# Merced College



## Diagnostic Radiologic Technology Program

# **Clinical Handbook**

Name: _____

Class of: _____

If found, please call: _____

or Return to Merced College, DRT Program

# Table of Contents

# Introduction

It is the intent of this Clinical Handbook to give the students, faculty, and affiliate representatives a guide to accurately evaluate clinical progress and to provide an overview of the direction that the student's education is taking.

The handbook guides a student on their journey through the clinical experience, with an emphasis on obtaining and tracking the core clinical competencies that all individuals must demonstrate to establish eligibility for ARRT certification, as well as the student's breadth of knowledge and skill.

This handbook provides explanations of each clinical course requirement, definitions, grading criteria, and so much more, to help each student along their clinical course journey.

To make the clinical evaluation process a reliable, valid tool, input from all three groups, as mentioned above, will be required.

It is hoped that this will serve to promote a high degree of competency, professionalism, motivation, and self-pride in each participant.

**Developed by:**

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**Director, Diagnostic Radiologic Technology Program**

**Revised for Fall 2024**

**RADT-12B:     Student Learning Outcomes**

Upon successful completion of the course, the student should be able to verbally or in writing:

A. Perform independently with minimal error, ten of the fifty-two "Initial Core Competencies" required to complete the initial clinical experience portion of the student's training.
B. Evaluate the ten radiographic image sign-offs on positioning and technical considerations, image acquisition and image analysis competently.

**RADT-14B:     Student Learning Outcomes**

Upon successful completion of the course, the student should be able to verbally or in writing:

A. Perform independently with minimal error, ten of the fifty-two "Initial Core Competencies" required to complete the initial clinical experience portion of the student's training.
B. Evaluate the ten radiographic image sign-offs on positioning and technical considerations, image acquisition and image analysis competently.

**RADT-15B:     Student Learning Outcomes**

Upon successful completion of the course, the student should be able to verbally or in writing:

A. Perform independently with minimal error, a minimum of fifteen of the fifty-two "Initial Core Competencies required to complete the clinical experience portion of the student's training.
B. Evaluate the fifteen radiographic image sign-offs on positioning and technical considerations, image acquisition and image analysis competently.

**RADT-16B:     Student Learning Outcomes**

Upon successful completion of the course, the student should be able to verbally or in writing:

A. Perform independently with minimal error, seventeen of the fifty-two "Initial Core Competencies" required to complete the initial clinical experience portion of the student's training.
B. Evaluate the seventeen radiographic image sign-offs on positioning and technical considerations, image acquisition and image analysis competently.

**RADT-17B:     Student Learning Outcomes**

Upon successful completion of the course, the student should be able to verbally or in writing:

A. Demonstrate continued competency by independently executing with minimal error, sixteen of the forty "Final Competencies".
B. Evaluate the sixteen radiographic image sign-offs on positioning and technical considerations, image acquisition and image analysis competently.

**RADT-18B:     Student Learning Outcomes**

Upon successful completion of the course, the student should be able to verbally or in writing:

A. Demonstrate continued competency by independently executing, with minimal error, twenty-four of the forty "Final Competencies".
B. Evaluate the twenty-four radiographic image sign-offs on positioning and technical considerations, image acquisition and image analysis competently.

# Student Supervision in the Clinical Setting

The Diagnostic Radiologic Technology Program of Merced College is proud to affiliate with this radiography department for the purpose of clinical education of student radiographers.

The Radiologic Technology Program is approved and accredited by both the CDPH-RHB and the Joint Review Committee on Education in Radiologic Technology and is in compliance with Title 17 and JRCERT Standards, including Standard 5, Health and Safety, which assures patient safety and proper educational practices via student supervision.

Student radiographers shall work in a 1:1 student to staff RT ratio and they must be supervised by qualified radiographers*.

*All radiologic technologists, students, and personnel should be aware:*

**DIRECT SUPERVISION** – The JRCERT defines **DIRECT SUPERVISION** as student supervision by a qualified radiographer who:

- reviews the procedure in relation to the student's achievement,

- evaluates the condition of the patient in relation to the student's knowledge,

- is physically present during the conduct of the procedure, and

- reviews and approves the procedure and/or image.

- is present during student performance of any repeat of an unsatisfactory radiograph.

**DIRECT SUPERVISION:** 100% of the time when working in the following areas, regardless of level of competency:

- All Surgical
- All Mobile, including mobile fluoroscopy
- Interventional Radiography
- Angiography
- CT
- MRI
- Mammography

- Emergency Room (ED) Trauma Bay cases (traumatic spine cases, etc.)
- Newborn Intensive Care
- Pediatric cases 8-years and younger
- Injection of contrast media
- Radiographic procedures for which the student has not earned and documented competency
- All repeats

All students (regardless of semester/level of training) must be **DIRECTLY SUPERVISED** until a competency has been obtained and for **ALL REPEATS.**

**REPEATS:** For repeats, the student's set-up (positioning, technique, etc.) must be approved by a qualified radiographer before the exposure is made.

**INDIRECT SUPERVISION:** The JRCERT defines **INDIRECT SUPERVISION** as that supervision provided by a qualified radiographer **immediately available** to assist students regardless of the level of student achievement.

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

JRCERT describes **INDIRECT SUPERVISION** as the supervising radiographer being within **"EARSHOT"** of the student. Electronic means of contacting supervising radiographers is unacceptable per the JRCERT (i.e., telephone, pager, intercom, etc.).

*\*Qualifications for RTs who "supervise/work with" students: for CDPH-RHB / Title 17 regulations, qualified radiographers must possess unrestricted California state license (CRT). For JRCERT, qualified radiographers may hold current ARRT or equivalent in radiography (CRT). Therefore the minimum qualification for the person who works with a Student Radiographer is current CRT license.*

Student Supervision in Clinical Setting - 2024

# Code of Ethics & Responsibility

# Merced College

## Diagnostic Radiologic Technology Program

## Hold Harmless Form

I understand that due to my occupational decision to enroll and work in the health field, I may be exposed to potential infection; e.g. Hepatitis B.

With my signature below, I am releasing and hold harmless Merced College and its hospital/clinical affiliates of any responsibility due to my work exposure to, or infection of, potential infectious contacts.

_____      _____
Student's Signature                                                      Date


_____      _____
Witness                                                                      Date

# Merced College
## Diagnostic Radiologic Technology Program

### Code of Ethics – Confidentiality
### Privacy of Health Information – Health Insurance Portability and Accountability Act of 1996 (HIPAA)

One of the cardinal concepts in all codes of ethics relating to health care relates to the confidentiality of information. The information provided to a student radiographer is not only legally privileged, but a student radiographer is often privy to conversations between patients and their physicians, confidential information contained in patient charts, and confidential information about the clinical facility.

Student radiographers often witness circumstances where patients are unable to preserve their dignity and may behave in ways which might cause them shame or embarrassment if known to friends or family. Many patients do not want it known that they are ill or have been hospitalized. Some may wish to keep their diagnosis confidential. Information that may seem of no consequence to you may constitute a very sensitive issue for the patient. Any breach of confidence, even if no names are mentioned, may rightly be interpreted by others as an indication that the radiographer does not respect professional confidence. Betrayals of confidence cause individuals to lose faith in the health care team and may result in their hesitation to reveal facts that are essential to their care.

The patient's right to confidentiality is not violated by appropriate communications among health care workers when the information is pertinent to the patient's care. It is justifiably assumed in such a case that the transfer of information is for the patient's benefit and that all personnel involved are bound by the ethics regarding confidentiality. Appropriate communications are those directed privately to those who have need of the information. Conversations about patients must never be held in public areas such as waiting rooms, elevators, cafeterias, or outside the clinical facility.

**Confidentiality Standards:**

I will not discuss personal information about the patients that I come in contact with in clinical observations and/or clinical experiences, except with authorized medical and/or clinical personnel.

I will not put patients' names on papers handed in for class or lab and will remove any signs of patient identification from radiographs that I bring to class or lab to share or as part of an assignment.

I will only access patient information for those I am providing patient care.

I will not post or discuss any information about patients, clinical or college personal or clinical facilities on any type of social media. (_____) initial

I further agree not to reveal to any third party any confidential information about any clinical facility I may be assigned, except as required by law or as authorized by a particular clinical facility.

**I have read, understand and agree to abide by the confidentiality standard set forth above. I further understand that breach of this standard may be cause for dismissal from the clinical facility and/or program and could potentially lead to civil or criminal charges. (_____) initial**


Program Participant: _____     Dated this _____ day of _____, 20 _____
                  Print               Signature


Witness: _____     Dated this _____ day of _____, 20 _____
                  Print               Signature

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# ARRT "Standard of Ethics" and the Radiographer's Scope of Practice

Knowingly reporting inaccurate information in the completion of your clinical training requirements goes against the ARRT "Standards of Ethics" in practice and is subject to being sanctioned.

In particular:

### Fraud Involving Certification and Registration

1. Employing fraud or deceit in procuring or attempting to procure, maintain, renew, or obtain or reinstate certification and registration as issued by ARRT; employment in radiologic technology; or a state permit, license, or registration certificate to practice radiologic technology. This includes altering in any respect any document issued by ARRT or any state or federal agency, or by indicating in writing certification and registration with ARRT when that is not the case.

### Fraudulent Communication Regarding Credentials

2. Engaging in false, fraudulent, deceptive, or misleading communications to any person regarding any individual's education, training, credentials, experience, or qualifications, or the status of any individual's state permit, license, or registration certificate in radiologic technology or certificate of registration with ARRT.

## Scope of Practice

### Technical Incompetence

10. Performing procedures which the individual is not competent to perform through appropriate training and/or education or experience unless assisted or personally supervised by someone who is competent (through training and/or education or experience).

### Improper Supervision in Practice

11. Knowingly assisting, advising, or allowing a person without a current and appropriate state permit, license, registration, or an ARRT registered certificate to engage in the practice of radiologic technology, in a jurisdiction that mandates such requirements.

### Improper Delegation or Acceptance of a Function

12. Delegating or accepting the delegation of a radiologic technology function or any other prescribed healthcare function when the delegation or acceptance could reasonably be expected to create an unnecessary danger to a patient's life, health, or safety. Actual injury to a patient need not be established under this clause.

# Merced College

## Diagnostic Radiologic Technology Program

## Acceptance of Professional Responsibilities

For the purpose of participating in the Program as a student radiographer, I accept the responsibilities and standards of the American Registry of Radiologic Technologists, such as those listed in the Scope of Practice and Standard of Ethics.

Moreover, I understand and accept the requirements for clinical experiences and program participation, such as background checks, drug clearances, vaccinations, immunizations and CPR. I will hold current documentation of each of these clearances according to program policies at all times in order to continue in the program.

Program Participant:_____     Dated this _____ day of _____, 20 ___

Witness:_____     Dated this _____ day of _____, 20 ___

# Merced College

## Diagnostic Radiologic Technology Program

## Statement of Responsibility

For and in consideration of the benefit provided the undersigned in the form of radiographic performance and image evaluation experience of patients at affiliated clinical facilities, the undersigned and his/her heirs, successors and /or assigns do hereby covenant and agree to assume all risks of, and be solely responsible for, any injury or loss sustained by the undersigned while participating in the Diagnostic Radiologic Technology Program operated by Merced College at affiliate clinical facilities unless such injury or loss arises solely out of particular affiliate clinical facility's gross negligence or willful misconduct.

Program Participant:_____   **Dated this _____ day of _____, 20 _____**

Witness:_____   **Dated this _____ day of _____, 20 _____**

# Student Clinical Evaluations

# Student Clinical Evaluations

Vital components of clinical competency that are evaluated during the clinical training phase of the program include cognitive knowledge, psychomotor skills, and the affective domain.

Cognitive knowledge and psychomotor skills can be discerned by how well one transfers their understanding of classroom knowledge into clinical practice.

The affective area is an aspect of your behavior that can be expressed as interests, attitudes, appreciations, values, and emotional sets or biases. In other words, how do you relate with your peers, supervisors, physicians, and patients? Are your behaviors appropriate in a clinical, professional setting? If your attitudes and values are not appropriate, how can you know this and respond accordingly?

To assess a student's progression into the profession, a "Student Clinical Evaluation" will be utilized twice a semester. An example of the evaluation is provided here in this handbook on the following pages.

It is the student's responsibility to request the Clinical Preceptor submit the evaluation, to be submitted to the instructor of record by the given deadline, along with a self-evaluation "Student Clinical Evaluation". Evaluations are submitted via Trajecsys for all clinical terms. Students should plan on enough lead time to ensure submission of evaluations by the deadline dates given. Evaluations offer the student and CP the opportunity to review progress, review competencies, identify opportunities for improvement, and much more, all to help the student improve, grow and develop skills throughout the program.

**Students, an evaluation is considered incomplete if you have not signed the evaluation**. Please keep in mind that your signature does not necessarily indicate agreement with anything noted on the evaluation, rather you have read what was submitted. You are encouraged to submit comments to your evaluations via Trajecsys after you read your evaluations.

Students rotating through more than one facility during an evaluation period need to submit **at least one completed** clinical evaluation for each facility they've worked 6 working days or more during the evaluation period. Students with assignments that include multiple sites should communicate with their CPs to request evaluations if they have met this minimum attendance.

College faculty Clinical Supervisors will also be submitting evaluations accordingly in the evaluation process. The college faculty instructors' Clinical Supervisors' evaluations will be averaged for a midterm and final subtotal. The resulting subtotals will be averaged together for a final total in their category.

**A pattern of unacceptable evaluation criteria scores can lead to an unsatisfactory grade and dismissal from the program.**

## Student Clinical Evaluation

**Rate the student's performance and/or professional behavior considering the student's level of training.**

Scoring Rubric:
Poor Performance (50% or less)
Area for Improvement or Weakness (75%)
Performing at Level/Meeting Compliance (85%)
Above Average Performance (93%)
Exceptional Performance (100%)

**Student Status:**  ○ Freshman  ○ Sophomore  ○ Intern

### Performance

Demonstrating positioning skills

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Demonstrating techniquing skills

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Generating an adequate quantity of work

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Maintaining focused attention to task on hand

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Recognizes and applies routine patterns to imaging

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Completing work tasks in a timely manner (speed)

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Completing tasks with appropriate level of accuracy

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Exhibiting understanding of classroom knowledge (anatomy / general)

○ Poor Performance ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance ○ Above Average Performance
○ Exceptional Performance

Retaining information adequately

○ Poor Performance ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance ○ Above Average Performance
○ Exceptional Performance

Managing own learning performance / learns from mistakes (to include recommended lab activities)

○ Poor Performance ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance ○ Above Average Performance
○ Exceptional Performance

Complying with proper supervision for level of competency (direct / indirect supervision by qualified practitioner)

○ Poor Performance ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance ○ Above Average Performance
○ Exceptional Performance

Following instructions / Following through on assigned tasks (includes timely mandatory clinical orientation requirements)

○ Poor Performance ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance ○ Above Average Performance
○ Exceptional Performance

Goals for Student:

Comments:

## Work Habits

Taking the initiative (incl. venipunctures, OR, fluoro, trauma, XTL exams, etc.)

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Offering assistance to staff

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Maintaining and utilizing a technique book

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Logs and maintains repeat analyses adequately

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Maintaining exam logs (up-to-date; supervision notation)

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Maintaining proper medical and surgical asepsis

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Preparing and maintaining clean work stations

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Proper use / care of equipment (x-ray/fluoro, Image / IR orientation, computers, etc.)

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Providing good examples of routine exams

- ○ Poor Performance   ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance   ○ Above Average Performance
- ○ Exceptional Performance

Seeking responsible radiographic assignments (good variety)

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Providing good examples of clinical competency sign-offs

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Making adequate progress in clinical competencies

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Making adequate progress in surgical observations & surgical experience

*Select N/A only if student is at an outpatient location.*

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance   ○ N/A

Comments:

## Dependability and Responsibility

Attendance: Punctual and has regular attendance per schedule

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Dates of absences:

Appropriate notification of absence/tardiness and makeup of missed time

*Select N/A if student has never been absent or late*

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance   ○ N/A

Intern Schedule: Posting intern schedule and/or timely resolution of scheduling conflicts (with CP and CS).

*Select N/A for freshmen/sophomores. This is for interns only*

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance   ○ N/A

Logs: attendance. absences / makeup time, etc. in clinical handbook/Trajecsys, incl. orderliness and minimal errors.

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Effective written communication skills (incl. email, PACs notations, etc.)

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Comments:

## Self-Confidence

Maintaining a positive attitude

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Instilling confidence in patients

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Working independently when appropriate

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Displaying appropriate level of confidence

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Demonstrating the ability to adapt to new situations

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Making adequate progress in skills for level of training

○ Poor Performance   ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance   ○ Above Average Performance
○ Exceptional Performance

Establishing good rapport with staff/radiologists (respectfulness, etc.)

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Comments:

## Responsible Judgement

In an emergency situation

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance  ○ N/A

Utilizing fluoroscopy appropriately.

*Select N/A if your facility does not have fluoroscopy services.*

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance  ○ N/A

Demonstrates appropriate pre-exposure collimation

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

- When moving difficult and/or injured patients

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Proper use and/or placement of RT & LT markers

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

In organizing sequence of workload tasks / workflow

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

By demonstrating problem solving / critical thinking skills

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

Employing radiation protection measures for all parties (ALARA)

○ Poor Performance  ○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance  ○ Above Average Performance
○ Exceptional Performance

By keeping exposure index number within appropriate range (S#, REX#, etc)

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance

By reporting equipment, patient, and staffing events in a timely and accurate manner

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance ○ N/A

Comments:

## Proper Patient Interaction

Projecting voice adequately

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance

Respecting patient's dignity, modesty, and comfort

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance

Using easy to follow instructions or explanations

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance

Establishing good patient rapport in a timely manner

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance

Communicating in a professional manner and within scope of practice

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance

Addressing patient by name and/or checking ID bracelet and/or birth date

- ○ Poor Performance ○ Area for Improvement or Weakness
- ○ Performing at Level / Meeting Compliance ○ Above Average Performance
- ○ Exceptional Performance

## Diplomacy

Accepting constructive criticism

○ Poor Performance　○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance　○ Above Average Performance
○ Exceptional Performance

Observing rules and regulations (includes being available for site visitations, etc.)

○ Poor Performance　○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance　○ Above Average Performance
○ Exceptional Performance

Exhibits professional demeanor (no gum chewing or inappropriate language, etc.)

○ Poor Performance　○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance　○ Above Average Performance
○ Exceptional Performance

Comments:

## Adherence to Dress Code and Personal Cleanliness

Professional appearance (ex: uniform, no distracting body art)

○ Poor Performance　○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance　○ Above Average Performance
○ Exceptional Performance

Maintaining good body hygiene (ex: fingernail policy)

○ Poor Performance　○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance　○ Above Average Performance
○ Exceptional Performance

Wearing name and dosimetry badges (mark down for forgetting or losing)

○ Poor Performance　○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance　○ Above Average Performance
○ Exceptional Performance

Exhibiting proper PPE use and hand hygiene (e.g., mask, gel in/gel out, cleansing, glove use)

○ Poor Performance　○ Area for Improvement or Weakness
○ Performing at Level / Meeting Compliance　○ Above Average Performance
○ Exceptional Performance

Comments:

Summary:

**Grading Note to Students:**

OVERALL EVALUATION: Accumulated Total Grade Points Received

98.5 - 100 = A+ = 30 points

95.5 - 98.4 = A = 28 points

92.5 - 95.4 = A- = 26 points

89.5 - 92.4 = B+ = 24 points

86.5 - 89.4 = B = 22 points

83.5 - 86.4 = B- = 20 points

80.5 - 83.4 = C+ = 18 points

77.5 - 80.4 = C = 16 points

75 - 77.4 = C- = 14 points

Below = 0 points

● Enter

**Student Signature:** Student may add signature and comments by attaching a post-submission comment. To do so, student logs in using his/her user name and password. Then, go to Reports/Completed Evaluations. Select the evaluation template and hit apply; click View Details (looks like a folder at right of screen). Click on the plus sign (+) at the bottom next to Add Comment. Student will see a dropdown menu of all items on the evaluation; scroll down the list of items and select the Student Signature item.

● Enter

# Clinical Competency Evaluations

# CLINICAL COMPETENCY EVALUATIONS

The intent of the clinical competency process, as outlined in the Diagnostic Radiologic Technology Program's *Clinical Handbook,* is to provide a reliable mechanism through which a student's clinical competency is verified and legally documented.

One of the major ways that the student's clinical on-the-job or psychomotor skills will be assessed is through the use of the Clinical Competency Evaluations.

These evaluations are divided into the following initial core competency categories:

1. Abdomen
2. Chest & Thorax
3. Extremities - Lower
4. Extremities - Upper
5. Extremities - Trauma
6. Fluoroscopy Studies
7. Head
8. Mobile & Surgical Studies
9. Spine & Pelvis
10. Pediatrics (age 6 or younger)
11. Geriatrics (physically or cognitively impaired as a result of aging)

Each category is subdivided into an essential number of procedures in which the student should become proficient by the completion of the program. Some exams are considered mandatory and others are electives. Students must demonstrate competency in **ALL** the **mandatory** radiologic procedures.

Students must demonstrate competency in at least 15 of the 30 **elective** radiographic procedures. **Elective** radiologic procedures are found shaded in the following Initial Clinical Competency pages.

Continued competency: In order to assure students maintain proficiency throughout the Program, a re-evaluation of all 40 mandatory radiographic procedures must be completed during the **Final Clinical Competency** phase of the program, which includes three mandatory "electives" procedures.

A student's grade in the clinical phase of the program will be objectively calculated utilizing a point system that correlates weighted values to those factors we feel are important in assessing student development into competent, responsible Radiographers. This evaluation tool, entitled "Clinical Grade" serves as a cumulative report of the student's clinical performance.

## Clinical Competency Process

After the student has begun the second semester of training, beginning proficiencies in executing an entire diagnostic procedure will be required. When the student feels that she/he is able to perform a formally studied procedure *"independently"* with minimal error, she/he should approach the designated, qualified supervising radiologic technologist and request that the radiographic procedure be observed for competency evaluation involving a "live" patient. If all qualified evaluators are occupied, the student must accept this and try for another time. During the competency evaluation, the evaluator will observe the student perform the exam in an unobtrusive manner, unless the evaluator sees an immediate or serious danger to the patient. Patient care will always be the first priority.

**All clinical competencies must be documented in Trajecsys by the supervising radiologic technologist who watched the exam on the same day as they are performed.**

**Students should track their progress.**

**Only CRTs with 2 yrs or more professional experience may grant competencies. In addition, they are verified by the Clinical Preceptor(s).
A CRT is someone who holds current certification as a radiologic technologist by the CDPH-RHB.**

It is anticipated that prior to requesting evaluation for a competency a student would have been involved in a number of similar radiographic procedures. This number is relative to how fast a student can grasp the essence of how to *"independently"* perform a specific radiographic procedure. Additionally, students must have already received didactic instructions on any particular procedure hoping to get a sign-off.

Successful competency evaluation of a procedure allows the student to proceed to another procedure and eventually complete all the Initial Clinical Competency requirements. As an approximate benchmark, the student should be able to demonstrate 90% accuracy for all aspects of a procedure. Failure of any particular procedure requires that the student remain under **direct supervision** while performing that particular procedure until independent competency is demonstrated and documented. Once the competency is demonstrated, approved, and documented the student may perform that exam under **indirect supervision**. See Definitions in this Handbook and/or RT Student Policy & Procedures Handbook for detailed Supervision Policies.

Students may obtain more than one competency on the same patient. However, they are strongly encouraged to demonstrate continued competency-level abilities on a variety and diversity of patients, health conditions, scenarios, equipment, etc. once a competency is obtained.

If within a procedure, one or potentially two clinical competency procedures can be considered for a sign-off, the following conditions must be met:

1. The intended sign-off must be a procedure that is not routinely seen or ordered at that particular facility. For example, if "Pelvis" procedures are few and far between, a student could get a "Pelvis" sign-off while completing a "Hip" procedure if the "Hip procedure includes an AP Pelvis".
2. If the facility routinely gets orders for "Pelvis" and "Hip" procedures, use this opportunity to have a varied experience and complete the two sign-offs on two different patients.
3. Each sign-off must be complete according to the Program's *Radiographic Protocol for Sign-Offs* without double counting any views. Each view can only be attributed to one sign-off (no overlapping/sharing views to complete a procedure for a sign-off).

**Competencies verified in any manner other than what was previously listed should not be granted by technologists or preceptors.** They are at risk of being disqualified by the discretion of preceptors or program faculty upon review. If disqualification of a competency results in an unsatisfactory grade for the respective clinical course, the student will be dismissed from the Program. Clinic competency sign-offs will be randomly reviewed for quality control purposes by a college Clinic Supervisor ("Portfolio Review") and the radiographic images produced by the student for a particular competency sign-off will be reviewed. If found lacking in quality, this competency sign-off may be disqualified. Keep in mind that procedures used for competency sign-offs should be considered a reflection of your work, a portfolio of your capabilities.

# Complete Exams and Simulations for Competencies

Unless specified, no credit will be awarded for limited studies, unless that is how the *Radiographic Protocol for Sign-Offs* is listed. No competencies are awarded for unlisted studies.

*Incompletion of required clinical procedures for a particular semester will result in **minus 5 points per incomplete clinical competency procedure**. If the decrease in possible points accrued (due to lack of completed clinical procedures) for a particular semester results in an overall grade below passing (D or F), then the student will receive a failing grade which will result in dismissal from the program. If the student receives a passing grade, in spite of the reduction in possible points, any incomplete clinical procedure(s) will be added to the subsequent course's required clinical competency course objectives.

The views required by the Program for all radiographic clinical competencies are listed in the *Radiographic Protocol for Sign-Offs*. The Program exam protocols are standardized for Program participants and may differ from a clinical site's routine views.

In the case that a site's protocol for radiographic views is different than the Program's requirement, the student will perform the site's routine to demonstrate competency in the clinical setting, and then the student will report to the RT laboratory to simulate the remaining required views for the Program. The RT laboratory may supplement clinical competencies via simulation of additional images and skills demonstration for RT instructors. Simulations will be on a limited basis, i.e., to complete required overhead images after fluoroscopy portion is performed in clinical setting. If a clinic allows the student to include non-routine views (ex: "Sunrise" for knee exam) to obtain a competency sign-off without having to do a simulation in the lab, that's OK as long as they had permission to do so before completing the extra view. If a student is assigned to two facilities for their rotation (i.e. intern), then a competency procedure should be completed in the facility that has the most complete procedure protocol.

For example, if your facility doesn't require all the views listed, you complete the study in the lab, much like a practical is done. In that case, when the technologist is documenting an Initial Competency in Trajecsys, they shall report exactly how many of the required views were performed by the student and evaluated by the supervising radiographer. When there are views left to be evaluated, the student needs to complete the remaining views in the MC lab. Both parts of the competency evaluation will be entered into Trajecsys separately for a complete evaluation of the procedure.

Students are responsible for knowing which views are required by the Program. Come to lab promptly to complete the comp; you have two weeks from the first part to complete the second part. Points may be deducted on your evaluations for not making adequate progress in completing any simulations associated with a sign-off (within two weeks from getting sign-off).

All simulations require a written simulation brief filled out by the student and signed by the IOR. A previously completed "Initial" simulation brief may be used for a "Final" simulation brief but only if it is on-hand to provide the reference when seeking the "Final" sign-off. If you have any questions about this process, don't hesitate to ask.

Faculty will review the completed sign-offs to verify all sign-offs were correctly completed during portfolio reviews and when grading the handbooks.

# Having Difficulties Obtaining Competencies?

If a student is having difficulty completing the required clinical procedures, it is their responsibility to communicate their concerns with their Preceptor, followed by notifying the Program Director or Clinical Coordinator in a **timely manner**, so that their predicament can be addressed.

If need be, special arrangements can be considered before it gets too late into the semester to appropriately address the issue.

If students wish to practice radiographs on an x-ray phantom, the following guidelines should be followed:
1. Attend Open Skills Lab
2. Checking out phantom body parts may be possible with CC or PD permission, at their discretion, on a limited basis, particularly if lab access is restricted. Phantom body parts are very expensive, fragile, and need to be available on campus for instructional purposes.
   a. Plan on staying after clinical assignment hours to practice on the phantom body parts;
   b. May be able to practice on phantom body parts during clinical assignment hours with the C.P.'s or lead technologist's permission;
   c. If a Clinical Supervisor (MC Faculty) is present, he/she is there to evaluate students. The Clinical Supervisor and patient service are the first priorities, not practicing on the phantom body parts;
3. Points may be deducted on the evaluation form or Clinical Grade for not following these instructions. When in doubt, ask program faculty for clarification.

## RECOMMENDED SKILLS LAB PRACTICE

**Instructions:** If in the judgment of a CRT, a student needs remediation in completing specific position(s), projection(s) or entire procedure(s), recommend they attend Open Skills Lab to practice what they're lacking.

Clinical Preceptors and Clinical Supervisors submit this recommendation in Trajecsys. In Trajecsys, access Evaluations and select Recommended Skills Practice. Enter information for the OSL instructors and student; both receive an email notification from Trajecsys.

Please include detailed information on the skill area to be practiced.

**Examples:** L-Spine: Lat & Obls   or   Lead Marker Placement   or   Manual Technique

Students will have two weeks to complete the Recommended Skills Lab Practice with the OSL instructors. If this recommendation comes less than two weeks from the end of the term, it will be rolled over into the next term, assuming the student passes the course. The student must make contact with their instructor to arrange this end-of-term extension.

*Failure to complete this assignment will result in loss of 5 points due to incomplete handbook (see Clinical Grading).*

## REPEAT IMAGE ANALYSIS GUIDELINES

Careful analysis of repeated images/exposures is a valuable aid in identifying the student's understanding of the radiographic process. Ultimately, significant reductions in patient dose, student radiographer time and effort and supply costs can be achieved with properly executed repeat image/exposure analysis. A comprehensive repeat image analysis involves a careful study of one's repeats, regardless of the cause. Any image outside the acceptance limits and scrapped exposures should be included in the study. Think of it as a constructive analysis to improve quality control, to point out areas where further technical training may be helpful or to identify the progress being made.

Make sure to log all repeats attributed to you on your *Daily Record of Clinical Exams* and complete the *Repeat Summary & Analysis* form accordingly. These two entries should match and repeats are reported in Trajecsys logs as well. Don't count on remembering the details of the circumstances; note them at the end of the procedure. These forms are used for documentation purposes to ensure we abide by ALARA standards.

If you are found to be in non-compliance with these (or any other) guidelines, your clinical evaluation grade will be affected. Disregard of these guidelines may be cause for serious discipline including program dismissal for falsifying patient records. It's like a patient's chart. If an error is noted, you draw a line through the error; you don't erase it or delete it.

# CRITERIA FOR CLINICAL COMPETENCY EVALUATIONS

I. **Procedure**

A. Patient Assessment & Management Skills
1. evaluate the examination order correctly
2. assess the patient's condition appropriate
3. verify patient identification (2 identifiers)
4. demonstrate proper room preparation
5. apply patient management skills

B. Positioning Skills - student was able to:
1. position the patient correctly on the table (head at the appropriate end, prone or supine)
2. center of part to be demonstrated
3. alignment of CR to the center of the IR
4. oblique patient correctly if required
5. remove unwanted anatomical parts from FOV

C. Equipment Operation / Facility Readiness - student was able to:
1. select proper IR size and FOV
2. orient IR properly
3. turn tube from horizontal to vertical (and vice versa)
4. move bucky tray, utilize IR positioning holders & locks
5. identify and utilize tube locks
6. set the correct SID
7. handle IR and grid correctly
8. fill syringes, set up sterile field using aseptic technique
9. direct mobile unit
10. operate controls for mobile unit
11. process the image correctly

D. Technique Selection – student was able to:
1. measure or assess the patient correctly
2. use a technique chart / panel
3. adapt for technique changes in SID, grid ratio, collimation, patient, etc.
4. select proper factors on the control panel

II. **Image Acquisition & Evaluation**

A. Tube-Part-Image Alignment
   Radiographs demonstrate:
1. anatomical part(s)
   a. no motion is present
   b. part is shown in proper prospective
2. proper alignment
   a. IR, part, tube centered
   b. patient obliqued or rotated correctly

B. Receptor Exposure, Spatial Resolution, Distortion
   Radiographs indicate:
1. technique chart / panel was used correctly
2. correct exposure to produce image (EI in proper range)
3. compensation for pathological factors is apparent

C. Radiographic Identification - Images demonstrate:
1. *visible "R" & "L" lead anatomical markers in correct location*
2. appropriate annotation (time, distance, pt position)
3. patient information and date can be identified

III. **Radiation Safety** – student was able to:

A. **REPEATS** ☒  Perform Procedure with minimal (1 repeat) or no repeats
B. Exposure Index (EI) or Deviation Index (DI) number was within proper range
C. Demonstrate appropriate radiation protection for patient, self and others
D. Demonstrate appropriate pre-exposure collimation (*post-exposure shuttering/cropping of the image is not allowed for student radiographers*)

IV. **Definitions**

A. **Documentation:** Clinical Competency Handbook, Trajecsys records, exam forms, time sheets, student information update documents (CPR, TB, etc.), repeat analysis forms, intern schedule & technique book are required to be on site and up-to-date in the event of unscheduled site visitation from the RHB, JRCERT, TJC or a Clinical Supervisor.

B. **Orthopedic Procedure:** Any procedure of the upper or lower extremities.

C. **Shuttering/Cropping:** Post-processing application which allows black frame to be added over *original collimation edges*. Should only be used to enhance image viewing and not as a replacement for proper pre-exposure collimation. Cropping does not change amount of scatter produced. There is no substitute for pre-exposure collimation because collimation controls scatter, thus improving image quality and reducing patient exposure.

Shuttering (masking) should only be applied *outside* collimated FOV border, thus providing documentation that prudent judgment was used in beam restriction as per ALARA.

D. **Supervision**
1. **Direct Supervision** as defined by the JRCERT
   *"Student supervision under the following parameters":A qualified radiographer" . . . . . . "reviews the procedure in relation to the student's achievement." . . . "evaluates the condition of the patient in relation to the student's knowledge." . . . "is present during the conduct of the procedure." . . . "reviews and approves the procedure."*

2. **Indirect Supervision** as defined the JRCERT
   *"For radiography, that supervision provided by a qualified radiographer immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the physical presence of a qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use."*

E. **Trauma:** Trauma is considered a serious injury or shock to a body part in which modifications in positioning, (minimize movement of body part with corresponding compensation in tube angle, etc.), and monitoring of the patient's condition are required to complete the procedure. If a trauma patient is capable of assuming routine positions, this is not considered a "trauma" competency. From the ARRT definition.
   Note Upper Extremity Trauma (non-shoulder) simulation restrictions: Scapula, Elbow to incl. frozen elbow and Coyle views, or Humerus to incl. transthoracic & distal lateral patch.

F. **Geriatric Patient:** the patient is physically or cognitively impaired as a result of aging. Mature age without impairment is not accepted for purpose of these competencies. Students are demonstrating skills working with this type of patient. From the ARRT definition

MERCED COLLEGE
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# RADIOGRAPHIC PROTOCOLS FOR CLINICAL COMPETENCY SIGN-OFFS

**Abdomen Decubitus or Upright: 1 view**

**Abdomen Supine: 1 view**

- AP Supine Abdomen

**AC Joints: min 2 views**

- PA/AP Bilateral w/o weights
- PA/AP Bilateral w/weights

**Ankle: min 3 views**

- AP Ankle
- Medial Oblique
- Mediolateral Lateral

**Arthrogram**

- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*
- Must have corresponding part signed-off already

**Calcaneus: min 2 views**

- AP Axial
- Mediolateral Lateral

**Cervical Spine: min 5 views**

- AP Axial
- AP Odontoid
- Lateral
- Both Obliques (PA preferred)
- Swimmer's and Fuchs as needed

**Chest AP (Stretcher or Wheelchair): 1 view**

**Chest Routine: 2 views**

- PA and Left Lateral

**Chest Lateral Decubitus: 1 view**

**Clavicle: min 2 views**

- PA/AP
- PA/AP Axial

**Contrast Enema – single contrast: min 5 views**

- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*
- AP Abdomen
- RPO and LPO Abdomen
- Left Lateral Rectum
- AP/PA Axial Sigmoid
- Post-Evac AP Abdomen
- Post-Evac Lat Rectum

**Contrast Enema – Double Contrast: min 9 views**

- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*
- AP Abdomen
- RPO and LPO Abdomen
- Left Lateral Rectum
- AP/PA Axial Sigmoid
- Post-Evac AP Abdomen
- Post-Evac Lat Rectum
- Left and Right Lateral Decubs

**Cross-Table Lateral Spine: 1 view**
- Any level spine with patient recumbent and beam is horizontal

**Cross-Table Lateral Hip: 1 view**
- Lateral Hip with patient recumbent and beam is horizontal

**Cystography or Cystourethrography**
- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*

**Elbow: min 3 views**
- AP
- AP Medial and/or Lateral Oblique
- Lateromedial Lateral

**ERCP**
- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*

**Esophagus: min 3 views**
- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*
- PA/AP Esophagus
- RAO Esophagus
- Rt Lateral Esophagus
- *Cannot be a swallowing dysfunction study*

**Facial Bones: min 4 views**
- PA Axial (Caldwell)
- Parietoacanthial (Waters)
- Lateral
- Townes

**Femur: 2 views**
- AP
- Mediolateral Lateral
- *Must include both joints on both views; may patch as necessary*

**Finger or Thumb: 3 views**
- PA Finger/Hand or AP Thumb, Oblique and Lateral

**Foot: 3 views**
- AP
- Medial Oblique
- Mediolateral Lateral

**Forearm: 2 views**
- AP
- Lateromedial Lateral

**Geriatric Patient Exams**
- *At least 65 years old and physically or cognitively impaired as a result of aging*
- *Exam views are same as the routine, complete exams*
- Chest Routine
- Upper or Lower Extremity
- Hip or Spine

**Hand: 3 views**
- PA, Oblique and Lateral

**Hip: min 3 views**
- AP Pelvis
- AP unilateral
- Lateral unilateral

**Humerus: min 2 views**
- AP and Lateral

**Hysterosalpingography**
- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*

**Intravenous Urography: min 6 views**
- Scout
- Nephrogram
- AP Abdomen
- RPO and LPO
- Bladder Shot
- Post-Void AP/PA Erect

**Knee: min 4 views**
- AP Axial
- Intercondyloid Fossa
- Medial Oblique or Sunrise
- Mediolateral Lateral

**Lumbar Spine: min 5 views**
- AP
- Both Obliques
- Left Lateral
- L5-S1 Spot

**Mandible: min 4 views**

- PA/AP
- AP/PA Axial – modified Towne
- Bilateral Axiolateral Obliques

**Mobile C-Arm Exams**

- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*
- Set-up, manipulate, break-down, send images and dose report to PACS
- C-Arm Procedure requiring manipulation around a sterile field
- C-Arm Procedure requiring manipulation to obtain more than one projection

**Mobile Radiographic Exams**

- Chest: min 1 view
- Upper or Lower Extremity: 2-3 views
- AP Abdomen: 1 view

**Myelography**

- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*
- XTL of Exam Body Part/AOI

**Nasal Bones: 3 views**

- Parietoacanthial (Waters)
- Both Laterals

**Orbits: min 3 views**

- Parietoacanthial (Waters)
- Both Parietoorbital Oblique (Rhese)
- Lateral

**Paranasal Sinuses: min 4 views**

- *Use horizontal beam*
- PA Axial (Caldwell)
- Parietoacanthial (Waters)
- Lateral
- Submentovertical (SMV)

**Patella: 3 views**

- PA/AP
- Lateral
- Axial (Sunrise)

**Pediatric Exams**

- *Age 6 or younger*
- *Exam views are same as the routine, complete exams*
- Chest Routine
- Upper or Lower Extremity
- Abdomen
- Mobile Study

**Pelvis: 1 view**

- AP

**Ribs: min 4-5 views**

- PA Chest (optional)
- AP/PA Unilateral or Bilateral Ribs
- RAO/LAO Unilateral or Bilateral Ribs
- RPO/LPO Unilateral or Bilateral Ribs
- Below Diaphragm

**Sacroiliac Joints: min 3 views**

- AP Axial
- RPO or LAO
- LPO or RAO

**Sacrum and/or Coccyx: 3 views**

- AP Axial Sacrum
- AP Axial Coccyx
- Lateral Sacrum/Coccyx

**Scapula: 2 views**

- AP and Lateral

**Scoliosis Series: min 1 view**

- AP/PA

**Shoulder: min 3 views**

- AP (Internal/External/Neutral count for 1 only)
- AP Oblique - Grashey
- Axial
- Scapular Y

**Skull: min 4 views**

- PA/AP (modified)
- AP Axial (Towne)
- Both Laterals

**Small Bowel Series: All views/complete study**

- *Student is the Key Operator in the procedure.*
- *Student takes all views/completes the study.*
- Scout KUB
- AP/PA Abdomen – 15 min
- AP/PA Abdomen – 30 min
- AP/PA Abdomen – 45 min
- AP/PA Abdomen – 60 min
  - *Times may vary*

**Sternoclavicular Joints: min 2 views**

- Both PA Obliques – RAO and LAO

**Sternum: min 2 views**

- RAO
- Lateral

**Temporomandibular Joints: min 3 views**

- AP Axial – modified Towne
- Bilateral Axiolateral Obliques

**Thoracic Spine: min 3 views**

- AP
- Lateral
- Swimmer's

**Tibia-Fibula: 2 views**

- AP
- Mediolateral Lateral

**Toe(s): min 3 views**

- AP Axial Foot (Toes)
- AP Oblique Toe(s)
- Lateral Toe(s)

**Trauma Exams**

- Shoulder or Humerus
  - Scapular Y or Transthoracic or Axial
- Lower Extremity
  - AP/PA and Lateral
- Upper Extremity (Non-Shoulder)
  - AP and Lateral

**Upper Airway (Soft-Tissue Neck): min 2 views**

- AP
- Lateral

**Upper G.I. Series: min 3 views**

- *Fluoroscopy Portion in the Clinical Setting with student the Key Operator in the Procedure*
- AP/PA Stomach
- RT Lat Stomach
- RAO/LPO Stomach

**Wrist: min 4 views**

- PA
- PA Oblique
- Lateral
- Scaphoid

# Initial Clinical Competencies

# I.    INITIAL CLINICAL COMPETENCY REQUIREMENTS

The clinical competency requirements in the first phase are divided into ten major categories. The procedures in these categories will be known as **"Initial"** Clinical Competency Requirements and include mandatory and elective radiographic procedures.

1. Abdomen
2. Chest & Thorax
3. Extremities: Lower

4. Extremities: Upper
5. Extremities: Trauma
6. Fluoroscopy Studies

7. Head
8. Mobile & Surgical Studies
9. Spine & Pelvis

10. Pediatrics (age 6 or younger)
11. Geriatric Patient (physically or cognitively impaired as a result of aging)

A minimum of thirty-seven (37) mandatory and fifteen (15) elective imaging procedure competencies must be completed by the end of the fifth semester, with a specified number to be completed by the end of each semester/session. The minimum number of Initial Clinical Competency Requirements to be completed each semester/session are as follows.

RADT-12B . . . . . . .2<sup>nd</sup> semester . . . . . Spring . . . . .10 minimum Initial Competency Requirements – maximum Grand Total - 14

RADT-14B . . . . . .3<sup>rd</sup> semester . . . . . Summer . . . 10 minimum Initial Competency Requirements – maximum Grand Total - 26

RADT-15B . . . . . .4<sup>th</sup> semester . . . . . Fall . . . . . . . 15 minimum Initial Competency Requirements – maximum Grand Total - 42

RADT-16B . . . . . .5<sup>th</sup> semester . . . . . Spring . . . . . 17 minimum Initial Competency Requirements – maximum Grand Total - 52

If a student completes more than the minimal number of Initial Clinical Competency Requirements in any semester, the number over the minimum ("carry-overs") will count toward the minimal total for the following semester - but never more than the maximum grand total listed.

Grading Notes: Five (5) points will be deducted for <u>each</u> incomplete clinical competency procedure requirement as previously listed. Points may also be deducted for exceeding maximum allowances per semester. RADT-12B Requirement: Students are assigned to obtain a Chest Routine competency this term. *10 points will be deducted from HB grade for failure to meet this requirement.*

**Students: Use the Clinical Competency Tracker to track your progress in clinic.**

# "INITIAL" Clinical Competency Tracker
## MANDATORY EXAMS

Name:

*Instructions for students: Track your competencies obtained as they are documented in Trajecsys. Use facility codes only.*
*For further information, refer to Criteria for Clinical Competency Evaluations and Radiographic Protocols for Clinical Competency Sign-offs on prior pages of this handbook.*

| Abdomen | Sem/Yr./ Facility Code | Date | MR# | Chest & Thorax | Sem/Yr./ Facility Code | Date | MR# | Extremities: TRAUMA | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Abdomen (Supine) | | | | Chest Routine | | | | Trauma: Lower Extremity | | | |
| Abdomen (Upright) | | | | Chest AP (wheelchair or stretcher) | | | | Trauma: Upper Extremity (non-shoulder) | | | |
| | | | | Ribs | | | | Trauma: Shoulder or Humerus (Y view, Transthoracic or Axillary) | | | |

| Extremities: LOWER | Sem/Yr./ Facility Code | Date | MR# | Extremities: UPPER | Sem/Yr./ Facility Code | Date | MR# | Spine & Pelvis | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ankle | | | | Elbow | | | | C-Spine | | | |
| Femur | | | | Finger or Thumb | | | | Hip | | | |
| Foot | | | | Forearm | | | | Cross-table Lateral Hip | | | |
| Knee | | | | Hand | | | | L-Spine | | | |
| Tib/Fib | | | | Humerus | | | | Pelvis | | | |
| | | | | Shoulder | | | | T-Spine | | | |
| | | | | Wrist | | | | Cross-table Lateral Spine | | | |
| | | | | Clavicle | | | | | | | |

| Mobile C-Arm Studies | Sem/Yr./ Facility Code | Date | MR# | Geriatric Patient | Sem/Yr./ Facility Code | Date | MR# | Pediatric Patient | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C-Arm Procedure | | | | Chest (routine) | | | | Chest Routine | | | |
| C-Arm Procedure - Surgical | | | | Upper or Lower Extremity | | | | | | | |
| | | | | Hip or Spine (circle one) | | | | | | | |

| Mobile Studies | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|
| Abdomen | | | |
| Chest | | | |
| Upper or Lower Extremity | | | |

## ELECTIVE EXAMS                                                Name:

*Instructions for students: Track your competencies obtained as they are documented in Trajecsys. Use facility codes only.*
*For further information, refer to Criteria for Clinical Competency Evaluations and Radiographic Protocols for Clinical Competency Sign-offs on prior pages of this handbook.*

| Abdomen | Sem/Yr./ Facility Code | Date | MR# | Chest & Thorax | Sem/Yr./ Facility Code | Date | MR# | Extremities: TRAUMA | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Abdomen Decubitus | | | | Lateral Decub | | | | *No electives.* | | | |
| Intravenous Urography | | | | Sternum | | | | | | | |
| Small Bowel Series | | | | Upper Airway (soft-tissue neck) | | | | | | | |
| | | | | Sternoclavicular Joints | | | | | | | |

| Extremities: LOWER | Sem/Yr./ Facility Code | Date | MR# | Extremities: UPPER | Sem/Yr./ Facility Code | Date | MR# | Spine & Pelvis | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Toes | | | | Scapula | | | | Sacrum and/or Coccyx | | | |
| Patella | | | | AC Joints | | | | Scoliosis Series | | | |
| Calcaneus | | | | | | | | Sacroiliac Joints | | | |

| Fluoroscopy Studies | Sem/Yr./ Facility Code | Date | MR# | Head | Sem/Yr./ Facility Code | Date | MR# | Pediatric Patient | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *Must have contrast enema or UGI plus at least one Fluoro Elective.* | | | | *Must have at least one Head Elective.* | | | | Upper or Lower Extremity | | | |
| Contrast Enema | | | | Head Elective: *List:* | | | | Abdomen (Supine) | | | |
| UGI | | | | | | | | Mobile Study | | | |
| Fluoro Elective *List:* | | | | | | | | | | | |
| | | | | | | | | | | | |

# Final Clinical Competencies

## II.   FINAL CLINICAL COMPETENCY REQUIREMENTS

The clinical competency requirements in the second phase of evaluation are called "Final Clinical Competencies," and are completed by the student during the last Summer session and Fall semester of the clinical internship.

In order to assure students maintain proficiency throughout the Program, a re-evaluation of all 40 mandatory radiographic procedures must be completed during the Final Clinical Competency phase of the program, which includes three mandatory "electives" procedures.

RADT-17B      6th semester . . Summer      16 minimum Final Clinical Competency Procedures – maximum Grand Total of **20**

RADT-18B      7th semester . . . .Fall      24 minimum Final Clinical Competency Procedures – maximum Grand Total of **40**

These objectives MUST be completed during the semester indicated.  Only four (4) clinical competencies can be carried over to the Fall semester.

Grading Notes:  Five (5) points will be deducted for each incomplete clinical competency procedure requirement as previously listed. Points may also be deducted for exceeding maximum allowances per semester.

**Students: Use the Clinical Competency Tracker to track your progress in clinic.**

# "FINAL" Clinical Competency Tracker
## MANDATORY EXAMS

Name:

*Instructions for students: Track your competencies obtained as they are documented in Trajecsys. Use facility codes only.*
*For further information, refer to Criteria for Clinical Competency Evaluations and Radiographic Protocols for Clinical Competency Sign-offs on prior pages of this handbook.*

| Abdomen | Sem/Yr./ Facility Code | Date | MR# | Chest & Thorax | Sem/Yr./ Facility Code | Date | MR# | Extremities: TRAUMA | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Abdomen (Supine) | | | | Chest Routine | | | | Trauma: Lower Extremity | | | |
| Abdomen (Upright) | | | | Chest AP (wheelchair or stretcher) | | | | Trauma: Upper Extremity (non-shoulder) | | | |
| | | | | Ribs | | | | Trauma: Shoulder or Humerus (Y view, Transthoracic or Axillary) | | | |

| Extremities: LOWER | Sem/Yr./ Facility Code | Date | MR# | Extremities: UPPER | Sem/Yr./ Facility Code | Date | MR# | Spine & Pelvis | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Ankle | | | | Elbow | | | | C-Spine | | | |
| Femur | | | | Finger or Thumb | | | | Hip | | | |
| Foot | | | | Forearm | | | | Cross-table Lateral Hip | | | |
| Knee | | | | Hand | | | | L-Spine | | | |
| Tib/Fib | | | | Humerus | | | | Pelvis | | | |
| | | | | Shoulder | | | | T-Spine | | | |
| | | | | Wrist | | | | Cross-table Lateral Spine | | | |
| | | | | Clavicle | | | | | | | |

| Mobile C-Arm Studies | Sem/Yr./ Facility Code | Date | MR# | Geriatric Patient | Sem/Yr./ Facility Code | Date | MR# | Pediatric Patient | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|---|---|---|---|
| C-Arm Procedure | | | | Chest (routine) | | | | Chest Routine | | | |
| C-Arm Procedure - Surgical | | | | Upper or Lower Extremity | | | | | | | |
| | | | | Hip or Spine *(circle one)* | | | | | | | |

| Mobile Studies | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|
| Abdomen | | | |
| Chest | | | |
| Upper or Lower Extremity | | | |

## ELECTIVE EXAMS

Name:

*Instructions for students: Track your competencies obtained as they are documented in Trajecsys. Use facility codes only.*
*For further information, refer to Criteria for Clinical Competency Evaluations and Radiographic Protocols for Clinical Competency Sign-offs on prior pages of this handbook.*

| Fluoroscopy Studies | Sem/Yr./ Facility Code | Date | MR# | Head | Sem/Yr./ Facility Code | Date | MR# |
|---|---|---|---|---|---|---|---|
| *Must have contrast enema or UGI plus one Fluoro Elective.* | | | | *Must have one Head Elective.* | | | |
| Contrast Enema or UGI | | | | Head Elective: *List:* | | | |
| Fluoro Elective *List:* | | | | | | | |

# Clinical Grading Criteria

# CLINICAL GRADING

All RT Program clinical courses are graded by the same criteria, using the same categories, as follow.
The intent of this scoring method is to objectively arrive at an overall clinical grade for each semester by utilizing a point system
that correlates weighted values to those factors we feel are important in assisting students to become competent, responsible Radiographers.

All scoring will be entered on Canvas for grade calculations.

Categories are described under "Clinical Grading Criteria", along with expectations and penalties.
Additional tips are provided to students on the following page.

| CLINICAL GRADING CATEGORIES | Points Possible |
|---|---|
| I.  COLLEGE SUPERVISION EVALUATION | 30 |
| II.  STUDENT CLINICAL EVALUATION | 30 |
| III.  CLINICAL ASSIGNMENTS / HANDBOOK | 30 |
| IV.  DOCUMENTATION RECORDS | 2.5 |
| V.  RESOURCES | 2.5 |
| VI.  STUDENT INFORMATION UPDATES & PROCESSING | 5 |
| OVERALL CLINICAL COURSE POINTS | |
| COURSE GRADE | |

## CLINICAL GRADING SCALE

A = 93 - 100%        B = 84 - 92%        C = 75 - 83%        D = 68 - 74%        67% or below = F

# CLINICAL GRADING CRITERIA

I.   **COLLEGE SUPERVISION EVALUATION:** College faculty Clinical Supervisors confer on each student's progress as observed during clinical supervision visitations. Mid and final evaluations are completed by C.S.s and averaged to derive the College Supervisors' grade.

II.  **STUDENT CLINICAL EVALUATION:** Completed by Clinical Preceptors are used to derive the point value in this category.

*For both sections I and II, 2 pts will automatically be deducted from total score for: Late evaluation or Missing/Late student signature with comments in Trajecsys, or Students' being unavailable for a scheduled visit. Additional points may be deducted at the IOR's discretion.*

III. **CLINICAL ASSIGNMENTS (HANDBOOK):** A student's "Clinical Handbook" (including associated clinical assignments) must be submitted for grading on time according to the Instructor of Record (IOR) (typically during finals week or week before) to receive full credit in this category. Students will submit a "Skills Summary" to document clinical competencies obtained during the semester for demonstration of reaching course objectives. Student is responsible for making up any missing competencies from the previous semester, as well as completing the required amount for the current semester objectives.

*For this section, 5 pts will automatically be deducted from total score for: Each missing or incomplete competency below course objective, or tardy or incomplete assignment submissions, or failure to complete a recommended skills practice in time frame required. Handbooks and associated records must be orderly, without errors and complete or pts will be deducted at IOR's discretion. Penalties related to clinical attendance (logs, tardies, absences, etc.) will be deducted. Additional points may be deducted at the IOR's discretion. RADT-12B Requirement: Students are assigned to obtain a Chest Routine competency this term. 10 points will be deducted from HB grade for failure to meet this requirement.*

IV.  **DOCUMENTATION RECORDS:** attendance (hours) logs, exam logs, and repeat analysis are logged continuously throughout the semester. These logs plus self-evaluation forms are submitted twice a semester. Attendance records must be complete to include intern schedule, absence logs, and make-up time, as applicable. Orientation forms for freshman/sophomores must be signed by either the program director or clinical coordinator within 30 calendar days from the start of a new clinical assignment and within 14 calendar days for interns. Orientation forms must be kept in clinical handbook for the assignment and then filed in the student's personal file at the end of the semester.

*For this section, Points will be deducted for tardy submission of forms, incomplete forms/logs. 2 points will be deducted for mistakes, lacking information or missing time logs (-5 for second event). Additional points may be deducted at the IOR's discretion.*

| DUE DATES: | Due Date #1 | Midterm: Check Clinical Supervision Schedule or as otherwise instructed by IOR |
|---|---|---|
| | Due Date #2 | Final: Check Clinical Supervision Schedule or as otherwise instructed by IOR |

V.   **RESOURCES:** All instructional aide material checked out during a particular semester must be returned or handled otherwise responsibly to receive full credit in this category. This includes your radiation dosimeter. Your radiation personnel dosimeter badge must be turned in on time to the AH Office by the end of the 1st week of every quarter. In order to ensure you are aware of your dosimeter report readings, you will be required to review each quarterly dosimetry report on Canvas.

VI.  **STUDENT INFORMATION UPDATES & PROCESSING:** All student information must be current with appropriate documentation in American Databank and with clinical site as required (i.e. My Clinical Exchange). It is the student's personal responsibility to remain compliant with requirements at all times.

When the Clinical Coordinator assigns new clinical rotation assignments, students must engage professionally and efficiently with approval process for their new clinical assignment(s). This includes timely contact with Clinical Preceptor(s), clinical HR or Education departments, and department personnel. Failure to accomplish requirements satisfactorily or in a timely manner will result in points deducted. This includes all onboarding processes, facility or department orientations, or additional drug or background screenings if required.

## CLINICAL GRADING TIPS

### "Don't Be a Loser" (how not to lose any clinical grading points)

## Be Familiar with the Clinical Grading Criteria. Then Check The Following:

1. **Dosimetry Badges:** Take care of your dosimeter, review your dosimetry report on time and turn in your dosimeter when instructed, on time.

2. **CPR & Vaccinations/Inoculations & TB Updates**
   a. Is this information in American Databank? Is it correct and current? Is your Clinical Handbook updated & initialed?

3. **Time and Exam Sheets & Clinical Evaluations & Orientation Forms**
   a. Make sure each form is complete. Don't forget to have C.P. sign **EACH** page as noted.
   b. Make sure you read and commented on all your Clinical Evaluations promptly, before due dates.
   c. Due dates are noted on the Clinical Supervisors Visitation Schedule and/or Canvas.
   d. Make sure Clinical Facility Orientation Form is completed by due date.
   e. Make sure all hours logs are correctly entered and approved in Trajecsys.

4. **Repeat Forms**
   a. Logs should be completed as soon as practical. Clinical Supervisors expect **all entries and logs** to be updated accordingly so if he/she makes an **unexpected site visitation**, your records will be up-to-date. Turn in completed forms twice a semester. See CS schedule.

5. **Clinical Handbook**
   a. Do you have the minimum number of competencies signed-off without going over the maximum number allowed per semester? Do not miss any required "elective" sign-offs.
   b. Make sure all views listed under *Radiographic Protocols for Sign-Offs* were completed for the sign-off (either patient and/or simulated). If not, this sign-off will be denied and you'll lose points. Have the staff RT enter into Trajecsys how many views you submitted for evaluation and what views are left to simulate in lab.
   c. If you need to simulate a view to complete a sign-off, the simulation must be completed within two weeks from getting your clinical sign-off, during the same term. Clinical Supervisors will be checking this.
   d. **Ensure your comps are entered on the same day as they are performed.** Did the exam get entered correctly? Check it out!
   e. Make sure your C.P. has approved each clinical competency entered by a Staff Tech in Trajecsys promptly. A red dot on Trajecsys means the CP still needs to review and approve.
   f. **Check on your records routinely for accuracy and completeness.** Ultimately, it is your responsibility to make sure your clinical responsibilities are complete. It's your grade that will be affected if something is missing or incorrectly entered – this includes competencies and hours logs.
   g. Make sure attendance and absence logs are up to date. All freshman/sophomore makeup hours should be completed as soon as possible per the Clinical Coordinator and with advance approval of the Clinical Coordinator. Interns must use their sick and vacation time to log any absences. Absences must be logged in Trajecsys immediately. See Student Policy & Procedures HB for more.
   h. Ancillary assignments are part of internship clinical hours; they must be documented as clinical attendance. Exams must also be documented during ancillary hours.
   i. Enter types of equipment (include HIS/RIS/PACS names) you've had experience with at current facility. Make sure to note software version, plus vendors and models.
   j. Surgery Observations: Make sure all surgery case logins are completed by the end of the 1st semester of internship (RADT-16B).
   k. All "Recommended Skills Lab Practices" should be completed and signed off by IOR within assigned timeframe.
   l. No competency sign-off will be awarded if an image is mismarked or RT/LT marker is cropped off or if we are unable to verify its presence with image manipulation even if the image is correctly annotated.

6. **Due Dates -** It is your responsibility to turn in all paperwork by its respective due date. Ask, if you are unsure.

7. **Site Visitations –** Be available for site visitations, especially when it comes to O.R. and extended portable duty. It is the student's responsibility to be available for C.S. visitations. Interns: you must identify conflicts with your C.P. in advance and make necessary arrangements to be seen.

# Appendices

# Merced College

## Diagnostic Radiologic Technology Program

### SURGERY EXPERIENCE (sterile procedures)

**OBJECTIVES:**

As part of the clinical training experience, students will be required to observe/participate in a minimum of ten (10) surgical procedures while under direct supervision of a registered radiographer. These ten surgical observations may begin being completed after midterm of the second semester (RADT-12B) if the student is making adequate progress in completing their clinical competencies.

- All 10 surgery observations/participations must be completed and signed-off before a student is eligible to have a surgical competency signed off.

- All 10 surgery observations/participations must be completed and signed-off prior to the grading for the fall sophomore semester (RADT-15B). - 5 points off Clinical Grading, section III.

**Upon completion of the observed numbers of surgical procedures, the student will be able to:**

1. Differentiate between disinfection and sterilization, as well as medical asepsis and surgical asepsis.

2. Demonstrate the appropriate steps in preparing radiographic equipment to enter a surgical suite.

3. Demonstrate the appropriate steps in scrubbing, gowning, and gloving in preparation to enter a surgical suite.

4. Describe the use of a sterile drape in establishing and maintaining a sterile field.

5. Define the term *sterile corridor*, and explain the significance of this concept.

6. Explain the radiographer's responsibility for maintaining surgical aseptic technique in the surgical suite.

7. Explain the radiographer's responsibility for radiation protection of the surgical team, the patient, and self in the surgical suite.

8. Demonstrate an awareness of how to manipulate the various locks and controls on a mobile "C-arm" unit.

9. Demonstrate an understanding of key introductory terms and concepts needed to safely work in a surgical suite by scoring a minimum of 85% on a written examination prior to starting their surgical observations.

Name:_____      Class of:_____

## Merced College
## Diagnostic Radiologic Technology Program

## <u>SURGERY CASE LOG (sterile procedures)</u>

**Student passed written examination with a score of 85% or higher:**_____

<div align="right">

**RADT-10 Instructor signature / date**

</div>

| | DATE | FACILITY CODE | MR# | PROCEDURE | EQUIPMENT USED | | R.T.'s Initials |
|---|---|---|---|---|---|---|---|
| 1. | | | | | ☐ Portable | ☐ C-Arm | |
| 2. | | | | | ☐ Portable | ☐ C-Arm | |
| 3. | | | | | ☐ Portable | ☐ C-Arm | |
| 4. | | | | | ☐ Portable | ☐ C-Arm | |
| 5. | | | | | ☐ Portable | ☐ C-Arm | |
| 6. | | | | | ☐ Portable | ☐ C-Arm | |
| 7. | | | | | ☐ Portable | ☐ C-Arm | |
| 8. | | | | | ☐ Portable | ☐ C-Arm | |
| 9. | | | | | ☐ Portable | ☐ C-Arm | |
| 10. | | | | | ☐ Portable | ☐ C-Arm | |

Note: maximum 3 pain management type cases may be used.

**NOTE:** A student must successfully complete the training and education of the designated "Venipuncture" course and pass a written examination. Successful demonstration of lab sign-offs on a model arm and on live human subjects must be documented before pursuing venipuncture competency check-offs in the clinic setting. It is required that while enrolled in the program, the student **MUST** perform a total of 10 successful live human venipunctures (including those completed in lab) under the direct supervision of an authorized person before being allowed to perform venipunctures under the general supervision of a physician.

**Authorized Personnel for Competency Sign-Offs Are:**
Persons authorized to supervise simulation on live human venipunctures starts for certification may include the following personnel: Radiologists, Physicians, Registered Nurses and Radiologic Technologists that hold a Venipuncture Certificate.

## VENIPUNCTURE COMPETENCY CHECKLIST
### Demonstrated Skills:

1. Verify physician's order & check patient's chart for allergies (particularly latex, iodine or xylocaine). Gather supplies.
2. Wash hands, prepare IV infusion, select & prime appropriate tubing.
3. Check patient's identity, either by check-in armband or verbal Verification of patient's identity. Explain procedure to patient. May check for site prior to putting gloves on.
4. Wash hands. Don gloves.
5. Select or confirm site. Select appropriate catheter type and size for Procedure and/or fluid container(s).
6. Apply tourniquet proximal to proposed puncture site.
7. Cleanse area with appropriate antiseptic solution.

8. Puncture skin with needle at 30 to 45 degree angle, bevel up.
9. Reduce angle, slowly advance needle and observe for blood return.
10. After blood return, advance Teflon catheter and disengage stylet.
11. Release tourniquet.
12. Connect primed IV administration, set and initiate flow.
13. Assess for signs of infiltration.
14. Secure catheter with tape, apply appropriate dressing.
15. Regulate infusion as prescribed.
16. Discard contaminated supplies in appropriate waste
17. Remove & properly dispose of gloves and wash hands.

**Note:  All students must maintain current CPR and BLS certification while enrolled in the program.**

**All venipuncture must be under direct supervision while a student.**

Student Name:_____

# Merced College – Diagnostic Radiologic Technology Program
## VENIPUNCTURE COMPETENCY DOCUMENTATION

**PHASE I – DIDACTIC & LAB**

**RADT-16A**   Dates:_____   Total Hrs._____

**RADT-10**   Date:_____   Total Hrs: 2 hrs.   Current CPR Card: 2 hrs. Expiration Date:_____

Student passed written examination with a score of 85% or higher:_____

<div align="right">RADT-16A Instructor signature / date</div>

| Successful Lab Sign-Off on a "MODEL Human Arm" | | | | |
|---|---|---|---|---|
| **No.** | **Evaluation Date** | **Authorized Person's Name (Print)** | **Authorized Person's Signature** | **Title or Degree** |
| 1. | | | | |

| Successful Lab Sign-Off on a "LIVE Human Arm" | | | | |
|---|---|---|---|---|
| **No.** | **Evaluation Date** | **Authorized Person's Name (Print)** | **Authorized Person's Signature** | **Title or Degree** |
| 2. | | | | |

**PHASE II – CLINICAL or LAB PRACTICE – "Live or Model Arm" Sign-Offs**

| Successful Lab Sign-Offs on a "LIVE Human Arms or MODEL Human Arms" | | | | |
|---|---|---|---|---|
| **No.** | **Evaluation Date** | **Authorized Person's Name (Print)** | **Authorized Person's Signature** | **Title or Degree** |
| 3. | | | | |
| 4. | | | | |
| 5. | | | | |
| 6. | | | | |
| 7. | | | | |
| 8. | | | | |
| 9. | | | | |
| 10. | | | | |

Student Name:_____     **Merced College**     Class of:_____

Diagnostic Radiologic Technology Program
## FLUOROSCOPY PROCEDURE TIME LOG

Log procedure time (start to finish), not "beam-on" time. Procedure times are also documented in procedure logs.
Record time in quarter-hour intervals (not minutes). For example, 0.25 hr or 1.5 hrs.
Include ALL fluoroscopy procedures (observed, assisted, or performed) For example: IR, cath lab, C-arm, BE, UGI, etc.

| Year One | Monthly Totals | Cumulative Totals | Year Two | Monthly Totals | Cumulative Totals |
|---|---|---|---|---|---|
| January | | | January | | |
| February | | | February | | |
| March | | | March | | |
| April | | | April | | |
| May | | | May | | |
| June | | | June | | |
| July | | | July | | |
| August | | | August | | |
| September | | | September | | |
| October | | | October | | |
| November | | | November | | |
| December | | | December | | |
| Year One Total: _____ hrs. | | | GRAND FLUOROSCOPY TOTAL: _____ hrs. | | |

*Carry Year One Total forward to calculate Year Two's January cumulative total      Grand Total can be used for resume and interview process.

# Record of Clinical Assignments and Equipment Log

| Semester | Hospital/Clinic Code | Equipment used: Incl. HIS, RIS, PACS, CR, DR, Portable(s), C-arm(s), etc. with details listed (brands & models, etc.). |
|---|---|---|
| Merced College RT Lab | M | |
| RADT – 12B | | |
| RADT – 14B | | |
| RADT – 15B | | |
| RADT – 16B | | |
| RADT – 17B | | |
| RADT – 18B | | |
| Other | | |

**This information will be useful when making resumes and sitting for interviews.**

-1 pt for incomplete listings (Clinical Grade, Section III)

## Clinical Attendance

Clinical Attendance is mandatory and documented in Trajecsys.

Refer to the *DRT Student Policy & Procedure Handbook* for detailed policies.

Remember to document correctly:
- All absences must be entered into Trajecsys immediately.
  - Enter a time exception to document reason for absence and who was notified
- Make up time must also be documented in Trajecsys.
  - DRT Program Clinical Coordinator must pre-approve.

<u>INTERNS ONLY:</u>
- See Internship Guidelines & Policies Cheatsheet.

---

### Completion of Internship Clinical Hours Release

Intern Student:_____

Clinical Facility:_____

Clinical Preceptor: _____
                                              Print

Clinical Preceptor: _____
                                              Signature

---

Clinical Facility:_____

Clinical Preceptor: _____
                                              Print

Clinical Preceptor: _____
                                              Signature

**Falsification of signature is considered a breach of ethics and will be dealt with to the fullest extent possible.**

Student Name:_____                    Class of:_____

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## Didactic Competency Requirements:

The student has successfully completed course work which addresses the categories identified by the ARRT Content Specifications for the Examination in Radiography (effective 2022).

Program Director's Signature_____                    Date:_____

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## Radiography Clinical Competency Requirements:

The student has demonstrated the competency requirements which address the categories identified by the ARRT Clinical Competency Requirements (effective 2022) as documented in this Clinical Competency Evaluation Handbook.

Program Director's Signature_____                    Date:_____

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## General Patient Care Procedures Requirements:

The student has demonstrated the patient care procedures competency requirements which address the categories identified by the ARRT Clinical Competency Requirements (effective 2022) as documented in this Clinical Competency Evaluation Handbook.

Program Director's Signature_____                    Date:_____