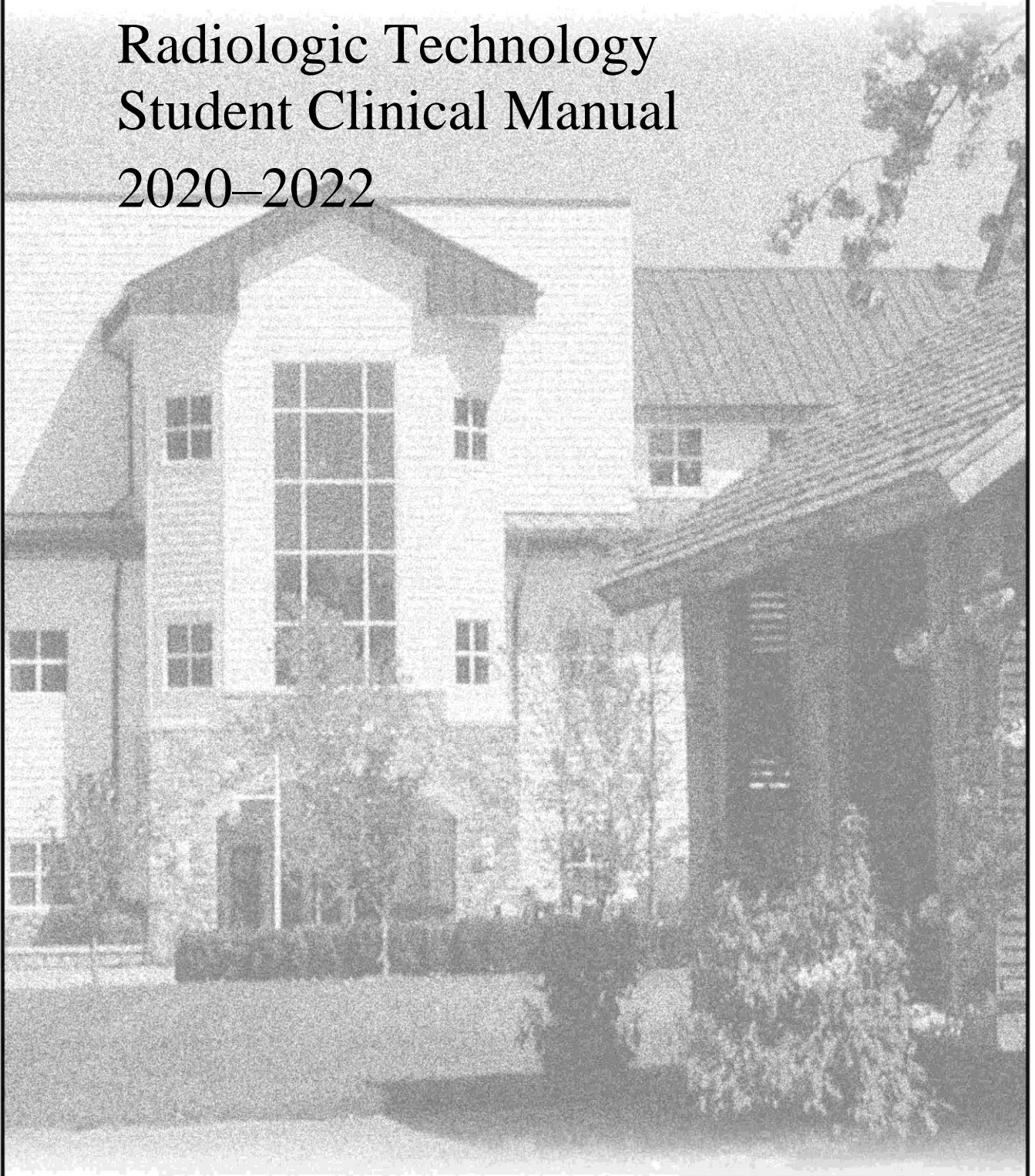


BROOKDALE COMMUNITY COLLEGE

Radiologic Technology
Student Clinical Manual
2020–2022



Radiologic Technology Program
Health Science Institute

RADIOLOGIC TECHNOLOGY

STUDENT CLINICAL MANUAL

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COMPETENCY BASED CLINICAL EDUCATION

Philosophy

Competency based clinical education is a progressive approach to the clinical development of each student. Students begin this process by observing imaging procedures after didactic instruction. Laboratory demonstrations are provided by the lab instructors to show proper techniques and applications for the completion of diagnostic imaging procedures. Once a student has practiced laboratory skills, the student then proceeds to laboratory evaluations. The student then progresses to the participative stage of the competency based clinical education system in the clinical setting.

In the participative stage, the student assumes a more active role in his/her clinical responsibilities. However, students may only perform those radiographic procedures that were previously taught in class, practiced in the laboratory and a laboratory evaluation was passed. Students shall perform these procedures with DIRECT supervision of a licensed technologist.

The final stage in a competency based clinical education system is the ability of the student to perform radiographic procedures under INDIRECT supervision whereby the student performs imaging procedures with limited supervision. Before the student can achieve this level of supervision, he/she must demonstrate competency through initial clinical competency evaluations (ICCE) on the radiographic procedure.

At the end of the program, a student will be placed in the clinical setting and demonstrate his ability to work safely and independently. Each student will successfully complete 12 terminal clinical competency evaluations on a variety of radiographic procedures.

GLOSSARY OF TERMS

College Laboratory: A separate work area for student practice utilizing phantoms and/or “mock” procedures. The college laboratory shall include a table, an overhead tube, a control panel and other necessary equipment.

Laboratory practice:

a. Instruct	}	Instructor
b. Demonstrate		
c. Practice	}	Student
d. Evaluate		

Radiographic procedures (exams): A series of radiographic exposures of an anatomical part or region of the body that is sufficient to permit diagnostic evaluation.

Category: A series of related radiographic procedures that exemplify an area of the human body.

Competency: The ability to function and successfully and safely perform a series of tasks with limited supervision to complete a set of objectives.

Laboratory Procedure Competency Evaluation: Assessment of a student’s performance of a radiographic procedure in the college laboratory to ensure the student accomplished a set of established objectives before performing procedure in the clinical setting on patients. .

Initial Clinical Competency Evaluation: The first assessment of a student’s performance of a radiographic procedure and resulting radiographic images in the clinical setting to ensure the student accomplished a set of established objectives.

Continuing Clinical Competency Evaluation: A follow up assessment of a student’s performance of a radiographic procedure and resulting radiographic images in the clinical setting to ensure the student has retained an accomplished a set of established objectives.

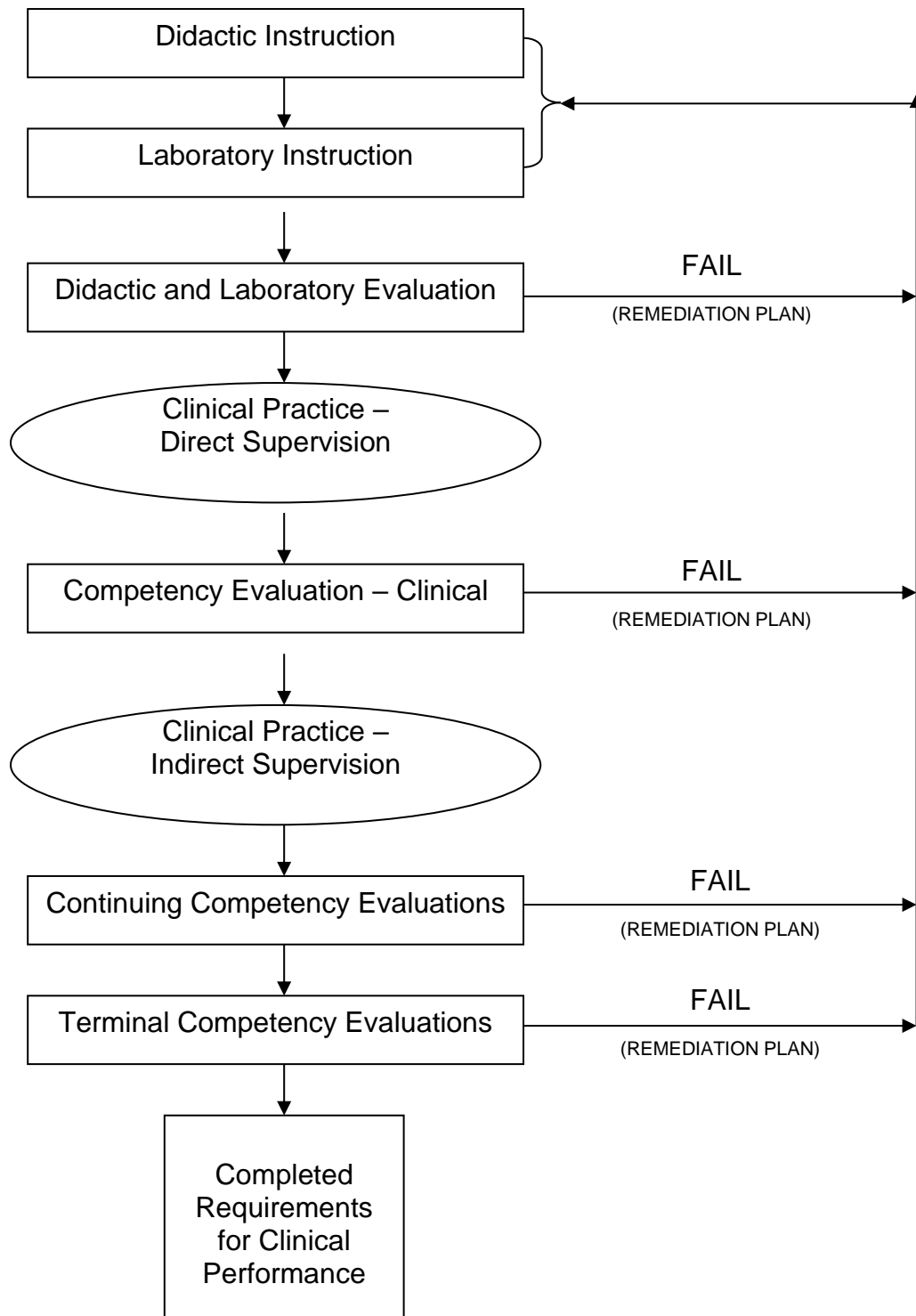
Terminal Competency Evaluation: Assessment of a student’s performance of a radiographic procedure and resulting images to determine ability of a student to perform independently before graduation. Terminal Competency Evaluations are completed on procedures that ICCE and CCCEs have been successfully completed. They are performed **only within the last 90 days** of the program prior to graduation.

Simulation: The student shall perform radiographic procedures on a mannequin or phantom and simulate the exposure. The student’s procedure performance and procedure associated images are evaluated.

COMPETENCY BASED CLINICAL EDUCATION SYSTEM

Eight Steps to Clinical Competency

COMPETENCY BASED CLINICAL EDUCATION FLOWCHART



COMPETENCY BASED CLINICAL EDUCATION PROGRAM

Eight Steps to Clinical Competency

OVERVIEW

A Competency Based Clinical Education (CBCE) System is a standardized method of evaluation of the cognitive and psychomotor skills of students performing radiographic procedures. Competency based evaluations are used as a positive tool. Evaluations aid instructors by evaluating the abilities and deficiencies of students' performance. It also aids the student in knowing how their abilities rank among other students, as well as their own clinical strengths and weaknesses.

Clinical competency evaluations are based on set objectives a student must learn, perform and be able to justify tasks necessary to become a competent independent radiographer.

The entire clinical competency program is based upon eight (8) individual steps for each procedure. At the completion of didactic theory lessons of a particular radiographic procedure, and other related courses, the student will participate in clinical practice.

INTRODUCTION TO THE CLINICAL EXPERIENCE:

Prior to students performing procedures in the clinical environment, they are introduced to the clinical settings through several means: class lectures, laboratory demonstrations, laboratory evaluations, clinical orientation, and a period of observation and assistance.

A. Classroom lectures

The didactic program begins with an "Introduction to Radiologic Technology and an Introduction to Patient Care" which include content in patient care, radiation protection, and image processing. The student is introduced to these basic concepts before actively participating in the clinical setting.

B. Laboratory demonstrations

Along with the didactic classes, laboratory demonstrations visually introduce each student to equipment, radiographic safety devices, and many of the radiographic areas of the medical imaging department and allow students to practice tasks necessary to perform radiographic procedures.

C. Laboratory Practice

Students are scheduled in small groups to utilize laboratory equipment to practice concepts learned in class, including patient care, communication, occupational safety, radiographic

exposure, radiation safety, equipment manipulation and positioning of patients to perform radiographic procedures under simulated conditions.

D. Laboratory Evaluation

Once a student has completed a demonstration and has practiced particular radiographic procedures learned in class, students will undergo an evaluation of their ability to position a patient and incorporate all other related skills into the performance of radiographic procedures under simulated conditions. Students must pass a laboratory procedure before being able to move to clinical practice.

E. Clinical Orientation

The student will be taken to the clinical environment of the Medical Imaging Department, to familiarize the student to the radiographic rooms and related equipment and to also meet supervisors, clinical instructors and technical staff of the department.

During this time, clinical instructors and technical staff will demonstrate and discuss the various uses of the equipment and radiographic areas and department procedures.

New students will spend approximately two (2) weeks in the clinical setting observing the practices and procedures of the department and the technologists' technical responsibilities.

Within a period of approximately two (2) weeks after the beginning of the first Fall term, a new student should be able to begin to actively participate in the clinical environment. They will assist fellow technologists during radiographic procedures.

A new student will begin to—

- prepare the radiographic room for a procedure, with sheets, pillows, etc.;
- stock and clean assigned radiographic room;
- obtain correct imaging plates and accessories for use;
- enter patient data into the computer;
- start and finish a case in the computer;
- assist technologists with moving patients to and from the radiographic table;
- assist in lifting patients to and from the radiographic table; and
- retrieve patient's previous studies from RIS archive (if needed).

During this period, the students will further orient themselves to the clinical environment before beginning the "Eight Steps to Clinical Competency."

COMPETENCY BASED CLINICAL EDUCATION PROGRAM

STEP BY STEP

EACH STEP MUST BE COMPLETED BEFORE THE STUDENT IS ABLE TO CONTINUE ON TO THE NEXT STEP OF CLINICAL COMPETENCY.

The following steps have been discussed thoroughly to allow the student to understand his/her responsibilities and duties as the vital component of the competency program.

The eight (8) steps to clinical competency are as follows:

- | | | |
|---|---|----------------|
| 1. Classroom theory/ lecture | } | COLLEGE CAMPUS |
| 2. Laboratory demonstration | | |
| 3. Laboratory practice | | |
| 4. Laboratory evaluation | | |
| 5. Clinical practice (DIRECT supervision) | } | HOSPITAL |
| 6. Initial Clinical Competency evaluation (ICCE) | | |
| 7. Continual competency evaluation (INDIRECT supervision) | | |
| 8. Terminal competency evaluation (TCE) | | |

1. Classroom theory/ lecture

In the classroom setting the student will participate in lectures, audiovisual presentations, demonstrations and discussions related to technical, ethical and professional tasks needed to perform radiographic procedures efficiently, safely and competently.

2. Laboratory demonstrations

Lab instructors will present laboratory demonstrations of correct patient positioning, equipment manipulations for each anatomical area after it has been taught in the classroom, appropriate exposure selection and other related procedural tasks.

It is the student's responsibility to participate in all demonstrations as scheduled. In the event of an absence of a laboratory demonstration, the student must schedule another session with the Laboratory Coordinator. Make-up demonstrations will be arranged according to availability in the schedule. (This may be late in the evening and/or Saturdays.)

NOTE: Students must sign in at the beginning and end of each laboratory session.

3. Laboratory practice

Once laboratory demonstrations of particular procedures are complete, the student can then proceed to practicing these procedures and tasks in the laboratory setting. The student will be responsible for practicing radiographic positioning and equipment manipulation with fellow students. An instructor, the full body phantoms or a fellow student can pose as a patient while a student practices procedure-related tasks with simulated exposures only.

Students are to:

1. Practice together weekly during designated PRACTICE lab sessions and during slower clinical hours.
2. Assist fellow students with positioning routines.
3. Review laboratory evaluation forms during each practice session for self-evaluation.

“Laboratory Evaluation” forms associated with each Radiographic Procedure course can be found on Trajesys (On-line Clinical Management System).

NOTE: Students must sign in at the beginning and end of each laboratory practice session.

4. Laboratory evaluation

Once a student has completed laboratory practice and within two weeks from the demonstration, he/she will be scheduled a laboratory evaluation session for a lab instructor to evaluate his/her practiced laboratory skills. The laboratory evaluations are scheduled weekly and it is the student’s responsibility for arriving on time to scheduled laboratory evaluation sessions.

The extended time between demonstrations and laboratory evaluations provides the student ample time to prepare for the evaluations, to practice and to ask questions.

The laboratory evaluation is a clinical test of knowledge and ability of each student before being allowed to perform those procedures on patients with DIRECT supervision in the clinical setting.

NOTE: During the evaluation, the student will NOT be able to ask questions. Each student will be responsible for knowing the routine procedure, its mechanics, field sizes, accessory equipment, patient care needs, appropriate exposure factors, **recognize anatomy and procedural factors on associated radiographic images** and other pertinent information to conduct the procedure competently WITHOUT assistance. The student must verbally articulate what they are doing each step of the way.

The technical skills of the procedure must be demonstrated and verbally discussed by the student. The more cognitive skills will be assessed by the verbal descriptions the student must describe during the evaluation.

The evaluator/instructor will make corrections or suggestions AFTER the student has completed the listed task or at the end of the evaluation. A grade will be tabulated to assess the student’s understanding and clinical abilities.

Laboratory evaluations must be passed with a score of 80 or better.

In an event a student fails to meet this requirement, he/she will be referred for didactic and practice remediation before repeating the laboratory evaluation. The student will come in

during an open lab time to practice. The student must sign up for another evaluation session to be conducted AFTER additional practice has been completed.

The student will be evaluated on his/her patient care, radiation protection, positioning, exposure selection, equipment manipulation skills and knowledge of image criteria. The level of a student's skills will be taken into consideration each evaluation, according to the level of instruction and the schedule of didactic lessons.

Once a student has successfully completed a laboratory practice evaluation, he/she may continue to the next step—clinical practice.

Laboratory evaluation forms can be found on Trajesys for each Procedure Course for the student's practice and review prior to each evaluation.

In the event, a student is unable to successfully complete any given procedure evaluation, the student will return to laboratory practice and then may be re-evaluated by two instructors. If a student fails to successfully complete on the second attempt, the student will be pulled from clinical for remediation, practice and re-evaluation. Any missed time will be made up. Absence could jeopardize student's ability to finish course requirements and pass the course.

Final semester laboratory evaluations

At the end of each semester, each student will undergo a final laboratory evaluation. During this evaluation, students will be asked to perform a variety of procedures from the current and any prior semester to ensure they have maintained a level of competency. **Final laboratory evaluations must be successfully completed by the end of the semester.**

In the event, a student is unable to successfully complete any given final procedure evaluation, the student will return to laboratory practice and then may be re-evaluated by two instructors. If a student fails to successfully complete on the second attempt, the student will fail the course.

5. Clinical practice

Once a student has passed the weekly laboratory evaluations with a satisfactory score, he/she will then be allowed to perform those radiographic procedures on patients with DIRECT SUPERVISION of a registered technologist or clinical instructor. The student gains experience and improves technical and patient care skills during this practice period.

The student must consider the patient's condition and safety when performing all procedures. The student cannot perform any procedure that has not been successfully passed in the college laboratory.

Only those procedures that have been passed in the college laboratory can be performed with DIRECT SUPERVISION.

All repeat exposures during a procedure must be DIRECTLY SUPERVISED.

CLINICAL EVALUATION

Once a student has completed all of the prior steps successfully and usually after the fourth (4th) week of the semester, the student will then begin to complete initial clinical competency evaluations (ICCE).

As per the NJDEP Board of Radiological Health, students MUST SELECT exposure factors during all clinical competency evaluations. “Techniques selection may include CR, DR, AEC and manual techniques. Since not all facilities have AEC equipment, it is important that students are competent in producing radiographs using manual exposure factor selection. **If CR or DR equipment is used during [initial] clinical competency, image evaluation shall be based on the first image prior to any manipulation.** As part of the competency evaluation, **the exposure index must be reviewed and be within the facility’s established exposure range” in order for image to be acceptable for evaluation.**

For all Continuing Competency Evaluation (CCEs) and Terminal Competency Evaluations, MANUAL SELECTION OF EXPOSURE FACTORS IS REQUIRED.

6. Initial Clinical Competency Evaluations (ICCE)

After a period of time and student having opportunity to perform procedure on patients, the student will complete an initial clinical competency evaluation (ICCE). The patient will be selected/approved by the instructors. A variety of patient types from ambulatory to trauma and infants to adult will be selected.

Each evaluation form has specific criteria that each student must fulfill to pass. The student will be evaluated as to his/her patient care, radiation protection and patient safety, positioning, exposure selection and equipment manipulation skills. The final radiographic images are also evaluated for positioning and exposure quality.

Once the student has successfully completed an initial clinical competency evaluation on a particular procedure, he/she is permitted to perform the procedure with INDIRECT SUPERVISION. The RT must be immediately available.

A student must complete all Terminal Competency Evaluations with a score of 24 or better.

REPEAT CLINICAL COMPETENCY EVALUATION

In the event a student fails to pass any initial category competency or continuing clinical competency evaluations, they will be counseled and referred to remediation to practice and to review theoretical materials. **Hospital or college faculty will refer student to the college laboratory for remediation and practice.** Once the student has had adequate time to practice and review, they will notify an instructor and will schedule a repeat evaluation on the same procedure within a two (2) week period after remediation.

In the event the student must repeat an evaluation for a second time, a remediation plan will be developed and repeat evaluations will be conducted by TWO INSTRUCTORS to evaluate student’s aptitude for clinical performance in the category posing difficulties.

The student cannot progress through the competency based clinical education system until the student successfully completes any remediation and repeat evaluation.

Each semester, students are required to complete a minimum number of initial clinical competency evaluations in the procedural category being taught in class each semester. **The specified evaluations need to be successfully completed to pass the course.**

NOTE: In order to graduate and fulfill state and ARRT clinical competency requirements, the student needs to complete initial clinical competency evaluations on an extensive list of procedures- 37 mandatory and 15 elective procedures. Students are encouraged to perform as many ICCEs as they can in each procedural category each semester (see ARRT Clinical Requirements Booklet). More information can be found at www.ARRT.org

7. Continuing Competency Evaluations

A number of continual competency evaluations for each term are outlined in the procedure course syllabi for each term. **CONTINUING EVALUATIONS MUST BE COMPLETED ON RADIOGRAPHIC PROCEDURES THAT PREVIOUS INITIAL CLINICAL COMPETENCY EVALUATIONS WERE SUCCESSFULLY COMPLETED ON.**

As per NJDEP Board of Radiological Health's requirements "Continuing Competency Evaluations must be performed on a **progressive level of patient and procedure difficulty**. A Continual CCE can only be performed on a procedure that was previously evaluated for competency as an Initial Clinical Competency Evaluation (ICCE). (Example: if a student was determined to be competent by simulated ICCE, the Continual CCE must be performed on a patient. If a student was determined competent by way of an Initial CCE on an ambulatory non-traumatic hand, the Continual CCE must be performed on a patient with trauma to the hand or have any other condition that would increase patient difficulty, such as, Parkinson's Disease, Rheumatoid Arthritis, etc.)"

During Continuing Competency Evaluations, the student must manually select exposure factors in order for evaluation to count. Evaluator MUST check off manual technique on evaluation form.

In order to track, the progressive level of patient and procedure difficulty, the evaluator must indicate the patient type and status and indicate reason for procedure (pathological condition and level of difficulty) on the evaluation form.

A student must complete all Continuing Competency Evaluations with a score of 21 or better.

NOTE: Continuing Evaluations that do not demonstrate an increased level of patient or procedure difficulty will not be counted.

In addition, at any time during the student's education, a clinical instructor can randomly select, without notice, a student to perform any previously passed procedure to evaluate. Evaluations will be performed with the same criteria as was the initial category competency evaluations to ensure a continued adequate level of performance.

NOTE: ** If a student fails to pass a continual competency evaluation, the student will be referred to a remediation plan and will be required to review all related theoretical materials and repeat related evaluations before being allowed to continue performing those related category procedures on patients.

NOTE: In order to graduate and fulfill state and ARRT clinical competency requirements, the student needs to complete continuing competency evaluations on procedures that ICCEs were previously completed in order for students to move on to the Terminal Evaluation phase of the program.

IN SUMMARY

All of the previously discussed evaluation steps must be completed successfully as part of the clinical practicum grade for each term. The student must complete any remediation, all outlined laboratory and clinical competency evaluations, continuing evaluations and any repeat evaluations to pass the clinical course each term.

8. Terminal Competency Evaluations (TCE)

After all classroom didactic lectures, laboratory, and initial category competency evaluations and continuing clinical competency evaluations in all categories have been completed satisfactorily and within 90 days of graduation, the student will be eligible to complete Terminal Competency Evaluations. The clinical instructor will select a patient and procedure for the student to complete as a terminal competency evaluation.

The student must obtain a permission slip from Clinical Coordinator before beginning TCEs.

The evaluation forms are similar to those used for all other Continuing Clinical Competency Evaluations. **During Terminal Competency Evaluations, the student must manually select exposure factors in order for evaluation to count. Evaluator MUST check off manual technique on evaluation form.**

The student will be evaluated for patient care, radiation protection and patient safety, administrative skills, procedure preparation, positioning, equipment manipulation, radiographic exposure selection and problem-solving skills, as well as the final radiographic images. These evaluations are to evaluate the student's ability to perform all radiographic procedures independently and competently.

NOTE: ONLY qualified clinical instructors can complete terminal competency evaluations.

The student must satisfactorily complete the following procedures as Terminal Competency Evaluations**:

	1 chest
	1 abdomen
	2 upper extremities
	2 lower extremities
	2 contrast study procedures
	2 spine/pelvic girdle
	1 thoracic cavity
	1 head work / OR
Total	12

**** patients must be more difficult than prior cases**

NOTE: In order to meet State requirements, students may only complete Terminal Competency Evaluations on radiographic procedures that the student has successfully completed an initial competency evaluation (ICCE) and a continuing competency evaluation (CCE).

A student must complete all Terminal Competency Evaluations with a score of 24 or better. If any student has difficulties passing any of the above evaluations, they will be counseled and referred for remediation to include didactic materials pertaining to that related category, laboratory evaluation and clinical practice before being allowed to repeat a Terminal Competency Evaluation.

NOTE: TWO instructors may re-evaluate the student during a repeat Terminal Competency Evaluation on the procedure previously failed. **The student must make sure two instructors re-evaluate and sign TCE form.**

Graduation Competency Requirements

The student must successfully pass all general education courses, RADT courses, laboratory competency evaluations, all NJ State BRH and ARRT clinical competency evaluation requirements, all terminal competency evaluations, and fulfill other administrative responsibilities and program course requirements to complete graduation requirements and to sit for the ARRT certification examination.

CLINICAL EVALUATIONS & RECORDS

A. CLINICAL RECORDS

Clinical evaluations are important tools in assessing and determining a student's progress throughout the program. Laboratory and Clinical Competency evaluations, image evaluations, clinical performance evaluations (professional development), attendance records, radiation monitoring reports and other records are maintained on each student throughout the program. All evaluations are submitted, recorded and maintained within the Trajesys system. Students have access to their progress at all times.

All evaluations, clinical performance evaluations, image evaluation testing, and attendance is maintained in each student Trajesys file until graduation. Once a student has graduated, only the Program Competency Checklist remains in the student file permanently.

The Program Competency Checklist is used to document the student's clinical competency progress. Each student **MUST** prove competency in the procedures and related tasks outlined in the ARRT and the Radiologic Technology Board of Examiners clinical requirements.

Radiation monitoring reports are maintained in the College Laboratory. Radiation badge reports remain permanently in the college laboratory.

DOCUMENTATION:

1. **Arrival and departure times each clinical day must be completed in Trajesys and within the specified area in the Radiology Department.**
2. Student must review and sign off on all evaluations regularly.
3. Sign any paper evaluations in PEN.
4. Evaluations are to be completed **DURING** the performance of procedures and results transmitted by the end of the day.
5. All forms must be dated, signed and completed.
6. All forms must be completed in their entirety.
7. All originals are to be returned to the college laboratory office.
8. **Students must update personal clinical participation logs by the end of each day. These records are routinely checked by instructors. In general, students should be participating in a minimum of 10 procedures in any given day.** Logs are to be submitted by Wednesdays each week.

If documentation is not completed correctly, evaluations will not be accepted.

B. LABORATORY COMPETENCY

Laboratory Competency Evaluation Form

Laboratory competency forms can be found in Trajesys. Each form is specific to the procedure learning each week. These forms are used in the Laboratory to evaluate the students' performance on patient positioning and related skills learned in the didactic and laboratory portions of the courses. AFTER this documentation has been presented to the clinical instructor, the student may then begin performing the said procedure at the clinical site under DIRECT supervision.

Any procedure that students perform in Clinical (Clinical Laboratory) must first be evaluated in the College Laboratory. (The student must perform the procedure under simulated conditions in the laboratory and pass the evaluation in order to perform on a patient in Clinical.)

Brookdale Community College
Radiologic Technology Program

LABORATORY EVALUATION

CLAVICLE

STUDENT _____ AVERAGED GRADE _____
 EVALUATOR _____ DATE _____
 PATIENT _____

SCORING THE EVALUATION:

Each task or objective must be performed completely. There are no partial credits. The total amount is subtracted for any task not completed in its entirety or error occurred. Student must achieve an 80% or better to pass.

PRE-PROCEDURE OBJECTIVES:

YES NO

	YES	NO
Is person prepared (uniform, ID, Rad. Badge, Markers)?		
Identified self/ Checked Patient's ID badge/ verified name		
Obtained pertinent history (injury, symptoms, allergies, pregnancy...)		
Checked exam order from requisition/chart/ patient		
Room is clean and set before patient enters		

Student must complete ALL the above in order to proceed with evaluation.

PERFORMANCE OBJECTIVES:

Given a patient and the necessary radiographic equipment, the student will demonstrate the ability to:

I. PERFORM AN AP CLAVICLE PROJECTION BY:

A.	Completing the position within 2 minutes	2	
B.	Placing the IR in the bucky or on table appropriately	2	
C.	Accurately measure patient	5	
D.	Selecting the appropriate field size	1	
E.	Selecting appropriate Mas	5	
F.	Selecting appropriate KvP	5	
G.	Appropriately shielding patient	5	
H.	Selecting proper Source Image Distance (40")	10	
I.	Placing patient in supine recumbent or AP upright position	5	
J.	Placing affected clavicle in center of film horizontally and vertically	10	
K.	Placing affected arm in good position and adjusting shoulders to lie in same horizontal plane	10	
L.	Directing Central Ray perpendicular to midshaft of clavicle and center of film	10	
M.	Properly collimating to area of interest	10	
N.	Marking IR appropriately with lead markers and accessories	5	
O.	Respiration suspended at end of expiration	2	
P.	Making the exposure while observing patient	2	
Q.	Instructing patient to breath normally	1	
R.	Verbally demonstrate knowledge of structures shown	10	
	TOTAL	100	

STRUCTURES SHOWN: (total 10 points) 1—Entire clavicle in frontal image, 2—Lateral half of clavicle above scapula, 3—Medial half of clavicle superimposing the thorax.

C. CLINICAL COMPETENCY EVALUATIONS

1. Initial Category Competency Evaluation (ICCE)

AFTER the student has successfully completed a laboratory evaluation on a procedure under simulated conditions, the student can begin to perform that procedure on patients in the clinical setting under DIRECT supervision. Initial competency evaluations are to be completed by a qualified clinical instructor when available. The patient and time of the evaluation will be at the discretion of the evaluator. **Evaluations should represent a variety of patient types and progressive level of difficulty.**

If a student refuses to perform the procedure that has been chosen for evaluation, a grade of zero will be given for that evaluation and be referred to the college laboratory for remediation.

The competency evaluation will include all projections for each procedure according to hospital's protocol, as well as all tasks associated with the radiographic procedure.

Students must achieve a minimum score of 21 or better on each projection in order to pass evaluation.

After the student has successfully completed a clinical competency evaluation for a given examination, he/she may then perform that examination under indirect examination. **When and only when a student has completed a competency evaluation for each of the required procedures in a category, then that student can perform all procedures within that category under indirect supervision.**

2. Continuing Competency Evaluation

Continuing Competency Evaluations are similar to initial clinical competency evaluations. They utilize the same evaluation criteria and follow the same guidelines as the competency evaluation previously stated. **Any procedure in which a student has passed an initial clinical competency evaluation (ICCE) on may be evaluated for a continuing competency evaluation. A minimum of one month must have passed since the ICCE prior to completing a continuing competency evaluation in any given procedure.** [The only exception to this is in the final semester. CCEs may be performed after 2 weeks of ICCEs]. There are a set number of continuing competencies that must be accomplished each term outlined in the procedure course syllabi. Continuing Competency Evaluations are not performed during the first clinical term.

3. Terminal Competency Evaluations (TCE)

Terminal competency evaluations are completed at the end of the program within 90 days of completion. They utilize the same evaluation form as other competency evaluations. Students will perform a minimum of 12 procedures for evaluation. The patient and time of evaluation will be selected at the discretion of the evaluator. **Patient selection for these evaluations should demonstrate a progressive level of difficulty.** These evaluations will also include all projections for each procedure according to hospital's protocol, as well as all related tasks. **NOTE:** Students can only perform TCEs on procedures they have completed both ICCEs and Continuing Competency Evaluations on. The greater number of continuing evaluations completed, the greater number of procedures available to complete TCEs on.

Required Number of Clinical Evaluations by Semester

Fall 1		Spring 1	
ICCE (5)	ContCE (0)	ICCE (10)	ContCE (4)
Chest AP Portable AP / Lat stretcher PA/ LAT Pedi Chest (under 6) Geri Chest (over 75) Abdomen AP Supine Erect Decubitus Portable Abd	None	4 Upper Extremities 4 Lower Extremities 2 either upper or lower extremities	2 Chest 2 Abdomen
* Complete 2 additional ARRT requirements		* Complete 4 additional ARRT requirements	

Summer Clinical Practicum (RADT 158)

ICCE (3)	ContCE (6)
3 Contrast Studies	1 chest ^ 1 abdomen ^ 2 UE 2 LE
* 9 additional ARRT requirements	

Fall 2 (RADT 252)

ICCE (5)	ContCE (6)
1 C-Arm 2 Spine 1 Thoracic Cavity 1 Shoulder Girdle	2 upper extremities ^ 2 lower extremities ^ 2 contrast studies
* Complete 9 addl ARRT requirements	

Spring 2 (RADT 257)

ICCE (5)	ContCE (6)	TCE (12)
1 Skull 1 other headwork 1 CT head 1 CT CHEST/abdomen/pelvis 1 C-Arm 1 thoracic cavity	1 UE ^ 1 LE ^ 1 contrast ^ 2 spine 2 thoracic cavity	1 chest 1 abdomen 2 upper extremities 2 lower extremities 2 contrast work 2 spine 1 thoracic cavity 1 head/OR
* Complete all remaining ARRT Requirements by 3/1		

^ do not complete a Cont CE on a procedure previously performed as a Cont CE

Brookdale Community College
Radiologic Technology Program

CLINICAL COMPETENCY EVALUATION

Initial Category Competency Evaluation (ICCE) Terminal Competency Evaluation (TCE)
Continuing Competency Evaluation (Cont.) Remediation

PATIENT CONDITION: Trauma <input type="checkbox"/> Ambulatory <input type="checkbox"/> In-patient <input type="checkbox"/> PATIENT TYPE: Pediatric <input type="checkbox"/> Adult <input type="checkbox"/> Geriatric <input type="checkbox"/> PARTICIPATION: Cooperative <input type="checkbox"/> Uncooperative <input type="checkbox"/>	TRANSPORT: Stretcher <input type="checkbox"/> Wheelchair <input type="checkbox"/> TECHNIQUE: Manual <input type="checkbox"/> Auto. Exposure <input type="checkbox"/> OTHER: _____
--	---

PRE-PROCEDURE PREPARATION	YES	NO	
Is personally prepared (uniform, ID, radiation badge, markers).			STUDENT _____
Identified self, checked patient's ID badge, verified name.			
Obtained history (injury, symptoms, allergies, pregnancy...).			CLINICAL SITE _____
Checked exam order from requisition/chart/patient.			
Room is clean and set before patient enters.			EXAM/PROC. _____

Student must complete ALL the above in order to proceed with evaluation.

PROJECTIONS

POSITIONING/PROCEDURE SKILLS/TASKS					
Patient info correctly enter and correct exam selected					
Proper type of IR selected.					
Grid and other imaging accessories correctly selected and used.					
Remove all possible artifacts (jewelry, teeth, hairpins...).					
Patient positioned correctly for projection.					
Tube moved and detented at correct distance.					
Tube moved and detented to center of IR/grid.					
Central ray angled as per projection.					
Central ray directed to correct anatomical structure.					
Utilized appropriate position aids/immobilizers/restraints.					
Collimated to include part of interest only.					
Left/right marker accurately placed on IR to avoid superimposition of anatomy					
Used appropriate respiratory instructions.					
Gave patient clear, concise instructions.					
Exposure factors selected and set appropriately.					
Communicated with physician/RT re exam.					
Utilized appropriate isolation/aseptic technique.					

RADIATION SAFETY					
Collimated to ensure limited exposure.					
Protected patient (used appropriate shielding).					

POST-PROCEDURE ACTIVITY					
Radiographs properly identified and processed.					
Identified any necessary corrective action.					
Gave patient post-procedure instructions (barium, report).					

TOTAL POINTS:

--	--	--	--	--	--

Comments:

Scoring: Student must achieve a minimum of 21 for each projection in order to pass. PASS FAIL

KEY

- 0 =No skills—Student unable to/did not perform any part of the stated task or requires refinement in skills.
 - 1 =Functionally adequate skills—Student performs the tasks completely within a reasonable time frame.
 - 2 =Accomplished skills—Student performed all portions of the task correctly and independently at an advanced level of working knowledge and speed.
- NOTE: X out any criteria that do not apply to projection.

STUDENT _____
EVALUATOR _____
DATE _____

PROGRAM OFFICIAL _____

WHITE: PROGRAM

PINK: STUDENT

D. AREA COMPETENCY EVALUATIONS

Each semester students are scheduled to rotate through various procedural areas, such as the emergency x-ray area, fluoroscopic imaging room, and operating room. These rotations are developed in conjunction with the didactic materials being taught in the classroom to ensure students actively participate in radiographic procedures they are currently learning.

As part of the observation and assistive phases each semester, in addition to procedure competency evaluations, each student will be responsible for completing 2-5 area competency evaluations as outlined in the procedural course syllabi each semester. These evaluations provide a means for the student to demonstrate his/her ability to move, manipulate and operate safely and competently specific imaging equipment and perform area related skills.

Many of these areas possess different types of imaging and accessory equipment, therefore different skills are necessary in each of these areas. During the first and second rotations in each of these new imaging areas, students will complete an "area competency" evaluation. The assigned technologist working with the student will evaluate the student's ability to manipulate and use the equipment safely and competently and complete related skills.

These evaluations are to be completed as the student rotates through each assigned area and submitted within one week of completion.

It is the responsibility of each student to make certain he/she is able to complete each objective for each imaging unit or imaging room. If after reviewing the objectives on each area competency, a student is uncertain how to perform the necessary task he/she should ask an instructor to demonstrate the task and allow the student to practice.

Fall I • (RADT 153)

O2 Administration
Suction Unit
Hand washing
Transfer from wheelchair to lowered radiographic table

Fall I • (RADT 152)

Reception
CR Digital Imaging Equipment
Radiographic room

Spring I • (RADT 157)

Emergency room unit
Fluoroscopic unit
Mobile unit

Fall II • RADT 252 (new site)

Quality Assurance
Operating room (C-Arm)
Mobile radiography
CR Digital Imaging Equipment
Emergency/trauma

Spring II • RADT 257

CT Scan
1 Special modality (Bone Dens., DVI, Mammo., MRI, NM, Rad Therapy, US)

**Brookdale Community College
Radiologic Technology Program**

CR DIGITAL IMAGING EQUIPMENT

STUDENT _____ DATE _____
EVALUATOR _____

SCORING THE EVALUATION:

Each task or objective must be performed completely. There are no partial credits. Place a check in the box adjacent to the skill as the student demonstrates the skill completely. Student must pass each objective before handing in the completed assignment.

PERFORMANCE OBJECTIVES:

The student will demonstrate the ability to:

I. Perform related skills using digital imaging equipment BY:

(check when Complete) (Initials of supv RT)

A.	Correctly identify the components of the digital imaging system; console, laser reader, digital plates, monitor and laser printer		
B.	Enter patient's name and information to begin procedure		
C.	Select correct procedure parameters before making exposure (image size, orientation, procedure type, position, etc.)		
D.	Use bar code reader to identify image plate before inserting into reader		
E.	Correctly place cassette into image reader		
F.	Bring up correct patient/model image		
G.	Identify patient/ model name and other related information on image		
H.	Adjust contrast on image for part type appropriately		
I.	Modify resultant image to show L or R marker; erect or other identifying information		
J.	Correctly identify exposure index (range of acceptable exposure) Maybe referred to as log mean, EI, EX, EXI values		
K.	Identify if EXI is within acceptable range for given body part		
L.	Send image to printer for printing		

Comments:

Student Signature: _____ Date _____

Instructor/Staff Signature: _____ Date _____

E. CLINICAL PERFORMANCE EVALUATION

The main reason for clinical performance evaluations are the assessment of professional skills, patient safety and work performance. It takes into consideration such areas as patient care, communication, conduct, attendance, patient interaction, etc. This evaluation is completed with input from college instructors, hospital clinical instructors, clinical staff and administration of the clinical education agency. These evaluations are reviewed with the students in the middle of each semester and suggestions for improvement are made at that time.

Passing scores progressively increase throughout the program.

In the first fall semester, a student must achieve at minimum of **2.0** in order to pass.

In the first spring semester, a student must achieve a minimum of **2.1** in order to pass.

In the second fall semester, a student must achieve a minimum of **2.2** and

in the second spring semester, a student must achieve a minimum of **2.3** in order to pass.

In the event, a student's score reflects a score less than the acceptable score in any given semester, the instructor and student will develop a plan of action to improve those skills or behaviors prior to the end of the semester. The student will be re-evaluated at the end of the semester.

If a student does not successfully pass the second evaluation, the clinical grade will be adversely affected. The student could fail the clinical course.

CLINICAL PERFORMANCE EVALUATION

Student name _____

Date _____

Clinical Site _____

Semester _____

Directions: Circle one (1) rating value for each statement that best indicates the student's level of performance or skill development for each listed performance objective below.

Note: In the comments area for each of the seven (7) sections, please provide examples on specific behaviors/incidences for any scores that are below a score of 2.

Grading: Each student must achieve a minimum **average score of 2.0** to pass the evaluation and course.

The above named student:

Rating Scale

- 0 = No skills** - student unable to perform/does not perform
1 = Needs Improvement - Student needs refinement of skill
2 = Functionally adequate - student performs task completely and expediently
3 = Accomplished skill - Student performs skill independently and at an advanced level

COGNITIVE SKILLS

Communication

Circle one (1) for each statement

- | | | | | |
|--|---|---|---|---|
| 1. Uses appropriate medical terminology in professional discussions | 0 | 1 | 2 | 3 |
| 2. Exercises good judgment in the selection of topics of discussion | 0 | 1 | 2 | 3 |
| 3. Records and conveys messages to appropriate staff and faculty (i.e., Histories) | 0 | 1 | 2 | 3 |
| 4. Utilizes appropriate patient education methodologies (e.g., age, disabilities) | 0 | 1 | 2 | 3 |
| 5. Expresses thoughts and/or concerns in a non-confrontational manner | 0 | 1 | 2 | 3 |
| 6. Maintains confidentiality with private or personal information appropriately | 0 | 1 | 2 | 3 |

Comments: _____

Sample

Critical Thinking

- | | | | | |
|---|---|---|---|---|
| 1. Makes reasonable conclusions based on facts and knowledge of situation | 0 | 1 | 2 | 3 |
| 2. Asks questions that are pertinent and essential to finding solutions | 0 | 1 | 2 | 3 |
| 3. Determines the credibility of information sources before using to make decisions | 0 | 1 | 2 | 3 |
| 4. Seeks solutions/answers without unnecessary solicitation from faculty/staff | 0 | 1 | 2 | 3 |
| 5. Completes tasks as instructed with appropriate behavior | 0 | 1 | 2 | 3 |
| 6. Sets priorities & makes decisions in a timely manner & includes key stakeholders | 0 | 1 | 2 | 3 |

Comments: _____

PSYCHOMOTOR

Patient Care / Safety

- | | | | | |
|--|---|---|---|---|
| 1. Respects patients' dignity and privacy | 0 | 1 | 2 | 3 |
| 2. Identifies patients' needs (i.e., washcloth, emesis basin, gown...) | 0 | 1 | 2 | 3 |
| 3. Assists with patients' medical needs as appropriate | 0 | 1 | 2 | 3 |
| 4. Recognizes and responds to cleanliness of patient environments | 0 | 1 | 2 | 3 |
| 5. Recognizes events that may jeopardize/compromise patient care | 0 | 1 | 2 | 3 |
| 6. Acts in a manner that prevents patient injury or accidents | 0 | 1 | 2 | 3 |

Comments: _____

Organization

- | | | | | |
|--|---|---|---|---|
| 1. Manages procedures/assignments in an organized and logical fashion | 0 | 1 | 2 | 3 |
| 2. Assures that equipment and supplies are maintained and stocked | 0 | 1 | 2 | 3 |
| 3. Performs duties with speed while maintaining accuracy | 0 | 1 | 2 | 3 |
| 4. Uses time wisely for educational purposes | 0 | 1 | 2 | 3 |
| 5. Is adequately prepared (i.e., uniform, books, lead markers, supplies) | 0 | 1 | 2 | 3 |

Comments: _____

sample

CLINICAL PERFORMANCE SKILLS

Participation

- | | | | | |
|--|---|---|---|---|
| 1. Actively participates in total workload of assigned area/seeks out work | 0 | 1 | 2 | 3 |
| 2. Performs tasks expediently when asked | 0 | 1 | 2 | 3 |
| 3. Performs tasks that are unassigned but necessary for the efficient function of the department | 0 | 1 | 2 | 3 |
| 4. Shows initiative to complete clinical competencies in a timely manner | 0 | 1 | 2 | 3 |
| 5. Works autonomously/independently (without much guidance and prompting) | 0 | 1 | 2 | 3 |
| 6. Is familiar with routines/protocols/policies | 0 | 1 | 2 | 3 |

Comments: _____

Accountability

1. Reports to assignment on time	0	1	2	3
2. Returns from breaks/lunch on time	0	1	2	3
3. Completes assignments promptly, thoroughly and accurately	0	1	2	3
4. Notifies instructor(s) of tardiness/absence/whereabouts/changes to schedule, etc.	0	1	2	3
5. Accepts responsibility for own actions	0	1	2	3

Comments: _____

Professional Demeanor

1. Projects a sense of confidence	0	1	2	3
2. Exhibits behaviors in accordance to the code of ethics	0	1	2	3
3. Adheres to rules set forth in student handbook and program manuals	0	1	2	3
4. Dresses according to uniform policy (including pocket handbook)	0	1	2	3
5. Demonstrates an interest in professional literature and organizations	0	1	2	3
6. Accepts guidance, suggestions and constructive criticism positively	0	1	2	3
7. Maintains composure and professional decorum in all situations	0	1	2	3

Comments: _____

Strengths:

Sample

Weaknesses:

Total score _____ divided by 40 = **Averaged score** _____
Pass _____ Fail _____

Instructor _____

Date _____

Student _____

Date _____

Faculty _____

Date _____

F. IMAGE EVALUATIONS

This activity assists students in recognizing acceptable criteria and visibility of diagnostic images. Students learn how to identify various projections, positions, artifacts, exposure factors and qualities and methods of adjusting them. During the evaluation, students critically evaluate three (3) images each semester and provide rationale for their assessment. Students also provide corrective actions for image deficiencies. This evaluation is conducted by college instructors.

Each image evaluation must be passed with a score of 20 or better in order to pass.

In the event a student does not successfully complete the image evaluation, the student will be referred to remediation and practice and then be rescheduled within two weeks. If the student does not successfully pass the evaluation, the course grade will be adversely affected. The student could fail the course.

Student: _____

Clinical Site: _____

Brookdale Community College
Radiologic Technology Program
Film Image Evaluation

Objective: Given a series of radiographs, the student will evaluate each film to demonstrate his/her knowledge of radiographic quality, radiographic exposure and manipulation of factors, and positioning, anatomy and pathology.

The student must achieve a minimum score of 20 on each film to receive a pass.

Scoring Criteria:
0 = Student unable to discuss factor or did not identify factor during evaluation
1 = Student demonstrated average knowledge of factor and identified factor appropriately during evaluation
2 = Student demonstrated above average knowledge of factor as it related to the radiograph

What part and position does the film demonstrate? _____ **Score**
Is the radiograph considered acceptable? (circle choice) YES NO

Photographic Properties
Part Penetration _____
Density _____
Appropriate Contrast/ CR _____
Detail (structures) _____
Geometric Properties
Spatial Resolution _____
Sharpness _____
Motion _____
Magnification _____
Shape Distortion _____

Procedural Factors
Structure Criteria _____

Structures shown/missing _____

Part Positioning _____
Part to CR _____
Angulation to part _____
Collimation _____

Pathology/ Disease _____
Artifacts _____
Other _____

Corrective Action _____

Comments:

Total Points

PASS _____ **FAIL** _____

Evaluator: _____

Student: _____

Date : _____

A:\remediation\Filmeval.doc 12.99

Student: _____

Clinical Site: _____

Brookdale Community College
Radiologic Technology Program
DIGITAL IMAGE Evaluation

Objective: Given a series of radiographs, the student will evaluate each film to demonstrate his/her knowledge of radiographic quality, radiographic exposure and manipulation of factors, and positioning, anatomy and pathology.

The student must achieve a minimum score of 20 on each film to receive a pass.

Scoring Criteria:
0 = Student unable to discuss factor or did not identify factor during evaluation
1 = Student demonstrated average knowledge of factor and identified factor appropriately during evaluation
2 = Student demonstrated above average knowledge of factor as it related to the radiograph

What part and position does the image demonstrate? _____

Is the radiograph considered acceptable? (circle choice) YES NO

Score

Photographic Properties
Part Penetration _____
Exposure/ Brightness _____
Appropriate Contrast _____
Contrast Resolution _____
Detail (structures) _____

Geometric Properties
Spatial Resolution _____
Sharpness _____
Motion _____
Magnification _____

Procedural Factors
Structure Criteria _____

Structures shown / missing _____

Part to CR _____
Pt Positioning _____
Angulation to part _____
Collimation _____

Pathology/ Disease _____
Artifacts _____
Other _____

Corrective Action(s) _____

_____ **X 2**

Comments:

Total Points _____

PASS _____ **FAIL** _____

Evaluator: _____

Student: _____

Date : _____

G. AGE COMPETENCY EVALUATIONS

During the first Fall semester in RADT 153, students learn about patient considerations for patients of different age groups. Students are given an age competency evaluation booklet that includes evaluation objectives for infant, child, adult and geriatric patients. While students are performing procedures on patients of different age groups, they are evaluated for their ability to manage the age specific patient.

Students should bring the Age Competency Booklet to clinical and ask clinical staff to evaluate them during the performance of procedures in the four different age groups. (See the Age Competency Booklet for objectives).

Students must complete the age competency evaluation by the end of the second semester.

BROOKDALE COMMUNITY COLLEGE
Radiologic Technology Program
AGE RELATED COMPETENCIES

Name: _____ Date: _____

Scoring Criteria	
<p>Rate Competence Level 2=Demonstrated Competency/Proficient skills 3=High level of competency/ advanced proficiency/skill.</p>	<p>Please note to evaluator: If a student does not demonstrate average or above average competency for any objective, DO NOT rate- leave blank. The student will repeat another time.</p>

Neonate/Infant under 2	Rating	Initial	Date
Approaches and provides care in a calm, and tender manner			
Maintains safe environment, side rails up, and protects infant from rolling			
Uses distraction techniques to calm the infant.			
Keeps infant warm and unexposed			
Uses distraction techniques to calm the infant.			
Encourages parental assistance in providing care. Involves parents/caregiver.			
Educates parents/caregivers of procedural requirements.			
Child under 6	Rating	Initial	Date
Approaches child in calm manner and uses direct approach.			
Maintains safe environment, side rails up, uses age-appropriate equipment.			
Involves child in care and allows child to have control through appropriate choices			
Educates parents/caregivers of procedural requirements			
Child under 12	Rating	Initial	Date
Approaches child in calm manner and uses direct approach.			
Maintains safe environment, side rails up, uses age-appropriate equipment.			
Involves child in care and allows child to have control through appropriate choices			
Adolescent under 18	Rating	Initial	Date
Maintains safe environment, side rails up, uses age-appropriate equipment.			
Involves patient in care, treatments, and procedures and allows patient to have control as condition permit.			
Explains all care, treatment, and procedures to patient before being performed and allows time for questions.			

H. REMEDIATION

In the case of a student shows difficulties in performing any clinical task or a failure of any laboratory or clinical competency evaluation, the student will be referred to a remediation process as follows:

- a. The student's supervision status in the failed radiographic procedure is removed.
- b. The area(s) of failure is discussed with the student.
- c. A remediation plan is developed.
- d. Students return to didactic theory and laboratory practice.
- e. Student's are re-evaluated in the laboratory.
- f. Once laboratory evaluation is successfully completed, the student is returned to clinical practice with DIRECT supervision.
- g. The student is re-evaluated in the clinical agency within two weeks of completed remediation. **It is the student's responsibility to make sure he/she is re-evaluated.**

Remediation can be initiated by hospital or college instructors and faculty. The content and length of this remediation plan and the clinical application phase will be developed by the faculty and laboratory instructors. This plan will be documented and kept in the student's file.

Brookdale Community College
Radiologic Technology Program
Remediation Referral and Plan

Student: _____ Clinical Site (if applic.): _____

Faculty/Lab Instructor: _____ Date: _____

Course: RADT # _____

The above named student has been returned to the didactic and laboratory portions of the Clinical Competency Based Education (CBCE) program to review pertinent didactic lessons and materials and/or to the college laboratory to review and reevaluate the following didactic lessons, performance criteria (patient care skills, communication skills, etc.), radiographic procedures and/or affective domain skills.

Didactic tests/performance/tasks requiring remediation (be specific):

- 1)
- 2)
- 3)
- 4)
- 5)

.....
THIS SECTION TO BE COMPLETED BY FACULTY/LAB INSTRUCTOR

In order for the above named student to advance in and pass the CBCE program for the above stated course, the student must successfully complete the following remediation plan by the target date designated below.

Remediation plan:

- 1)
- 2)
- 3)
- 4)
- 5)

Sample

Target date/date to be completed by: _____

STUDENT COMMENTS:

Student: _____ Date: _____

Faculty/Lab Instructor: _____ Date: _____

.....
TO BE COMPLETED AFTER REMEDIATION

REMEDIATION PROGRESS

Remediation completed on: _____(Date) New remediation plan written: _____(Date)

Student: _____ Date: _____

Faculty/Lab Instructor: _____ Date: _____

WHITE—PROGRAM FILE YELLOW—CLINICAL/FACULTY FILE PINK—STUDENT

Clinical Supervision and Participation Policies

III. Clinical Supervision Policies

All students are to be directly supervised while performing radiographic/ imaging procedures until the student successfully passes an initial clinical competency evaluation on any given procedures.

A. DIRECT SUPERVISION

The licensed and registered radiographer shall—

1. Review the request for the procedure in relation to the student's achievement and program level and ability.
2. Evaluate the condition of the patient in relation to the student's knowledge to assess patient level of cooperation, health status and ability of student to respond effectively and safely.
3. Be present in the room during the performance of the procedure.
4. Observe ALL activities and tasks performed by student to ensure safety.
5. Radiographer corrects student before exposure is made as necessary.
5. Review and approve all radiographic images.
6. Be present and observe all repeat, portable and operative procedures performed by a student.

All mobile, operating room and repeat exposures are to be under direct supervision regardless of the level of clinical competency. It is the student's responsibility to ensure appropriate supervision at all times.

B. INDIRECT SUPERVISION

1. Supervision provided by a licensed and registered radiographer who is **"immediately available"** to assist students regardless of the level of student achievement.
2. "Immediately available" is interpreted as the presence of a licensed and registered radiographer adjacent to the room or location where a radiographic procedure is being performed at a distance whereby response can occur with seconds of a request.
3. This availability applies to all cases where ionizing radiation equipment is in use.

NOTE: Only students who have successfully completed an initial clinical competency evaluation on a given procedure may perform that procedure with indirect supervision. Once a student completes a procedure category, he/she may perform all procedures within that category under indirect supervision.

- No student is permitted to participate in the observational or assistance phase of the educational process without the DIRECT supervision of a radiographer.
- No two (2) first-year students are permitted to perform radiographic procedures together. Appropriate supervision by a licensed, registered technologist is necessary at all times.

C. REPEAT RADIOGRAPHS:

- In all phases of the clinical activities, all images produced by students must be **reviewed and countersigned by a radiographer or supervisor.**
- If any image needs to be repeated, a radiographer **MUST DIRECTLY SUPERVISE** the repeated radiographic exposure(s).
 - **RT must place their lead markers next to student's markers on repeated image**

NOTE: It is the student's responsibility to ensure he/she has supervision during any repeat. A student may be dismissed from the program as a result of patient safety violation if he/she fails to comply.

- During this time of clinical practice it is extremely important that a student notes any problems with procedures and discusses them with a clinical instructor.

D. STUDENT ROTATIONS IN THE CLINICAL SETTING

All technical and non-technical rotations in the clinical setting will begin after the completion of orientation and introductions to Radiation Protection and the clinical sites.

Each semester clinical faculty develops a student rotation schedule. The schedule indicates the location of the student's rotation each week while at the clinical agency. Rotations are to be followed to ensure equitable experiences. It is the student's responsibility to ensure he/she is placed according to prescribed schedule.

- A staff radiographer must be present at all times at a scheduled rotation location.

Rotations are to be directly supervised by the radiographer assigned to this area. **If no radiographer is available or the imaging equipment is inoperable, the student is to report to a clinical instructor for reassignment.** If no other properly supervised area is available, the student will be assigned to practice procedures in an available room or to independent study until adequate supervision becomes available.

E. CLINICAL ATTENDANCE

- Students are to report to their clinical assignments by 7:55 a.m. and be ready to begin at 8 a.m. Students must sign in at 7:55 a.m. and then sign out at 4 p.m. Each student has **30 minutes for lunch. Lunches may be scheduled between 11:30 a.m.**

and 12:30 p.m. and at times when a Brookdale Instructor is not present. Times for lunch are posted on rotation schedules. Under normal circumstances students are required to be in their assigned clinical area except for breaks and lunch.

Students cannot leave hospital property during breaks or lunch. If an emergency occurs, the student must notify the instructor immediately before leaving and sign out in Trajesys noting reason. The instructor must countersign the absence. The student must make sure the instructor countersigns.

Students should not be in their clinical agency at any other time except during scheduled clinical assignments.

Students are not allowed to miss more than **8 hours** from their scheduled clinical rotations during any given semester.

F. EXPECTATIONS OF STUDENTS' PERFORMANCE AND BEHAVIOR IN THE CLINICAL SETTING

Students are expected to behave professionally and respect the requests and direction of the technical staff at all times while in the clinical setting. The following list of behaviors was developed in collaboration with students, faculty and instructors. Any student failing to adhere to these expectations will be counseled. In the event any undesired behaviors continue, the student may fail the clinical performance evaluation, fail the clinical course and/or be dismissed from the program.

Clinical Performance Expectations

Expectations the Department/Faculty have of the Radiologic Technology student:

1. Students are to arrive on time and be in their clinically assigned area by start time.
2. Students will remain in assigned clinical area for designated clinical hours. Students will not leave the clinical area without permission. Students will not congregate.
3. Students will communicate to assigned technologist any changes in schedule and whereabouts at all times.
4. Students will show eagerness to learn and a willingness to **ACTIVELY** participate in **ALL** aspects of imaging procedures and assignments.
5. Students will always keep his/her assigned area clean, stocked and prepared for the next patient. (No garbage, soiled linen or excess supplies will be present).
6. Students will respect any technologist's reasonable requests and step aside and observe quietly when a technologist takes over a procedure. Questions concerning a request will be asked away from patients, family and/or visitors.
7. Students will ask instructors and staff technologists for assistance and ensure supervision is available during procedures.

8. Students will take into consideration the patient's condition, safety and privacy at all times.
9. Students will communicate to instructors any or all difficulties in the clinical area to ensure that skills are adequately practiced and learned.
10. Students will discuss with instructors any difficulties with patients, staff or other hospital personnel in a non-confrontational manner.
11. Students will abide by Department and program policies and procedures while in the clinical setting.
12. Students are not to repeat any radiation exposure, be in the O. R. or on portable assignments without DIRECT supervision- accompanied by a licensed RT.
13. Students will ensure they have adequate supervision according to their competency level on any procedure to be performed on a patient.
14. Students will make certain that procedure and other competency evaluations are completed as soon as skills are learned and will not wait until the end of the semester creating undue hardship on instructors and staff technologists.
Completion of semester requirements should be by the 12th week of any semester.
15. Students are expected to bring concerns to instructors as soon as they arise and not wait until problems occur.
16. Students are to follow the Problem Resolution policy when any problem occurs.

V. Information Sheet: Technical Requirements

Brookdale Community College Radiologic Technology Program

TECHNICAL REQUIREMENTS

SUBJECT: Technical Requirements of a Radiographer for Competent Clinical Performance

The technical requirements is a list of essential functions to be performed by any qualified radiologic technologist in order to satisfactorily complete all of the required clinical assignments and to competently perform all the procedures of a diagnostic radiographer in the work force.

1. Communicate therapeutically in English to patients in order to converse with and instruct them, to relieve their anxiety and gain their cooperation during the procedure.
2. Hear a patient talk in a normal tone from a distance of 20 feet.
3. Visually observe the patient (from a distance of 20 feet), in order to accurately assess the patient's condition and needs during the procedure.
4. Read and comprehend patient's medical chart and doctor's orders.
5. Evaluate radiographic images for proper identification and to assure diagnostic quality.
6. Render services and assistance to all patients depending on the individual patient's needs and abilities in moving, turning, getting on and off the x-ray table, wheelchair, etc. Be able to push, pull, and lift 40 pounds without assistance.
7. Position a mobile x-ray unit and manipulate a mobile x-ray unit in turning movements, transporting the machine on and off an elevator, and positioning a mobile x-ray unit in a patient's room.
8. Manually move the x-ray tube and manipulate the tube at standard and non-standard heights and angles up to seven feet.
9. Push a stretcher and/or wheelchair without injury to self, patient, or others.
10. Perform imaging procedures while wearing personal protective equipment (mask, gown, gloves, etc.)
11. Perform CPR (bag and mask ventilation, chest compressions)
12. Safely and effectively prioritize workload
13. Utilize intellectual ability to adapt to changing patients' conditions

V. College Lab Rules

Brookdale Community College Radiologic Technology Program

COLLEGE LAB RULES

1. Attendance at laboratory demonstration and practice is mandatory each week.
2. You must sign in and out for evaluations and practice each session.
3. You must arrive five (5) minutes before your scheduled times.
4. Your lab uniform must be complete before you can evaluate, including lab coat, radiation monitoring badge and markers.
5. You must have your own markers to evaluate.
6. If you are **ten (10) minutes** late for a demo, practice or evaluation, you will be rescheduled and docked any missed time.
7. Lab coats and closed-toe shoes must be worn at all times.
8. Appropriate attire at all times. You may be asked to leave the lab if the attire is not professional.
9. No cell phones or electronic devices may be on or used in the lab.
10. No private conversation allowed in the lab.
11. No food or drinks in the lab.
12. All lab equipment and supplies must be returned to their appropriate place before leaving.

ACKNOWLEDGMENT OF RECEIPT AND UNDERSTANDING OF THE RADT CLINICAL MANUAL

I have received and reviewed the RADT Clinical Manual. I have had the opportunity to answer questions and fully understand the requirements, procedures and policies set forth as written in the manual and explained to me. I fully understand that I am responsible for implementation and compliance to the procedures and policies outlined. My clinical course grade reflects this compliance and adequate performance of procedures outlined. I may be dismissed from the program, in an event that I have not followed or adequately implemented any procedure or policy here within. **Any violation may result in dismissal from the Radiologic Technology Program.**

PRINT NAME _____

SIGNATURE _____

DATE _____

