reviews findings, documents decision and notifies student and appropriate parties in a timely manner.**

This step represents the completion of Appeals Procedure with due process. The decision is final and based on stated policies and procedures, findings based on the appeals process, Program Director's expertise and in conjunction with VP of Academic Affairs evaluation, as indicated. Further review of the administration of appeals process lies with the VP of Academic Affairs as needed. Review request must be initiated by the student and within 48 hours of the Program Director's notification.

# CLINICAL EDUCATION: STANDARDS AND PROCEDURES

## I. Purpose of Clinical Education

The importance of clinical instruction and clinical experience cannot be overemphasized. The purpose of clinical education is to provide the student with the opportunity to develop required skills and to measure the student's proficiency in those skills. As prescribed by the American Society of Radiologic Technologists (ASRT), the Computed Tomography Program curriculum is designed to provide the student with didactic and clinical experience in all facets CT imaging.

## II. Process: An Overview

Objectives are assigned by the faculty for completion during the clinical courses. An objective is a stated outcome, which describes the result of learning. Students are asked to review the clinical course objectives before the beginning of the clinical assignment.

Students are provided with appropriately supervised clinical experience through assignments made by the faculty. The technologists at each clinical affiliate will assist the clinical instructor by supervising each student and evaluating his or her progress using the program's evaluation forms. Additionally, the technologists will assist each student with documentation of procedures performed by the student by initialing the ARRT document, *Clinical Experience Documentation Form* as appropriate.

To comply with the CT Program's clinical education standards, each student must perform the prescribed clinical procedures that establish eligibility for certification by the American Registry of Radiologic Technologists in computed tomography. Clinical experience requirements for CT consists of 59 procedures in nine different categories. The categories are: head, neck, spine and musculoskeletal, chest, abdomen, pelvis, special procedures, image display and post processing, and quality assurance. Each student must perform and document the required CT exams with the ARRT (a total of 125 repetitions of at least 25 of 59 the procedures from the nine categories).

In other words, each student must complete and document the performance of a subset of the 59 procedures according to the following rules:

--choose a minimum of 25 different procedures out of the 54 procedures.

--complete a minimum of 3 and a maximum of 5 repetitions on any chosen procedure.

--complete a minimum total of 125 repetitions across all procedures.

Students are reminded that **all** ARRT requirements for the computed tomography certification examination must be met before the graduate is eligible to sit for the test. ALL EXAMS ARE DOCUMENTED WITH THE ARRT THROUGH THE ARRT WEBSITE.

Eligibility requirements can be accessed through the ARRT's Web site at:

<https://www.arrt.org/pdfs/Disciplines/Content-Specification/CT-Content-Specification-2011.pdf>

### III. Clinical Assignments

- A. Students will be supervised and evaluated in the clinical affiliates by the staff technologists, and the Santa Fe College CT Program Clinical Faculty.
- B. The use of their facilities is a privilege granted by the clinical affiliates as opposed to a right of the college to use those facilities.
  - 1. While learning and working toward proficiency, students help ease the workload of the department, just as the staff contributes time and knowledge to the clinical education process.
  - 2. Students are expected to seek out procedures that are infrequently performed as well as patient care situations that do not occur on a routine basis.

### IV. Clinical Requirements

- A. Students are required to provide patient services in a safe and timely manner as described in the Technical Standards on page 15 of this handbook.
  - 1. The clinical instructor will discuss any report of unsatisfactory progress with the student involved.
  - 2. Continued unsatisfactory work will result in implementation of counseling procedures as described on page 14 of this handbook.
- B. Clinical performance is graded at the end of each term.
  - 1. **No grade lower than “C” is acceptable for the clinical course, RTE2571L.**
  - 2. **Grades are based on demonstrated clinical competency, initiative, attitude, dependability, ethical behavior, attendance, and record maintenance.**
- C. The welfare of patients and their families takes precedence over the learning needs of the student. If a student demonstrates a course of conduct that is unacceptable, unethical, or unsafe, he or she may be denied clinical involvement. This can be for a single severe incident or for a pattern of behaviors. A student denied clinical

involvement has in effect earned an “F” (failing) grade for the clinical course, which would prohibit him or her from successfully completing the program.

1. Conduct that may lead to an “F” grade:
  - a. Failure to meet clinical course requirements.
  - b. Failure to notify the clinical site of intent to be late or absent.
  - c. Habitual lateness or absence from clinic.
  - d. Unsafe practices, which are actually or potentially harmful to a patient due to, or as a result of, a student’s action.
  - e. Unprofessional behavior as defined by the American Society of Radiologic Technologists Code of Ethics and the SFC College Rules Manual.
  - f. Emotional or physical incompetence as documented by appropriate medical authorities.
  - g. Failure to meet the requirements of the CT Program’s Technical Standards
  - h. Failure to comply with directives related to clinical attendance records.

Technical Standards  
for the  
Santa Fe College  
Computed Tomography Program

POSITION DESCRIPTION for ENTRY LEVEL COMPUTED TOMOGRAPHY TECHNOLOGISTS

Institutions hiring graduate CT technologists will expect them to perform a full range of optimum quality procedures with minimum radiation exposure to both the patient and themselves. Performance duties will include but not be limited to patient and room preparation, manipulation of CT equipment, processing images, and performing technical and ancillary tasks to provide patient services in a safe and timely manner per institutional policy.

**TECHNICAL STANDARDS**

**The student must have:**

- ❖ Sufficient eyesight to observe patients, manipulate equipment and evaluate image quality.
- ❖ Sufficient hearing to assess patients' needs and communicate verbally with other health care providers.
- ❖ Sufficient verbal and writing skills to communicate needs promptly and effectively in English.
- ❖ Sufficient gross and fine motor coordination to respond promptly to the patients' needs, manipulate equipment, lift a minimum of 30 pounds, participate as a team member of four in moving a 150 pound incapacitated patient, and ensure overall patient safety.
- ❖ Satisfactory intellectual and emotional functions to exercise independent judgment and discretion in the safe technical performance of medical imaging procedures.

I have read and understand the aforementioned Technical Standards for CT technologists.

\_\_\_\_\_ (Student signature) \_\_\_\_\_ (Date)

In my professional opinion through physical assessment and consultation, I find no apparent reason why the individual could not perform the standards as stated.

\_\_\_\_\_ (Examiner's signature) (Credential) \_\_\_\_\_ (Date)

Additional comments may be placed on the reverse side of this form.

## V. Standards of Attendance

### A. Attendance Schedule.

*Attendance is mandatory during all scheduled clinical hours.*

1. In order to meet program requirements, each student's clinical assignment will be tailored to accommodate his or her work schedule and other personal obligations.
2. Students must report to their clinical assignments early enough to be ready to begin clinical education at the designated time.
3. A 30-minute lunch or dinner break will be scheduled by the supervising technologist as appropriate.

### B. Scheduling Procedure.

1. **No schedule changes are permitted without the approval of the program faculty.**
2. Students who change their assignments without permission will not receive credit for hours worked outside the schedule, and time missed from the published schedule will be deducted from their personal leave time.
3. Students are expected to meet their clinical obligations totally.
4. **When unable to report for a clinical assignment, students must always notify the clinical site and the program faculty by the hour that they are scheduled to be present. If unable to reach a faculty member by phone, students should leave a message for the faculty.**
5. **Failure to notify the clinical site and program faculty of an absence or late arrival will result in a deduction in the clinical grade for the term.**

### C. Documentation of Clinical Attendance

1. All hours of the student's clinical experience must be documented using the appropriate CT Program timesheets or attendance record located in the clinical notebook and online through the Angel course Web site.
2. Attendance records must be turned in to a program faculty member. Please scan and email to [angela.conti@sfcollge.edu](mailto:angela.conti@sfcollge.edu). Only if necessary faxed to (352) 395-5711 (attention: CT Program). Please refer to your Canvas calendar for due dates.
3. **THE MAXIMUM NUMBER OF ABSENCES WHILE ASSIGNED TO THE CLINICAL SETTING MAY NOT EXCEED 2 CLINICAL DAYS (16 HOURS) PER**

SEMESTER. IF THE STUDENT HAS ACCUMULATED MORE THAN 2 CLINICAL ABSENCES (OR 16 HOURS TOTAL) IN A SEMESTER, THE STUDENT WILL BE DROPPED FROM THE CORSE AND EXPECTED TO REPEAT THE COURSE. NOTIFY YOUR PROGRAM COORDINATOR PRIOR TO CLINICAL ABSENCES, AND IMMEDIATELY IN THE CASE THAT REQUIRES MORE THAN 2 ABSENCES.

## VI. Standards of Professional Appearance

- A. Professional appearance is mandatory
  - 1. The Imaging professional's ability to interact effectively with patients is severely compromised if he or she does not dress and behave in a professional manner.
- B. Each student may wear the scrub type uniforms that he or she wears in his or her position as a medical imaging technologist or radiation therapist.
  - 1. Strong perfume, cologne, or after-shave lotion must be avoided.
  - 2. Students who smoke cigarettes must take measures to avoid the smell of smoke on their clothes, breath, or body.
  - 3. Tattoos that are visible when students are dressed in the prescribed clinical uniform must be covered by appropriate clothing. Tattoos on arms must be covered by a white tee-shirt worn under the scrub uniform top. Tattoos on forearms many require a long sleeve white tee-shirt.
- C. Communicable diseases
  - 1. The goal of the program's communicable disease policy is to conserve available manpower and provide a safe environment for students, employees, and patients through the achievement and maintenance of an optimal standard of health for all.
  - 2. A copy of each affiliate's communicable disease policy is available at each clinical site.
  - 3. Absences occurring due to communicable diseases require the student to use his or her clinical leave time.
- D. Jury Duty

1. Students who are called for jury duty should contact a faculty member as soon as the summons is received. The program director will give consideration to writing a letter supporting the student's request to be excused from jury duty if said jury duty interferes clinical assignments.
2. Delay in bringing the summons to the attention of the program faculty may jeopardize the chances of being excused by the court, and ultimately create academic hardships.

#### E. Background Screening Process

1. All students selected to enter the CT Program must submit to the Health Sciences Programs' background screening process. Students must be free of offenses that could potentially disqualify them from working in a healthcare environment.
2. Students may encounter additional background screenings and/ or drug screenings at their own expense as required by the program's individual clinical affiliates. The disclaimer form included with the program acceptance packet addresses the possibility of additional screenings.
3. Any incidents that would affect background screening status must be reported to the program immediately. Failure to comply with this directive will result in immediate dismissal from the program.

## VII. Standards of Clinical Behavior

### A. General Information

1. Students in the clinical area should be in total control of their faculties. The use of alcohol or illegal drugs will result in immediate denial of clinical education. The college does not condone the medically unsupervised use, possession, sale, manufacture, or distribution of drugs that are illegal, that may involve medical or physical hazards to an individual, or that may lead to interference with the rights or privileges of others. Federal and State drug laws are strictly enforced on the college campuses and at all the clinical affiliates. Any student enrolled in the CT Program who appears to be under the influence of any illegal substance or alcohol will be subject to immediate drug testing at a facility

designated by the program and at the student's expense. Clinical evidence of the use of illegal substances or alcohol in the clinical setting may lead to immediate dismissal from the program. The program faculty must be notified if a student is required to take medically prescribed drugs, which could impair his/her ability to function safely in the clinical setting.

2. Students are required to maintain a clinical notebook and keep certain records throughout the program.
3. Federal laws, including HIPAA and FERPA, state regulations, licensure requirements, and practice acts detail use of specific information related to health care settings and professional behavior. It is the CT Program student's responsibility to adhere to any and all of these standards and regulations. The relaying, discussing, transferring, or use of any privileged information or personal health information or knowledge of events or actions, via any verbal, written, electronic, computer and/or any other technological form(s) concerning identifying patient information, health care agency information, or staff information is strictly prohibited. Failure to comply with this directive in anyway will result in disciplinary action, which may result in immediate dismissal from the program.

#### B. Accidents to patients

1. Immediately call the supervising technologist or one of the radiologists to check the patient.
2. Report all incidents or accidents, regardless of how minor they seem, to the supervising technologist immediately and complete the appropriate documentation.

#### C. Accidents to students

1. In the event of an accidental needle stick in the clinic, the student is to call the program director immediately at (352) 871-6340. If she cannot be reached call the department's administrative assistant immediately at 395-5700. Tell her of the situation and that the program director is urgently needed. The purpose of calling the college officials is to assist the student in receiving the care that is warranted. It is **imperative** that the student call, even in cases where the clinic might be taking all appropriate steps to administer first aid, dress the wound, draw blood, administer prophylactic medication if warranted, and offer

counseling. The program director must have you complete an SF College Incident Report Form within 24 hours of the incident. Depending on the policy of the clinic where the incident occurred, the faculty will assist you with protocol to follow. (Santa Fe College has a blanket accident insurance policy for students to cover such situations.)

2. Immediately report any accident or injury to the supervising technologist, and notify the program director immediately. Insurance cards must be with students at all times during their clinical rotations.
3. Students are required to carry professional liability insurance. Lab fees charged to each student are used for this purpose.

### **VIII. Immunizations, Health Records, and Other Program Documents**

#### **A. Immunization records**

3. Students must document appropriate immunizations for measles, mumps, and rubella; a varicella titer; a tetanus booster within 10 years; a negative PPD; three Hepatitis B vaccinations; and the program's physical examination form.

#### **B. CPR Requirements**

1. Documentation of current CPR certification must be provided to the program by the first day of scheduled clinical education in the clinical affiliates.
2. Students must maintain a current CPR certification throughout the entire time of enrollment in the Program.

### **IX. Radiation Safety Practices/Dosimetry/Pregnancy**

#### **A. An SFC radiation dosimeter must be worn by each student. A record is kept of the results of the monitoring.**

#### **B. Students must always wear a current dosimeter when in the clinic.**

1. If a student reports to his/her clinical assignment without a current radiation dosimeter, he/she must immediately leave the clinical site until he/she obtains his/her appropriate dosimeter.
2. Personal leave time will be charged to the student until the situation is corrected.
3. Each student must maintain a current radiation dosimeter as per program policies, which comply with the program's *Personal Radiation Monitoring Policy*. A copy of this policy, including ALARA specifications, is a part of each student's clinical notebook.

4. A lab fee charged to the student each term is used for the purpose of purchasing radiation dosimeter services.
  5. If a student loses or damages a radiation dosimeter, he/she must complete the radiation dosimeter incident report and the student may be charged a replacement fee.
  6. A "spare" dosimeter will be issued as a replacement in the case of lose or damage.
- C. Radiation dosimetry reports are maintained for each student by the program and made available to the students quarterly.
1. Questions about radiation dosimetry reports or exposure should be addressed to the Radiation Safety Officer, Stelio Marchionno, office W-22C, telephone number 395-5673.

**D. FEMALE STUDENTS WHO BECOME PREGNANT MUST NOTIFY THE RADIATION SAFETY OFFICER IF THEY WISH TO DECLARE THEIR PREGNANCY. DECLARATION OF PREGNANCY IS VOLUNTARY. IF THE PREGNANT STUDENT DOES WISH TO DECLARE HER PREGNANCY, SHE MUST COMPLETE THE PROGRAM'S "VOLUNTARY DECLARATION OF PREGNANCY" FORM, WHICH INCLUDES THE ESTIMATED DATE OF CONCEPTION. THE RADIATION SAFETY OFFICER OR HIS DESIGNEE WILL COUNSEL THE STUDENT CONCERNING HER PRENATAL EXPOSURE.**

1. Topics to be discussed are dose limits, additional monitoring, documentation, and radiation protection/safety awareness.
2. Additionally, the program faculty will meet with the pregnant student to discuss any necessary modification to her clinical education schedule.
3. Consideration must be given to the student's welfare during pregnancy as well as the policies of the clinical sites to which she is assigned.
4. In the event of extended leave from her clinical assignment, the faculty will meet with the student to determine the best course of action for all concerned, keeping in mind that arrangements will be made for the student to complete the clinical course as appropriate.
5. Students returning to their clinical assignments following a leave of absence due to a pregnancy must provide documentation from their physician stating that they

are able to resume their clinical duties in accordance with the program's technical standards.

## **EDUCATIONAL REQUIREMENTS and CURRICULUM**

The CT Program is designed for medical imaging professionals who are registrants of the American Registry of Radiologic Technologists (ARRT) in Nuclear Medicine Technology (N), Radiation Therapy (T), and/or Radiography (R). Nuclear Medicine Technologists who are registrants of the Nuclear Medicine Technology Certification Board are eligible for the program as well.

The program is based upon the American Society of Radiologic Technologists Curriculum Guide, which can be accessed at the following Web address:

<https://www.asrt.org/content/Educators/Curricula/CT/CTCurriculum.aspx>

All ARRT requirements for the national computed tomography certification examination must be met before the graduate is eligible to sit for the test. Eligibility requirements can be accessed at the following Web address: <https://www.arrt.org/pdfs/Disciplines/Content-Specification/CT-Content-Specification-2011.pdf>

### **The Santa Fe College Computed Tomography (CT) Program Overview**

The Computed Tomography (CT) program is a two-semester program designed to meet the schedule needs of the working technologist. Program content is offered online with minimal laboratory involvement on campus. CT clinical assignments are 16 hours each week for both semesters. Clinical assignments will be scheduled on an individual basis. During the program, students will have the opportunity to acquire the experience necessary to meet the eligibility requirements in order to qualify for the national computed tomography certification examination offered by the American Registry of Radiologic Technologists (ARRT). All Santa Fe College CT program requirements must be met prior to receiving your Santa Fe College CT certificate of completion. In addition, all ARRT requirements for the national examination must be met before the graduate is eligible to sit for the exam. To meet the ARRT guidelines, students must hold an associate's degree or higher, and be registered by the ARRT in Nuclear Medicine, Radiation Therapy, and/or Radiography. Additionally, Nuclear Medicine Technologists who hold Nuclear Medicine Technology Certification Board credentials are eligible for application. The Santa Fe CT program is based upon the ARRT and the American Society of Radiologic Technologists (ASRT) curriculum guide which can be accessed through the ARRT and ASRT websites.

### **The Computed Tomography (CT) Program Required Courses**

**RTE 2762 - Sectional Anatomy and Physiology (3.0 credit hours)**

**Course Description:**

This course examines normal anatomical structures and the relative position of organs to one another in the sagittal, coronal, oblique, and transverse planes. Course Outline Content: Introduction, Cranium, Brain, Cranial Nerves, Facial Bones, Cervical, Thoracic, Lumbar, Abdomen, Pelvis, Upper Extremities, and Lower Extremities.

**Learning Objectives:**

- Identify cross sectional anatomy on CT and MRI images
- Describe and identify various anatomical structures of the body
- Identify relative position of specific structures within the body including directional and regional terminology
- Interpret CT images and identify relevant pathologies

**RAD 2130 - CT Patient Care and Safety/Pharmacology (3.0 credit hours)**

**Course Description:**

The goal of this course is to present the student with the necessary skills to properly administer iodinate contrast agents. This course will teach the importance of effective communication, patient education, consent, and history associated with patient care and assessment. In addition, students will learn proper radiation dose calculation, safety, and venipuncture using sterile technique. Prerequisites for this course include: ARRT/NMTCB certification, current CPR, and state license.

**Learning Objectives:**

- Demonstrate effective communication in the clinical setting
- Perform patient assessment and history, offer proper patient education and consent
- Explain the importance of proper contrast administration and identify relative contraindications of contrast
- Calculate proper medication dosage and identify administration routes
- Demonstrate proper venipuncture and injection techniques
- Identify adverse reactions to medication and associate treatment methods
- Demonstrate methods to measure patient contrast dose levels
- Describe techniques used by CT technologists to reduce radiation dose

**RTE 2595 - CT Physics and Instrumentation (3.0 credit hours)**

**Course Description:**

The purpose of this course is to provide the student with a comprehensive coverage of the physical principles of CT. This course will teach the student to develop the necessary skills to operate a computed tomography system. The foundation, history, and fundamentals of CT will be discussed.

**Learning Objectives:**

- Discuss CT system components and operations
- Exam the technical aspects of image formation
- Explain the theory of x-ray production and major hardware components
- Identify certain aspects of patient care and safety pertaining to CT
- Discuss the types of contrast media used in CT
- Identify scanning techniques, protocols, and patient positioning in CT

- Explain and identify anomalies found on CT imagery

### **RTE 2542 - CT Imaging Procedures and CT Pathology (3.0 credit hours)**

#### **Course Description:**

The objective on this course is to expose the student to various procedures and pathology using CT imagery. In addition, the course will present some of the most common pathologies found during CT scanning; normal anatomy will be compared to the abnormal findings as well. Specialized imaging techniques will be discussed to demonstrate pathology. Students are expected to present a case study for this course. Emphasis is focused on pathology affecting the brain, spine, abdomen/pelvic cavities and orthopedic conditions as it relates to CT imagery. In addition, administration and clinical application of pharmacological agents for CT imaging are included. Prerequisites for this course include: ARRT/NMTCB certification, current CPR, and state license.

#### **Learning Objectives:**

- Identify specific pathology using CT Imagery
- Name causes of pathology presented in the course
- Describe prevalence of certain pathological conditions
- List symptoms associated with specific disease processes
- Distinguish between normal anatomy and the CT appearance of abnormal anatomy associated with pathology
- Define specific pathologies discussed in the module.

### **RTE 2571L - CT Clinical Education I (3.0 credit hours)**

#### **Course Description:**

In the course, the student will develop the necessary skills to operate a computed tomography system under the supervision of certified CT technologist in a clinical setting. The clinical education component is designed to give students the practical skills needed to complete the required documented CT exams per the ARRT guidelines.

#### **Learning Objectives:**

- Demonstrate and apply skills necessary to operate CT machinery
- Demonstrate patient care techniques and safety measures
- Identify cross sectional anatomy on CT images
- Interpret CT images and identify relevant pathologies
- Under direct supervision, properly administer contrast agents and medications

### **RTE 2815 - CT Clinical Education II (2.0 credit hours)**

#### **Course Description:**

In the course, the student will further develop the necessary skills to operate a computed tomography system under the supervision of certified CT technologist in a clinical setting. CT Clinical Education II expands on the principles learned in CT Clinical Education I. The clinical education component is designed to give students the practical skills needed to complete the required documented CT exams per the ARRT guidelines. The student must complete the hours required in clinic by credentialed

technologists. By observing, assisting, and performing computed tomography procedures under direct supervision; students will apply the principles presented in the didactic course.

#### **Learning Objectives**

- Demonstrate and apply skills necessary to operate CT machinery
- Demonstrate patient care techniques and safety measures
- Identify cross sectional anatomy on CT images
- Interpret CT images and identify relevant pathologies
- Under direct supervision, properly administer contrast agents and medications

#### **IMPORTANT SFC CT PROGRAM AND ARRT INFORMATION**

- **Each student will receive a dosimeter while in the SFC Program. The student will turn these dosimeters in quarterly while in the CT program. Only the student may hand in and pick up dosimeters.**
- **If for any reason a clinical affiliate dismisses a student (does not allow the student to continue at that site), that student may be subject to dismissed from the program.**
- **THE STUDENT MUST LOG ALL CT EXAMS WITH THE ARRT. THEREFORE, THE STUDENT MUST HAVE AN ARRT LOGIN. THIS IS A MANDATORY REQUIREMENT OF THE ARRT. THE ARRT NO LONGER ACCEPTS HAND WRITTEN DOCUMENTATION.**
- **When you have completed all ARRT required exams, you MUST complete your clinical assignment by going to clinic for the remainder of the semester. This has been stated by the SFC CT program faculty and is documented in the SFC CT Handbook.**
- **In order for completion of the SFC CT program you must show proof of completed exam documentation with the ARRT, receive a final evaluation, and hand in your dosimeter. If you do not complete all required ARRT exams, you will receive an “F” for the RTE 2815 Clinical Education II course.**
- **All requirements must be complete prior to the end of the semester or you will receive an Incomplete in RTE 2571L Clinical Education courses. If**

**I do not have proper documentation of your completed exams, I will not be able sign off for your exams with the ARRT. Therefore, you cannot include the Santa Fe College CT Program in your application to the ARRT for the CT examination board. If there are any questions regarding these clinical requirements, you may contact the SFC Imaging Program Director.**

- **Upon completion of all of your SFC CT program requirements (clinic and coursework), you will receive a certificate from SFC for the advanced post primary of CT, be in good standing with the SFC community, and in good faith I will be able to sign off with the ARRT.**

Thank you for adhering to the SFC CT policies.

Angela Conti, MBA, CNMT, RT (CT)  
CT Program Coordinator  
Santa Fe College

Michele Hammond, RT (R) (CT)  
Clinical Coordinator

CT PROGRAM FACULTY
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<b>Name:</b>	<b>Office:</b>	<b>Phone</b>
Sharon Whitcraft, MA, RVS, RVT, RCS Director, Medical Imaging Programs	W-201E	(352) 395-5702
Angela Conti, MBA, CNMT, RT (CT) Ct Program Coordinator	W-201	(352) 895-5330
Michele Hammond Clinic Coordinator	W-201	(352) 494-6399