

# *Radiologic Technology*

## **Class of 2026 Clinical Competency Handbook**

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**Effective August 2024**



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## Introduction

It is the intent of this handbook to provide the format for evaluating student progress and competency in the clinical setting. Students, clinical instructors, and college officials keep an ongoing accurate picture of the students' clinical progress through recorded performance evaluations. This assessment process assures that students will not perform procedures on patients without direct supervision before they are proven competent in those procedures.

Feedback from students and their instructors in the clinical settings is solicited and is essential in making this a reliable tool in the evaluation process. This evaluative tool helps in assessing students' skill performance while the clinical evaluation form evaluates the student's overall performance in the Radiology Department.

We aim to promote a high degree of competency, professionalism, and self-motivation in each participant in this program. Everything that you do during your clinical rotations will be evaluated. Treat your clinical education as if it were your extended work interview.

**Students are urged to preserve this handbook as a confidential document and keep it in a safe place as it is not replaceable if misplaced. The program is not responsible for its loss.**

## Definitions

**Clinical Coordinator (CC):** a college faculty member who oversees the clinical education of students in the Radiologic Technology Program. Clinical Coordinators make regular visits to Clinical Education Centers to meet with the students and Clinical Instructors.

**Clinical Education Center:** a Medical Imaging Department approved by the Joint Review Committee on Education in Radiologic Technology (JRCERT) and affiliated with Santa Rosa Junior College. Registered students in the program can only be assigned to the recognized Clinical Education Centers for their clinical experience.

**Clinical Instructor (CI):** a registered radiologic technologist assigned to supervise, guide, and evaluate the Radiologic Technology Program students assigned to their department. Clinical Instructors are employees of the Clinical Education Centers, are assigned the position of Clinical Instructor by their employers, and in some cases time equivalent of their duties to schedule, teach, supervise, and evaluate students.

## Student Learning Outcomes

Operate radiographic imaging equipment, and position patients to perform radiographic examinations and procedures with minimum radiation exposure for the patient, self and others.

## Student Requirements for Clinical Experience

1. You must purchase access to the *Trajecsys* Clinical Reporting System prior to contacting your clinical site. Register for access at *Trajecsys.com* and pay them directly or pay through the bookstore to use your financial aid.
2. **You must contact your clinical instructor at the clinical site at least 2 weeks before each semester begins.** You need to schedule a time for orientation and a time to set up your schedule for your upcoming clinical rotation.
3. Take a completed pre-rotation form to your clinical instructor on the day of orientation. This self-evaluation form will help the department determine what you have completed and areas of competency you need to gain further experience.
4. Complete, with the help of your clinical instructor, a semester schedule of your days and hours. A copy of this schedule must be posted in the department and a copy must be given to your college clinical coordinator.
5. The hourly assignment, as printed in the college catalog each semester, must be met weekly. Your clinical instructor and coordinator must first approve any deviation from your assigned weekly schedule. Students are strongly encouraged to accrue more than the minimum hours each week.
6. Preserve professional relations at all times at your clinical site. Always call your clinical instructor and clinical coordinator before your scheduled time if you will be late or absent. You are expected to be there on the days and times you are scheduled.
7. Maintain the student dress code as it is outlined in your Student Handbook at all clinical sites. Any reported violation of the dress code may result in a disciplinary action.
8. Due dates for the completion of **progress reports**, and **clinical evaluations**, are printed on your roster each semester. Copies of forms are available on the program website: <http://radtech.santarosa.edu/> and in *Trajecsys*. Due dates will be posted in *Trajecsys*.
9. There is a required 2-week observational rotation in CT Scanning. This is assigned during the fall or spring semester of your second year. During your special rotation there may be some days when little or nothing is scheduled because of equipment down time, low census, or patient cancellation. When permitted, you may go back to your regular assignment during the days that there are no special procedures scheduled. Additional time in a special rotation may be arranged with your clinical instructor and clinical coordinator. There is a CT observational checkoff form elsewhere in this handbook that can be used as a template. The supervising technologist will complete the form in *Trajecsys*.
10. There is a required 3-day observation in the Cath Lab/Angio department. This may be completed any time after the 1<sup>st</sup> semester. Print the Observation form found at the end of this handbook to document.
11. In the second year of training, students have the option of choosing an additional rotation in MRI and/or Mammography. Appropriate didactic training is required. Please see your program director for additional elective studies course(s).

## Curriculum Schedule effective Fall 2024

	<b>1<sup>st</sup> Year 60, 61A, 64 &amp; 64L</b>	<b>2<sup>nd</sup> Year 63B &amp; 66</b>	<b>2<sup>nd</sup> year elective 98 or 102</b>
August	Positioning CXR Patient Care transfers, med asepsis	Physics, tube circuitry, Q/A procedures Special Modalities	Clinical Experience MRI or Mammography
September	Positioning Abdomen Patient Care surgical asepsis, isolation	Physics X-ray production, physics Q/A procedures Digital Imaging	Clinical Experience MRI or Mammography
October	Positioning Upper extremities Patient care Vital signs, drug preps.	Physics Fluoroscopy, radiobiology and Q/A	Clinical Experience MRI or Mammography
November	Positioning lower extremities Patient Care BE, catheterization	Physics Advanced radiation protection, fluoroscopy	Clinical Experience MRI or Mammography
December	Positioning lower extremities Patient care drainage tubes	Physics Advanced radiation protection, The ALARA Project, Research Project Presentation	Clinical Experience MRI or Mammography
	<b>Clinical Course 71A 315 hours</b>	<b>Clinical Course 71D 459 hrs.</b>	

	<b>1<sup>st</sup> Year 61B, 63A, 69</b>	<b>2<sup>nd</sup> Year 65</b>	<b>2<sup>nd</sup> year elective 98 or 102</b>
January	Positioning GI System Physics Rad. technique & QA History of Medical Ethics	Pathology	Clinical Experience MRI or Mammography
February	Positioning GU System Physics Rad. technique & QA Confidentiality of Patient Medical Records	Cross Sectional Anatomy	Clinical Experience MRI or Mammography
March	Positioning Spine and contrast media Physics Radiographic technique & QA Ethical Issues in Healthcare	Research Paper	Clinical Experience MRI or Mammography
April	Positioning vertebral column Physics Grids screens & QA Legal Doctrines and Professional Standards	Current Technical Advancements	Clinical Experience MRI or Mammography
May	Positioning Ribs & sternum Physics, The Technique Chart Project Hospital Labor Relations	Research Project Presentation	Clinical Experience MRI or Mammography
	<b>Clinical Course 71B 315 hours</b>	<b>Clinical Course 71E 459 hrs.</b>	

	<b>1<sup>st</sup> Year 61C</b>	<b>2<sup>nd</sup> Year 68</b>	
May	Positioning Intro to skull positioning	Resume, cover letter, interviewing	
June	Skull, sinus, facial bones	Prepare for National Board Exam	
July	Orbits, TMJ's, zygomatic Arch, mandible	Prepare for National Board Exam	
	<b>Clinical Course 71C 117 hours</b>	<b>Clinical Course 71F 189 hours</b>	<b>1850 hours minimum</b>

**The program didactic curriculum is designed in close sequence with the clinical competency evaluations that are expected of students throughout their clinical experience**

## Breakdown of Required Clinical Hours

Semester	Course #	Clinical hrs.	Semester	Cum. Hrs.	Rotation	# of Weeks
1 <sup>st</sup> Fall	RADT 71A	18/week	315	315	#1	17.5
1 <sup>st</sup> Spring	RADT 71B	18/week	315	630	#2	17.5
1 <sup>st</sup> Summer	RADT 71C	18/week	117	747	#2	8
2 <sup>nd</sup> Fall	RADT 71D	27/week	459	1206	#3	17.5
2 <sup>nd</sup> Spring	RADT 71E	27/week	459	1665	#4	17.5
2 <sup>nd</sup> Summer	RADT 71F	27/week	189	1854	#4	8

**Elective rotations available: MRI and/or Mammography – up to 40 hours. Mammography and MRI hours do not count towards the completion of clinical hours.**

### Important Notes:

1. Students are *not limited* as to the number of additional hours of clinical experience they may have, *providing the daily hours never exceed 10 and the weekly hours never exceed 40 (including didactic)*. It is OK to stay and finish a case even if staying may keep you over your approved time for that day if you do so for educationally valid reasons. If additional clinical experience is warranted or desired, students may remain in clinical sites during any hours agreed to by the clinical instructor up to 40 hours per week, including classroom time.
2. Banked Hours: Students may bank extra hours each semester by earning up to 10 clinical hours per shift, instead of the required 9 hours. Banked hours may not be accrued on weekends. The maximum number of banked hours earned during the entire program may not exceed 50 at any time. Banked hours must be used first to cover clinical hours missed due to documented illness or other documented emergency circumstances. Use of banked hours under these circumstances must be approved by the Program Director. Any hours missed due to illness or emergency circumstances that are not covered by banked hours must be made up in the semester they were missed. (See attendance policy). Banked hours may be used for students to be excused from their clinical rotation during the final summer clinical rotation, up to 9 hours per week.
3. Students are allowed to have elective rotations in specialty areas after they have completed all mandatory and elective competencies of the clinical experience requirements at the end of the first year.
4. Student requesting weekend or evening clinical experience must submit the *Request for Special Assignment* form for approval and complete additional competencies on appropriate page(s). The process is initiated in the “On- demand” resources page of the Rad tech website.

# Clinical Experience Grading Procedures

**Grading for clinical experience is based on overall student progress and performance in the clinical area. Students must demonstrate completion of clinical hours and semester competencies to receive credit for the clinical performance evaluation.**

## **TIME SHEETS**

Students must clock in and clock out in *Trajecsys* when arriving, going to lunch, returning from lunch and leaving for the day. Time sheets will be validated by the Lead CI and Faculty every month. All assigned hours must be completed each semester. Failure to complete the required number of clinical hours in a semester can result in an “F” in the clinical experience course.

## **CLINICAL EVALUATIONS**

It is the responsibility of each student to request an End of Semester Clinical Evaluation from his/her clinical instructor prior to the end of each semester. This form is completed in *Trajecsys* and should be discussed in person with the Lead Clinical Instructor. It will also be signed by the student, Clinical Coordinator and Program Director. Students who receive an overall final grade that is lower than 75% on the final clinical evaluation form, or a failure in any one or more of the 10 areas on the final clinical evaluation will fail the course and subsequently be dropped from the program.

## **CLINICAL COMPETENCIES**

Students are required to complete an assigned number of mandatory and elective competency evaluations on patients in the clinical setting each semester (See page 11). ***Until a competency exam has been successfully completed and signed off by the clinical instructor or authorized technologist, the student may not perform that exam without direct supervision.*** Students will begin their Elective and Mandatory Competencies during the 1<sup>st</sup> semester. Some of the elective and mandatory competencies may be signed off in the radiology lab during positioning classes, due to the scarcity of certain procedures. All of the 36 mandatory competency evaluations and at least 15 of the elective competency evaluations must be signed off before a student can graduate.

## **GRADING COMPETENCIES**

Competency Evaluations are a part of the Clinical Experience grade. The assigned number of competency exams must be completed and signed off in *Trajecsys* by the end of each semester. (See page 18). Failure to complete the required number of competencies in a semester can result in an “F” in the clinical experience course.

## **Grading Scale**

The following grading scale applies to all clinical experience courses.

**95 - 100% = A**

**85 - 94% = B**

**75 - 84% = C**

**70 - 74% = D**

**Below 70% = F**

**Students must maintain a "C" or higher grade in each radiologic technology course at end of semester in order to continue in the program.**

## Clinical Evaluation Criteria

It is vital to each student's progress that they are evaluated in their clinical site. The overall performance and professional behavior of each student are evaluated regularly in the clinical setting. The Mid-term Clinical Evaluation and Final Clinical Evaluation are completed by the Lead clinical instructor. The evaluations are filled out in *Trajecsys*, which are scored on a scale of zero to 100 points.

## Progress Reports

In order to support the ongoing progress of students in the clinical setting, we require that every 2 weeks throughout the semester students ask a technologist with whom they are working to fill out a Bi-Weekly Progress Report. At least 2 different technologists and the lead clinical instructor should be asked to fill out Progress Reports as the semester progresses. The lead clinical instructor must complete, at least, 1 Progress Report in the Fall and Spring semesters. Bi-Weekly Progress Reports are completed by the technologist in *Trajecsys* and should be shared in person with the student. The Bi-Weekly Progress Reports will also be reviewed by the Lead CI, faculty and administration. This on-going evaluation serves to keep students fully informed as to how they are fitting in to the clinical setting and how their overall performance and professional behavior are being evaluated. It gives each student an ongoing written assessment of their performance prior to their written graded evaluation.

When a student appears to be failing to meet the performance criteria in any area, a written assessment describing the area of deficiency must be prepared for the student. This procedure is designed to allow students an opportunity to correct performance problems before their grading period is completed. If necessary, clinical instructors can consult with the college faculty on these Progress Reports during the semester to determine how the student is progressing. The lead clinical instructor reviews the Progress Reports when completing the student's End of Semester Clinical Evaluation.

## Clinical Competency Criteria

One of the ways that the student's clinical hands-on performance is assessed is through the performance of clinical competencies. These are competency evaluations of the student's performance on 36 mandatory exams and at least 15 (out of 34) elective exams. A minimum of 36 of the mandatory exams must be performed on patients or simulated in the clinical setting. Up to 10 exams total, in specified areas, may be simulated. Students must successfully complete the competency evaluation of each exam before they may perform that exam without the direct supervision of a certified radiologic technologist. However, any repeat radiograph must be performed under the direct supervision of a registered radiologic technologist.

### HOW TO COMPLETE THE COMPETENCIES

**Pre-competence:** When a student feels capable of doing one of the exams independently, with a minimum of errors, he or she should approach a clinical instructor and request to be observed during that exam for a Clinical Competency Evaluation. The student should provide the technologist with a **Competency Evaluation Template** for taking notes. Only the clinical instructors may evaluate competency exams. Competency exams evaluated by other technologists will not be accepted.

When the student demonstrates competency by successfully completing all aspects of the exam as outlined in the competency book, **with no more than 2 minor improvements, then the exam may be signed off as completed.** The competency must be entered in *Trajecsys* by the supervising technologist. If a student fails to successfully complete an exam for the clinical competency evaluation then he or she must review and practice that exam further under the supervision of a technologist. When the student is ready to be evaluated again, the above procedure should be repeated. A student may not perform an exam with indirect supervision until he or she has passed the competency evaluation for that exam. **Any competency bearing a “zero” or more than two "minor improvements" will constitute a failed check-off.**

### Schedule of Competency Evaluations

<b>Positioning Courses</b>	<b>Semester</b>	<b>Assigned Competencies</b>
<b>RADT 61A</b> Chest, abdomen, upper & lower extremities, hips & pelvis	1 <sup>st</sup> Fall	<b>3 Mandatory Competencies:</b> 2 V Routine Chest and Abdomen – Upright or Supine
<b>RADT 61B</b> Spine, ribs, UGI, BE, GU, contrast exams	1 <sup>st</sup> Spring	<b>5 Mandatory Competencies:</b> Spine (any level) plus 4 other exams  <b>3 Elective Competencies:</b> 1 Fluoroscopy study plus 2 other exams
<b>RADT 61C</b> Skull, facial bones, mandible, sinuses	1 <sup>st</sup> Summer	<b>7 Mandatory Competencies</b>  <b>3 Elective Competencies:</b> 1 elective from skull & facial bones in 61C counts as an elective
Clinical Course	2 <sup>nd</sup> Fall	<b>7 Mandatory Competencies:</b> 1 C-Arm Study + 6 other exams  <b>3 Elective Competencies</b>
Clinical Course	2 <sup>nd</sup> Spring	<b>9 Mandatory Competencies</b>  <b>3 Elective Competencies:</b> 1 Fluoroscopy study plus 2 other exams
Clinical Course	2 <sup>nd</sup> Summer	<b>5 Mandatory Competencies</b>  <b>3 Elective Competencies</b>

## STUDENT SUPERVISION POLICY

Students must be directly supervised until competency is achieved. Once students have achieved competency, they may work under indirect supervision. The JRCERT defines indirect supervision as student supervision provided by a qualified radiographer who is immediately available to assist students regardless of the level of student achievement.

- Repeat images must be completed under direct supervision. The presence of a qualified radiographer during the repeat of an unsatisfactory image assures patient safety and proper educational practices.
- Students must be directly supervised during surgical and all mobile, including mobile fluoroscopy, procedures regardless of the level of competency.
- Students must be directly supervised during the exam of any patient under the age of 18.
- Students may only transport patients to and from the Emergency Room when a Radiologic Technologist or other qualified hospital employee is present.
- First-year students may not transport patients from the waiting room who need the assistance of a wheelchair without direct supervision of a Radiologic Technologist or other qualified hospital employee.

Students must be under the direct supervision of a qualified radiologic technologist during every exam until that student has successfully completed and been signed off on the competency in *Trajecsys*. Once a competency has been signed off, the student may perform that exam under indirect supervision. A technologist must always be immediately available. All images to be repeated MUST be completed under direct supervision regardless of the student having already achieved a competency in that exam.

# DOCUMENTING YOUR SEMESTER PROGRESS

All Competencies, Log Sheets, Time Sheets and Evaluations must be completed in *Trajecsys* for grading on the due date and time posted on your clinical assignment roster. Please take time to make sure they are accurate and complete before the due date.

## **Here's what we require:**

- All time records in *Trajecsys* should be matched. (If there is a clock in – there is a clock out on the same day to match.)
- There should be a minimal number of time exceptions noted.
- The minimum number of hours should be met.
- The Lead CI should have approved the time sheets at the end of each month and at the end of the semester.
- Log sheets should be accurate and not contain any personal identifying information. Medical record numbers may not be entered in *Trajecsys*.
- Log sheets should be approved by the Lead CI at the end of each month and at the end of the semester.
- Students should have electronically signed and commented on all Evaluations.

## **Exceeding the Minimum Assignment**

Students are not limited to the assigned number of competencies each semester. The extra competencies checked off are *not* carried over to fulfill requirements of subsequent semesters. Competency re-checks are acceptable and apply to the minimum number of competencies required each semester.

To achieve a passing grade on your semester clinical course, you must:

- Document the required number of competencies
- Document sufficient clinical time on your timesheets
- Achieve a passing End of Semester Clinical Evaluation.

Students who have not completed all requirements each semester may fail the course and subsequently be dropped from the program.

# Guidelines for Competency Evaluations

## Reference: ARRT Elements of Competence and ASRT Curriculum Guide

Demonstration of clinical competence requires that the program director or the director's designee has observed the candidate performing the procedure independently, consistently, and effectively during the course of the candidate's formal educational program. Remote scanning is not acceptable for completion of ARRT Clinical Requirements. The candidate must complete the examination or procedure at the facility where the patient and equipment are located. The candidate must be physically present during the examination or procedure.

Institutional protocol will determine the positions and projections used for each procedure. When performing imaging procedures, the candidate must independently demonstrate appropriate:

### Procedural Performance

- A. Scheduling and sequencing of exams
- B. Order/requisition evaluation and verification, and corrective measures
- C. Facilities setup and room preparation
- D. Patient identity verification, patient assessment, clinical history, education, and care.
  - 1. Patient monitoring – emergency and nonemergency
    - a. Vital signs
    - b. Assessment and clinical history
    - c. Equipment
    - d. Patient emergencies
  - 2. Patient privacy and confidentiality (HIPAA)
  - 3. Documentation
  - 4. Infection control
    - a. Personal protective equipment (PPE)
      - 1. Types
      - 2. Proper use
  - 5. Patient education
    - a. Personal protective equipment (PPE)
      - 1. Appropriate communication style
      - 2. Age-specific and cultural sensitivity
      - 3. Socioeconomic sensitivity
      - 4. Patient-centered care
  - 6. Medical error reduction
  - 7. Patient safety considerations
- E. Imaging
  - 1. Positioning considerations
  - 2. Equipment operation
  - 3. Technical considerations
  - 4. Image acquisition
  - 5. Image processing
  - 6. Image analysis and evaluation
- F. Radiation protection
  - 1. Principles (ALARA)
  - 2. Radiation safety practices
    - a. Protection of the patient (AAPM recommendations)
    - b. Protection of personnel
    - c. Protection of others
  - 3. Education
    - a. Patient, family members, or authorized representatives
    - b. Other members of the healthcare team
  - 4. Equipment and accessories





## Santa Rosa Junior College Radiologic Technology Program

### Pre-Rotation Form

Please have this form and available for your new clinical instructor at your orientation session.

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

1. Which semester are you entering in the Radiology Program?
2. Where were your previous rotations and how long at each site?
3. Which positioning skills have you had up to this point?
4. Which positioning skills will you be taught this semester?
5. Which procedures do you feel comfortable performing?
6. List the competencies that you need to be checked off during this rotation.
7. What are you looking forward to most about this rotation?





## Santa Rosa Junior College Radiologic Technology Program

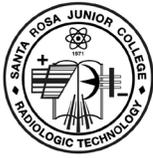
### Orientation Verification Form Template

NAME \_\_\_\_\_ DATE \_\_\_\_\_

Lead CI will complete all items on this checklist. Then log in to *Trajecsys* and complete the Orientation Verification Form for each student at the site.

- Parking Regulations: location, permits, day/evening.
- Break/Lunch Procedures: time and duration of meal and breaks and provisions for students bringing lunch.
- Restroom Facilities: locations.
- Personal Storage Areas: locker facilities and/or proper location for books, coats, bags, dosimeters, and valuables.
- Safety Procedures: site's radiation protection plan, fire regulations, codes, security, disaster plan, infection control guidelines, and standard precautions.
- Notification Procedures: in case of absence or tardiness, reporting incidents.
- Safe and effective use of fluoroscopy rooms, mobile units & C-arms.
- Ancillary Equipment and Supplies: location of grids, contrast media, immobilization devices, protective aprons/devices, emergency cart, linens.
- Accessory Items: needles, syringes, tourniquets, IV tubing, emesis basins, bandaging material, gloves, oxygen and suction accessories.
- Introduction to Key Personnel: radiologist(s), administrative personnel, staff technologists, and ancillary staff.
- Student Assignments and Information: postings, posted student schedule, reject images for analysis, weekend/evening policy, assignments and expectations.
- Orientation to Department: routines, patient transportation, procedure manual, equipment operation, exam requisitions.
- Communications During Clinical Assignment: emergency contact, outside phone calls, use of cell phone, visiting patients, contacting other students.
- Hospital Information: history, bed capacity, HIPAA program.
- Hospital Tour: OR, ICU, CCU, orthopedic clinic, women's center and other ancillary departments.
- PACS/RIS: student access code and privileges.
- Positioning protocol book or resource: All body parts and fluoroscopy exams.





## Santa Rosa Junior College Radiologic Technology Program

### Competency Evaluation Template

Student Name:	Semester:
---------------	-----------

**Instructions:** The evaluator will mark each area according to the following scale: 3 = Acceptable, 1 = Required minor improvement, 0 = Unacceptable.

Use this template to take notes while you are observing the student. Then enter your responses on the form in *Trajecsys*.

You may enter a **key** to help the student locate images later *or* have the student save the requisition in a student file located in the Imaging Department.

<b>PROCEDURE:</b> _____ <b>SIM</b> _____	<b>SCORE</b>
<b>Key:</b>	
<b>DATE:</b>	
<b>Patient identity verification</b>	
<b>Examination order verification</b>	
<b>Patient assessment, clinical history, education, and care</b>	
<b>Room preparation</b>	
<b>Equipment Operation</b>	
<b>Technique Selection</b>	
<b>Patient positioning</b>	
<b>Radiation Safety – principles, shielding, marker placement, protecting personnel and others</b>	
<b>Image processing and evaluation</b>	
<b>EVALUATOR NAME:</b>	

**More than two 1's constitutes a failed check-off. A zero constitutes a failed check-off.  
No image acquisition is performed without direct supervision of a registered technologist.**

Comments:





## Santa Rosa Junior College Radiologic Technology Program

### C-Arm Orientation Checklist Template

Student Name:	Semester:
---------------	-----------

<b>Locate and/or operate</b>	Completed	N/A
- Brakes and steering mechanisms.		
- Connect C-Arm unit to monitors.		
- ON/OFF switch/button.		
- Exposure technique control buttons/knobs.		
- Low dose and boost control.		
- Contrast and brightness control on monitor.		
- Collimation control.		
- Image orientation control.		
- Fluoro timer reset.		
- Movement control levers/handles.		
- Image save/store buttons.		
- Exposure switches (hand, foot), controls.		
- Hard copy devices.		
- Data entry using keyboard.		
- Annotate data before and after procedure.		
- Storage location.		
- Send images to PACS		
<b>Radiation Protection</b>		
- Understands how surgical cases are ordered.		
- Only expose when ordered by the physician.		
- Make sure all personnel are wearing protective aprons.		
<b>Advanced Procedures (if applicable)</b>		
- Cine radiography		
- Road mapping		
- Image subtraction		
- Peak opacification		
- Storing of images and cine		

Comments:





## Santa Rosa Junior College Radiologic Technology Program

### CT Orientation Checklist Template

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Clinical Education Center: \_\_\_\_\_

(YES)	(NO)	Student shows willingness, appropriate skills & care with transporting patients, attending to patients' needs, handling IV's & catheters.
		Willingness and ability to load the power injector.
		Willingness to assist with (not perform) venipuncture.
		Willingness to assist positioning patient for CT scan.
		Ability to identify the scan planes and basic anatomy. Demonstrates interest in the exams and procedures. Asks relevant questions.
		Demonstrates knowledge of CT fundamental scanning principles.

**Student has basic knowledge of common examinations:**

	Completed	N/A
A. Head/Face – Brain, IAC, Facial bones, Orbits, Sinuses, COW.		
B. Spine (Cervical) – Carotid angio, cervical trauma.		
C. Chest – Heart, Aorta, Mediastinum, Lungs, Hi-Res Chest.		
D. Abdomen/Pelvis – Liver & spleen, pancreas, retroperitoneal, adrenals, general surgery for mass or abscess, bladder.		
E. Spine (T&L) – Spinal stenosis, spinal trauma reconstructions.		
F. Special Studies – Post myelogram, biopsy, 3D reconstruction, MIPS, Orthopedic and spinal image guided surgery workup, cardiac scoring.		

	Completed	N/A
2. Examination preparation, patient care, and vital signs.		
3. Use of contrast agents (contraindications and adverse reactions).		
4. I.V. and power injector before and during scans.		
5. Basic knowledge of the scanner, accessory equipment & software		
6. Knowledge of image processing and archiving.		
7. Imaging protocols and image management.		
8. Knowledge and observance of radiation safety protocols.		

Supervising RT Signature and Comments:





## Santa Rosa Junior College Radiologic Technology Program

### Cardiac Catheterization Lab 3-Day Observation Experience

**Student Name:** \_\_\_\_\_ **Date:** \_\_\_\_\_

**Clinical Education Center:** \_\_\_\_\_

(YES)	(NO)	
		Is punctual in reporting to the department in the morning, as well as after breaks and lunch.
		Reports to department in proper uniform including a personnel monitoring device.
		Cooperates well with staff and projects professionalism at all times.
		Demonstrates enthusiasm and interest in learning.
		Student shows willingness, appropriate skills & care with transporting patients, attending to patients' needs, handling IV's & catheters.
		Applies didactic knowledge to clinical procedures.

	(YES)	(NO)
<b><u>Student has basic knowledge of:</u></b>		
A. Patient preparation, including, assessing patients to determine patient's physical ability to undergo the procedure and obtaining pertinent medical history from patient, including vital		
B. Contraindications to performing procedures.		
C. What patient care is needed during the procedure.		
D. Commonly used guidewires/catheters.		
E. Use of contrast agents, (contraindications and adverse reactions).		
F. Emergency equipment/cart contents, including O <sub>2</sub> and suction.		
G. Imaging protocols and image management.		
H. Radiation safety protocols.		
I. Imaging and accessory equipment as well as software.		
J. Image processing and archiving.		

**List 4 common procedures the student observed or participated in:**

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

**Supervising RT name (printed):** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Comments:** (Use back side of this sheet for additional comments)







# *Trajecsys* Guidance/Task List

## Task 1: Timekeeping

Open *Trajecsys.com* in any browser and log in.

Clocking in or out: Students must log their time 4 times each day:

- Upon arrival
- Leaving for lunch
- Returning from lunch
- Leaving for the day

Students must use a computer in the imaging department for timekeeping. *Trajecsys* will log the IP address of the computer used. Students should be ready to start/stop work immediately when they clock in/out.

Clocking in/out on a student's phone should only occur with pre-approval from faculty for extenuating circumstances. If using a phone to clock in/out, location services must be allowed on the phone. *Trajecsys* will log the GPS location of the phone.

Time exceptions – on left side column. (No computer, no internet, I forgot) should be used minimally. Excessive use of time exceptions will result in counseling and possible remediation. All time exceptions must have an explanation added.

DO NOT LOG ABSENCES in *Trajecsys*. Absences must be reported by email. Send **one** email to the Lead CI, with the Clinical Coordinator and the Lead Clinical Coordinator cc'd. Students must also contact someone in the imaging department by **phone** to let them know they will not be there.

Students should check their timesheets at the end of each day/week/month. Missing time records or mis-matched time records should be corrected immediately. Time sheets will be reviewed with the Clinical Coordinator when they visit your clinical site monthly. Time sheets will be approved at the end of every month by the Lead CI and Clinical Coordinator.

Viewing your progress:

It is the student's responsibility to know how many hours they have accrued at any given time. To view your time records, go to **Portfolio Reports** > Set filters for your site and the dates you want to see > Apply filter > Choose **Time Totals**. Time records that are missing, mis-matched or unapproved will not be included in the total.

Refer to page 7 of the Clinical Competency Handbook for exact hours required each semester.

# *Trajecsys* Guidance/Task List

## Task 2: Log Sheets

Logs – on left side column. ADD LOG SHEET.

Each exam you participate in at your clinical site will be logged permanently into *Trajecsys*, but you have several ways to collect the information need to create those log entries throughout the day.

1. Keep the printed requisition and write notes on it.
2. Log the exams on the Log Sheet Template provided in the Clinical Competency Handbook.
3. Log the exams in your own notebook.
4. Enter them into *Trajecsys* as you go.

Your Lead Clinical Instructor will give you instructions about how they prefer you manage this task.

Make note of the technologist who you were working with on each exam, if there were any repeats taken and the reason for the repeat, how long you were involved in any fluoroscopy exam.

### Saving Requisitions:

Some requisitions should be saved in a file provided by your Lead CI. They will help you locate images in PACS when your Clinical Coordinator comes to visit. Only save these types of requisitions:

1. All repeats
2. All competency check-offs
3. Any exam you are proud of or have questions about.

***You may not take requisitions with patient information on them outside of the Imaging Department.*** Each month, after you have reviewed these exams with your Clinical Coordinator, all requisitions must be shredded per your site's policy.

### Viewing your progress:

You can view your Log Sheets in *Trajecsys* by going to **Portfolio Reports** and choose **Daily Logsheets**. Students are responsible for the accuracy of these log sheets. They will be reviewed monthly by the Lead CI and Clinical Coordinator.

## *Trajecsys* Guidance/Task List

### Task 3: Competency Evaluations

When you are ready to be evaluated (checked-off) for a competency, you should let the technologist that you are working with know that you want to do that. ***Only technologists that are approved Clinical Instructors may enter competencies in Trajecsys. Only the technologist who observed the entire exam may enter the competency in Trajecsys.***

Hand the technologist the Competency Evaluation Template, found in the Clinical Competency Handbook, so they can take notes while you perform the exam. The technologist should review the requisition to be sure it is appropriate for you to check off on.

***Important!!!*** While you are expected to complete the exam by yourself, you may always ask for help with moving a patient, dressing or undressing a patient, or stop to ask a question. Technologists often need the help of their co-workers during exams and if you need help to ensure patient safety, then that should take priority.

The technologist should approve your images before they are sent to PACS. They will enter the competency into *Trajecsys* if you passed. If you did not pass, there is no need to enter it in *Trajecsys*. If you do not pass, try again!

The ARRT requires that you complete a competency evaluation on each exam one time. But, the SRJC Rad Tech Program requires a minimum number of competencies each semester. For this reason, you may re-check a competency for the purpose of meeting the minimum requirements each semester.

#### Viewing your progress:

You can view your progress on competency evaluations in *Trajecsys* by going to **Portfolio Reports** and choose **Skill Summary**. Competency evaluations will be reviewed by the Clinical Coordinator at each site visit.

## *Trajecsys* Guidance/Task List

### Task 4: Bi-Weekly Progress Reports

Students are responsible for requesting Bi-Weekly Progress Reports ahead of their due date. Give the technologist at least 2 days to complete your request. You may request it verbally, but also follow up by sending the technologist an email request through *Trajecsys* that clearly states your due date. Always select Copy Me when sending the email so that you have documentation that you made the request in enough time.

When the technologist has completed the Bi-Weekly Progress Report in *Trajecsys*, the student will see a notification on their Home Page, telling them that a New Evaluation or Form has been submitted. Click on the link to view the report.

To sign the report:

1. Click on View on the right side.
2. Read the scores and the comments at the bottom.
3. On the bottom right side of the report – click on the plus (+) sign next to Add Comment.
4. Scroll through the drop-down menu to Student Signature.
5. Type in a comment that acknowledges the feedback and thanks the technologist who gave it to you. This records your electronic signature.
6. Follow up with the technologist in person to ask questions and thank them for taking the time to provide feedback.

Viewing your progress:

You can view your progress on Bi-Weekly Progress Reports and all evaluations in *Trajecsys* by going to **Portfolio Reports** and choose **Evaluation Summaries**.

In the filter section, choose the correct template from the drop-down menu. Choose your name and site and click Apply Filter.

In the middle column of Detailed Report click Show Report.

Bi-Weekly Progress Reports will be reviewed by the Clinical Coordinator at each site visit.

## ***Trajecsys Guidance/Task List***

### **Task 5: Mid-term and Final Clinical Evaluations:**

Students are responsible for requesting Mid-term and Final Clinical Evaluations ahead of their due date. Give the Lead CI at least two weeks to complete your request. You may request it verbally, but also follow up by sending the Lead CI an email request through *Trajecsys* that clearly states your due date. Always select Copy Me when sending the email so that you have documentation that you made the request in enough time.

When the Lead CI has completed the Evaluation in *Trajecsys*, the student will see a notification on their Home Page, telling them that a **New Evaluation or Form has been submitted**. Click on the link to view the report.

Sign the report according to instructions on p. 26.

#### Viewing your progress:

You can view your progress on Bi-Weekly Progress Reports and all evaluations in *Trajecsys* by going to **Portfolio Reports** and choose **Evaluation Summaries**.

In the filter section, choose the correct template from the drop-down menu. Choose your name and site and click Apply Filter.

In the middle column of Detailed Report click Show Report.

Mid-term and Final Clinical Evaluations will be viewed by Lead CIs, faculty, and administration.

## ***Trajecsys Guidance/Task List***

### **Task 6: Other Evaluations:**

Students are responsible for requesting *Orientation, CT Orientation, C-Arm Orientation* Evaluations from technologists or Lead CIs. Give them at least one week to complete your request. You may request it verbally, but also follow up by sending an email request through *Trajecsys* that clearly states your due date. Always select Copy Me when sending the email so that you have documentation that you made the request in enough time.

When the appropriate technologist has completed the Evaluation in *Trajecsys*, the student will see a notification on their Home Page, telling them that a **New Evaluation or Form has been submitted**. Click on the link to view the report.

Sign the report according to instructions on p. 26.

#### Viewing your progress:

You can view your progress on Bi-Weekly Progress Reports and all evaluations in *Trajecsys* by going to **Portfolio Reports** and choose **Evaluation Summaries**.

In the filter section, choose the correct template from the drop-down menu. Choose your name and site and click Apply Filter.

In the middle column of Detailed Report click Show Report.

Evaluations will be reviewed by the Clinical Coordinator at each site visit.

### **Task 7: Clinical Site Evaluation:**

EVALUATIONS – on left side column. STUDENT CLINICAL SITE EVALUATION.

At the end of each rotation (Fall and Spring/Summer) you are required to complete a Student Clinical Site Evaluation.

This is your opportunity to provide constructive feedback to SRJC Rad Tech Program Administration and your Clinical Site.

NOTE: Your answers and comments will be viewed *only* by SRJC Rad Tech Program Administration until you have moved on to a new clinical site. Feedback from students is shared anonymously with Clinical Sites once per year.

You will receive an email reminding you when this evaluation is due near the end of each rotation.

**IMPORTANT!!!** - If you have important information or constructive feedback on your clinical site that should be shared immediately, please email your Clinical Coordinator or SRJC Rad Tech Program Administration.



## SRJC Radiologic Technology Clinical Competency Documentation



**Imaging Procedures ~ 36 Mandatory & 15 Elective Required /10 Simulations Allowed**

(> = Eligible for Simulation)

(\* = Trauma requires modifications in positioning due to injury with monitoring of the patient's condition.)



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

Chest and Thorax			Date completed	Patient or Simulation
Chest Routine	M			
Chest AP (w/c or stretcher)	M			
Ribs	M>			
Chest Lateral Decubitus		E>		
Sternum		E>		
Upper Airway (Soft Tissue Neck)		E>		
Sternoclavicular (SC) Joints		E>		
<b>Upper Extremity</b>				
Thumb or Finger	M>			
Hand	M			
Wrist	M			
Forearm	M			
Elbow	M			
Humerus	M>			
Shoulder	M			
Clavicle	M>			
Scapula		E>		
A-C joints		E>		
Trauma: Shoulder or Humerus (Scapular Y, Transthoracic or Axial)*	M			
Trauma Upper Extremity,(Non -Shoulder)*	M			
<b>Lower Extremity</b>				
Toes		E>		
Foot	M			
Ankle	M			
Knee	M			
Tibia-Fibula	M>			
Femur	M>			
Trauma: Lower Extremity*	M			
Patella		E>		
Calcaneus (Os Calcis)		E>		
<b>Head – Must select at least one elective procedure from this section.</b>				
Skull		E>		
Facial Bones		E>		
Mandible		E>		
Temporomandibular Joints (TMJ's)		E>		
Nasal Bones		E>		
Orbits		E>		
Paranasal Sinuses		E>		
<b>Spine and Pelvis</b>				
Cervical Spine	M			
Thoracic Spine	M>			
Lumbosacral Spine	M			
Cross-Table (Horizontal Beam) Lateral Spine (Patient Recumbent)	M>			





**SRJC Radiologic Technology Clinical Competency  
Documentation**



**Imaging Procedures ~ 36 Mandatory & 15 Elective Required /10 Simulations Allowed  
(> = Eligible for Simulation)**

(\* = Trauma requires modifications in positioning due to injury with monitoring of the patient's condition.)



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

Spine and Pelvis			Date completed	Patient or Simulation
Pelvis	M			
Hip	M			
Cross-Table (Horizontal Beam) Lateral Hip (Patient Recumbent)	M>			
Sacrum and/or Coccyx		E>		
Scoliosis Series		E>		
Sacroiliac Joints		E>		
<b>Abdomen</b>				
Abdomen Supine	M			
Abdomen Upright	M>			
Abdomen Decubitus		E>		
Intravenous Urography		E		
<b>Fluoroscopy Studies – Must select two procedures from this section and perform per site protocol.</b>				
UGI Series, Single or Double Contrast		E		
Contrast Enema, Single or Double Contrast		E		
Small Bowel Series		E		
Esophagus(NOT Swallowing Dysfunction Study)		E		
Cystography / Cystourethrography		E		
ERCP		E		
Myelography		E		
Arthrography		E		
Hysterosalpingography		E		
<b>Mobile C-Arm Studies</b>				
C-Arm Procedure (Requiring Manipulation to Obtain More Than One Projection)	M>			
Surgical C-Arm Procedure (Requiring Manipulation Around a Sterile Field)	M>			
<b>Mobile Radiographic Studies</b>				
Chest	M			
Abdomen	M			
Upper or Lower Extremity	M			
<b>Pediatrics (Age 6 or Younger)</b>				
Chest Routine	M>			
Upper or Lower Extremity		E>		
Abdomen		E>		
Mobile Study		E>		
<b>Geriatric Patient (At Least 65 Years Old and Physically or Cognitively Impaired as a Result of Aging)</b>				
Chest Routine	M			
Upper or Lower Extremity	M			
Hip or Spine		E		

