

CUMBERLAND COUNTY COLLEGE



**Radiography
Student
Handbook
2017**

Pride · Service · Excellence

The Cumberland County College, Radiography Program has dual education responsibilities and requirements for successful completion of the program. This is a supplemental student handbook for policies and procedures that are specific to the Radiography Program.

Refer to the program website via www.ccnj.edu for additional information

Due to the unique academic-clinical requirements of the Program, students are responsible for all Policies and procedures contained in the:

*Cumberland County College Catalog
Cumberland County Student Handbook
Cumberland County College Radiography Program Handbook
Policies and Procedures of the assigned Clinical Education Center*

PROGRAM ACCREDITATION

The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) and the Department of Environmental Protection Bureau of Radiation Protection for the State of New Jersey (NJDEP). Cumberland County College adheres to the Standards for an Accredited Educational Program for the Radiographer, updated most currently for 2014. A copy of the Standards is available for review on the program's website. A non-compliance policy is included as an Appendix in this Handbook.

STATEMENT OF NON-DISCRIMINATORY POLICY

Cumberland County College endorses the concepts of nondiscrimination and equal opportunity for all, regardless of color, race, religion, sex, national origin, handicap, age, place of birth, marital status, or liability for military service. The college follows the guidelines of Section 504 of the 1973 Federal Rehabilitation Act, which mandates equal access to education for disabled students. Campus Coordinator for Title IX and 504 activities is Rosemarie Fiscus, Executive Director of Human Resources, Administration Building, (856)691-8600, extension 1235. This individual is designated to coordinate the college's efforts to comply with and carry out its responsibilities under Title IX, Section 504/the ADA, and the Age Discrimination Act, which prohibit discrimination on the basis of sex, disability and age, respectively.

The Cumberland County College, Radiography Program reserves the right to change the curriculum and educational policies as considered necessary for the progressive development of the program.

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WELCOME TO YOUR NEW CAREER

The faculty of the Cumberland County College Radiography Program welcomes you as a student radiographer. We hope that you will find this to be a warm, friendly environment in which to learn.

You are entering the field of Radiography. This will be a new world for you as it will be your first encounter with the behind-the-scenes operation of a hospital.

As a student radiographer, you will be part of a medical team working in a branch of medicine called Diagnostic Imaging or Radiology. You will assist physicians known as Radiologists who specialize in the use of X-rays and other imaging methods to diagnose and treat various injuries and diseases. You will play a vital role in a science dedicated to saving lives and alleviating human suffering.

The education of radiographers is somewhat different than the education provided in other academic settings. Part of your education will be in the classroom and the other will be practical clinical experience. During the next two years, you will be closely observed in the classroom and in the clinical education center. You will be working closely with staff radiographers and physicians. Upon the successful completion of your education, you will be qualified to work in a hospital, diagnostic imaging center, physician's office, and with mobile imaging companies.

We hope this handbook will help you become acquainted with the Cumberland County College Radiography Program. As a student, there will be a number of expectations. You will have new responsibilities and will be required to meet professional standards.

In order to offer efficient and professional service to our patients, regulations within the Clinical Education Settings are necessary. These will be reviewed for you in this handbook, the college handbook and college catalog. All student radiographers are subject to the basic rules and regulations of the hospital, imaging department, and the school program. Rules and regulations are found in every walk of life and to some extent are even more important in the hospital environment.

The safety of patients and students is of primary importance. You must be physically and mentally able to complete the Essential Functions which are listed on the next page. Please review these criteria carefully. If you have a documented disability and wish to discuss the possibility for reasonable accommodations, please contact the Program Director prior to the start of the program.

We hope you will find your association with the faculty, radiologists, radiographers, and fellow students to be intellectually and professionally rewarding. We hope you will dedicate yourself to the Cumberland County College, Radiography Program tradition of offering the "**Best of Patient Care**".

Due to Joint Commission on Accreditation for Healthcare Organizations requirements concerning Clinical Education Settings, students are required to submit to a background check prior to assignment to clinical sites.

Admission to the program is contingent upon successful completion of the background check and physical exam, including drug screening. Students may be subjected to random drug testing, as deemed necessary by the clinical site, at any time while enrolled in the program.

Essential Functions

While in the clinical education center, the student radiographer must be able to:

1. Have sufficient strength, motor coordination, and manual dexterity to be able to:
 - a. Transport, move, lift, or transfer patients from a wheelchair/stretchers to an x-ray table or to a patient bed.
 - b. Move, adjust, and manipulate a variety of radiographic equipment (including the physical transportation of portable x-ray machines) in order to arrange the equipment and align it properly with respect to the patient and the image receptor according to established procedure and standards of speed and accuracy.
 - c. Physically place patients in the proper positions for the examination according to established procedures and standards of speed and accuracy.
2. Be capable of:
 - a. Communicating verbally in an effective manner in order to explain and direct patients as it relates to their examination.
 - b. Handling stressful situations related to technical and procedural standards and patient care situations.
 - c. Providing physical and emotional support to the patient during radiographic procedures and be able to respond with speed to situations requiring basic first aid and emergency care.
3. Have the mental or intellectual capacity to:
 - a. Calculate and select the proper technical exposure factors according to the individual needs of the patient and the requirements of the procedure with speed and accuracy.
 - b. View and evaluate the recorded images or radiographs for the purposes of identifying proper patient position, accurate procedural sequencing, proper radiographic exposure, and other pertinent technical qualities.
 - c. Properly use computer systems and other technology within the radiography department.
4. Must possess the sensory factors necessary to provide optimal patient care. These senses include, but are not limited to, hearing (with or without aids), vision (with or without aids) including color and depth perception, clarity of speech, and tactile sensory perception.

If you feel you will be unable to achieve any of these goals, please notify the Clinical Coordinator and/or Program Director prior to the first day of school. (856) 691-8600, extension 1265/ or 1264.

THE MISSION OF THE RADIOGRAPHY PROGRAM

To provide Cumberland County with competent technologists through a high quality, career-oriented education in radiography.

GOALS OF THE RADIOGRAPHY PROGRAM

1. Students will be competent when performing radiographic procedures.
2. Students will demonstrate effective communication.
3. Students will demonstrate problem solving / critical thinking skills.
4. Students will display professional development and growth.
5. Graduates will be employable and meet the needs of the healthcare community.
6. Students will display Information Literacy.

Revised 2012

Last reviewed 2017

PROGRAM FACULTY

Program Director - Robert Champa, M.A, R.T. (R)
Clinical Coordinator - Barbara Peacock, B.S, R.T. (R)(C.T.)
Lab Assistant -Joanne Salvatore, B.S, R.T. (R)(M)

CCC Adjuncts
-Ada Scott, R.T. (R)(M)(MR)
-Christine Bowden, R.T. (R)(BD)(M)
-Christina Whilden, R.T. (R)

Clinical Instructors:

AtlantiCare, City Campus

Antrania Loatman, A.A.S, R.T. (R)
Jackie Augustyn, R.T. (R)
Kurk Elsey, A.A, R.T. (R)
Cindy Bergmann, R.T. (R)(CT)

Inspira Vineland

Loretta Carter, A.A.S, R.T. (R)
Janet Montero, A.A.S, R.T.(R)
Mark Childers, A.A.S, R.T. (R)
Ada Scott, R.T. (R)(M)(MR)
Omaira Bernard, R.T. (R)

Inspira Woodbury

Joanne Salvatore, B.S, R.T. (R)(M)
Rosemarie McAnally, B.S, R.T. (R)
Stacey Wren, R.T. (R)(M)

Inspira Elmer

Karen Marshall, R.T. (R)(M)
Christine Bowden, R.T. (R)(BD)(M)
Miles Ashmore, R.T. (R)
Robert Scola, R.T. (R)

Memorial Hospital of Salem County

Brandi Ortiz, A.A.S, R.T. (R)
Joseph Comparri Jr, A.A.S, R.T. (R) CIIP
Donna Clouser, R.T. (R)(CT)
Joseph Cook, A.A.S, R.T. (R)(CT)

Cape Regional Medical Center

Marcella Profit, R.T. (R)
Heidi Howell, A.A.S, R.T. (R)
Dawn Moser, A.A.S, R.T. (R)
Kim Vohland, A.A.S, R.T. (R)

Atlantic Medical Imaging

Patricia Smith, R.T. (R)(M)

AtlantiCare, Mainland Campus

MaryBeth O'Brien, R.T. (R)
Barbara Clyde, R.T. (R)
William Cressman, B.S, R.T. (R)
Roseann Mott, R.T. (R)(CT)

Kennedy Health – Washington Twp

Christopher Reuther, A.A.S, R.T. (R)
Jana Smith, A.A.S, R.T. (R)
Mailyn Vitullo, R.T. (R)
Danielle Yates, A.A, R.T. (R)

Kennedy Health – Stratford

Maureen Linstrom, B.S, R.T. (R)
(TBA)

Kennedy Health – Cherry Hill

Stephanie Magasiny, B.S, R.T. (R)
Kelly Ann Emery, A.A.S, R.T. (R)(M)
Shannon Dykie, R.T. (R)(MR)
Michele Laine, B.S, R.T. (R)(M)

Kennedy Out Patient Center - Sewell

Colleen McCulloch, R.T., (R)
Jennifer Jerecki, R.T., (R)

Center for Diagnostic Imaging

Jennifer Sachleban, A.A.S, R.T. (R)(M)(MR)(CT)(BD)
Karen Perla, R.T. (R)(M)

Inspira Health Center Bridgeton

Jenna Legg, A.A.S, R.T. (R)
Michelle Ball, A.A.S, R.T. (R)
Rosalind Logan, A.A.S, R.T. (R)

Arthritis & Rheumatology Assoc. of SJ

Tim Lieske, A.A.S, R.T. (R)

Part-time faculty will be hired to instruct classes as the need arises.

Career Description

Radiographers are qualified by education to provide patient services using imaging modalities, as directed by physicians.

- Radiographers accurately image anatomical structures on a radiograph by applying knowledge of anatomy, positioning, and radiographic technical factors.
- Radiographers provide patient care essential to radiographic procedures; this includes exercising judgment when performing medical imaging procedures.
- Radiographers must also be able to recognize emergency patient conditions and initiate lifesaving first aid.
- The radiographer adheres to the principles of radiation protection for the patient, self, and others.
- Additional responsibilities may include maintaining equipment, processing images, keeping patient records, and performing various office tasks.

Curriculum

First Semester – Fall

(3:2:3) refers to (3 credits, 2 lectures hrs/week, 3 lab hrs/week)

Introduction to Radiographic Science (RT 101)	3 cr (3:2:3)
Radiographic Procedures I (RT 102)	3 cr (3:2:3)
Clinical Practicum and Image Evaluation I (RT 103)	2 cr (2:0:16)
Radiographic Exposure I (RT 104)	<u>2 cr (2:2:0)</u>
	10 Credits

Second Semester – Spring

Radiation Protection and Biology (RT 121)	3 cr (3:3:0)
Radiographic Exposure II (RT106)	2 cr (2:2:0)
Radiographic Procedures II (RT 107)	3 cr (3:2:3)
Clinical Practicum and Image Evaluation II (RT 110)	<u>2 cr (2:0:16)</u>
	10 Credits

Summer Session

Clinical Practicum and Image Evaluation III (RT 111)	<u>2 cr (2:0:40)</u>
	2 Credits

Third Semester – Fall

Radiographic Procedures III (RT 201)	3 cr (3:2:2)
Clinical Practicum and Image Evaluation IV (RT 202)	3 cr (3:0:24)
Equipment Operation and Maintenance I (RT 220)	<u>2 cr (2:2:0)</u>
	8 Credits

Fourth Semester – Spring

Radiographic Procedures IV (RT 205)	3 cr (3:3:0)
Clinical Practicum and Image Evaluation V (RT 206)	3 cr (3:0:24)
Equipment Operation and Maintenance II (RT 221)	<u>2 cr (2:2:0)</u>
	8 Credits

Summer Session

Clinical Practicum and Image Evaluation VI (RT 210)	<u>2 cr (2:0:40)</u>
	2 Credits

Total 40 Credits

General Education Courses

Anatomy and Physiology I (BI 106)	4 cr (4:3:3)
Anatomy & Physiology II (BI 107)	4 cr (4:3:3)
English 101	3 cr (3:3:0)
English 102	3 cr (3:3:0)
General Psychology (PY 101)	3 cr (3:3:0)
Introduction to Sociology (SO 201)	3 cr (3:3:0)
Principles of Mathematics (MA109)	3 cr (3:3:0)
Humanities Elective	3 cr (3:3:0)
Introduction to Microcomputers (CS101) or Computer Science Elective	3 cr (3:3:0)

Total 29 Credits

2 Yr Total 69 Credits

For a complete description of each course, please refer to the college catalog.

Academic Integrity

Plagiarism is cheating. Plagiarism is presenting in written work, in public speaking, and in oral reports the ideas or exact words of someone else without proper documentation.

Whether the act of plagiarism is deliberate or accidental [ignorance of the proper rules for handling material is no excuse], plagiarism is, indeed, a “criminal” offense. As such, a plagiarized paper or report automatically receives a grade of **ZERO** and the student may receive a grade of F for the semester at the discretion of the instructor.

Before Withdrawing From a Course

If a student experiences adverse circumstances while enrolled in any course and considers withdrawing, s/he should see an advisor (division or advisement center) BEFORE withdrawing from the class. A withdrawal may cause harmful repercussions to completion rate standards and overall GPA which can limit or eliminate future financial aid in addition to causing academic suspension.

Student Attendance

Attendance at all classes and in clinical education is vital to successful achievement in a professional Radiography Program.

The curriculum is planned to enable the student to integrate radiography concepts and principles with patient care in a progressive manner. Students learn more effectively in an environment of mutual acceptance, intellectual inquire, and self-involvement with their education. It is the responsibility of the faculty to provide opportunities for learning and it is the responsibility of the student to actively participate in the learning process. Students are expected to be present and prompt for all scheduled classes and clinical assignments.

The faculty does recognize that unforeseen situations arise over which the student has no control such as illness, death in the immediate family and personal matters. Regardless of the number of absences, the student must achieve a passing average in theory and demonstrate the competencies for each course objective in order to pass the course. Excessive illness or absence in a given course will necessitate review of the student's achievements and ability to complete course objectives.

A professional radiographer serves as a leader, assuming ever-increasing responsibilities. Part of the maturity necessary for this role is derived from self-discipline, and a realization of one's obligations to patients, to co-workers, and to oneself. Developing maturity is demonstrated by the correct use of sick time.

Attendance is important to the student's progress and development as a healthcare professional. Class outlines will contain the attendance policy developed by each instructor. Students are expected to attend class on a regular basis and are accountable for all work missed due to class absence. **Absence from the program (radiography didactic and clinical courses) for three consecutive days without notification to a Program Official will be considered a withdrawal from the program.**

Student Guidance and Advisement Process

The goal of advisement is for faculty to assist the student in the selection of the correct courses.

Procedure:

The student should refer to the Student Services section of the College Student Handbook. In addition to routine academic and clinical advisement, the student is advised to seek the following services as needed:

1. The Program Director for special requests, school/class status, administrative procedures, advisement and referrals.
2. The Clinical Coordinator for clinical education center concerns and special requests.
3. Concerns regarding grades should be discussed with the individual faculty member. If a satisfactory resolution is not obtained between the student and faculty member, the student may appeal the grade to administration in the following order: Program Director, Dean of STEM & Health Sciences, Vice President of Academic Affairs, President.
4. The Program Director or Instructor for assistance with study habits and personal problems affecting educational achievements (for appropriate referrals).
5. Students must assume the responsibility for requesting academic assistance. All advisement sessions are documented, signed by the advisor and student, and kept as part of the student's records.
6. The Clinical Instructor and Clinical Coordinator will provide guidance and advisement for clinical activities. Conference memos will be used to document discussions when necessary. The memos are retained as a part of the student's records.

Student Grievance Procedure

The following is the procedure that a student may follow if he/she believes that there is information pertaining to or contained in his or her education record that is inaccurate, misleading, or violates the privacy or other rights of the student:

1. If the questionable information concerns an academic grade received in didactic class work, the student should first talk with the instructor to discuss the grade in question as soon as the error is recognized. The student must present his/her concerns before the completion of the next scheduled class. The instructor will respond within one week.
2. If the questionable information pertains to a clinical evaluation/issue the student should first speak with the Clinical Instructor in an attempt to rectify the discrepancy as soon as possible or within one week of the issue. The Clinical Instructor will respond within one week.

3. If the student is still dissatisfied, the student should meet with the Clinical Coordinator within one week to discuss the issue. The Clinical Coordinator will respond within one week.
4. If the issue remains unresolved, the student should then make an appointment to discuss the matter with the Radiography Program Director. The student should contact the Program Director within one week of receiving the response from the instructor in the case of an academic question or the Clinical Coordinator in the case of a clinical question. The Program Director will investigate the situation and arrive at a final decision within a reasonable period of time not to exceed 2 weeks.
5. If after having heard the Radiography Program Director's decision the student is still dissatisfied, the student may then make take the issue to the following chain of command:
 - Dean
The student should present the concerns within one week of receiving the result from the Program Director. The Dean will make a decision within one week of reception of the complaint.
 - Vice President
The student should present the concerns within one week of receiving the result from the Dean of Health & Science. The Vice President will make a decision within one week of reception of the complaint.
6. Students are to comply with the following procedures included in the College Student Handbook and Cumberland County College Catalog.
 - Student Conduct Code
 - Academic Honesty
 - Prohibited Conduct
 - Disciplinary Sanctions
 - Student Grievance Procedure
 - Student Judiciary Committee
 - Student Due Process

Progression and Retention of Students

Due to the unique simultaneous requirements of academic and clinical education of the Radiography Program, the Academic Standards and Satisfactory Academic Progress policies of the Radiography Program differ from those found in the College Catalog. Those policies that vary from the College Catalog are indicated below.

Grading:

Each semester of classes is designed to build upon the knowledge gained the previous semester. Clinical grades are derived from the grades achieved in image evaluation, performance evaluations, and competencies at the clinical education center. The grading system for all radiography courses presented in the classroom portion of the Radiography Program has been aligned with the standards of our national credentialing agency, such that a minimum passing grade is (75) seventy-five. Each course outline will provide the grading system developed by the instructor. Student progression and retention in the Radiography Program is as follows:

Progression:

1. Students are required to earn a minimum grade of "C" in all Radiography (RT) courses in order to progress to the next semester.
2. Students are required to earn a minimum grade of "C" in all Anatomy & Physiology (A & P) courses in order to progress to the next semester.
3. Students earning less than a "C" in a Radiography or A & P course are unable to progress to the next semester until the course is repeated and the grade received is a minimum of "C."
4. If at all possible the program will work with the student to provide an uninterrupted educational experience.

Retention:

1. Students required to repeat a course to earn the minimum grade for progression to the next semester will remain in the program only if that minimum grade is earned.
2. Students will not be allowed to repeat more than one Radiography or A & P course during the entire educational process.

Course and/or Program Withdrawal:

A student who wishes to withdraw from the radiography program should seriously consider the career consequences of such a decision. It is recommended that the student seek counseling from the program faculty in regards to the reason and necessity for leaving the program. Every effort possible will be made by the program faculty to help the student find a means to stay in his/her chosen professional education environment. If after discussion and counseling no other decision can be reached the student must complete the required withdrawal form and submit it to Enrollment Services.

Incomplete Grades:

1. Incomplete grades must be changed prior to progressing to the next semester, unless approved by program officials.
2. Students must notify the Clinical Coordinator when clinical responsibilities are completed in order to ensure the proper grade change form is submitted.

Leave of Absence:

1. Students requesting a leave of absence must submit a written request to the Program Director and consult with their advisor. A leave of absence will be valid for a period of up to one year.
2. Students receiving less than the minimum grade for a Radiography and/or Biology course are considered to be on a leave of absence until the course is available.

Program Readmission:

1. Students who have requested a leave of absence will be required to reenter the Radiography Program within one year's time in order to be assured placement in the program.
2. In order to be eligible for readmission into the Radiography Program, students must submit a letter to the Program Director indicating their desire to continue the Program at least four months prior to the start of the semester in which they eligible to return.
3. The student will be required to successfully complete RT 100 prior to reentry into the program.
4. Upon return to the clinical education setting a continual competency evaluation must be completed on each initial competency achieved prior to the student's leave of absence. Any study not evaluated will not be counted toward the competency goal for that semester.

Graduation

Students must have a minimum of 63 credits with a cumulative of 2.0 GPA to be eligible to participate in the commencement exercise in May. All students in the radiography program will participate in the commencement ceremony. Students must continue with the summer session in clinical education to complete requirements for the Radiography Program. Upon completion of all required courses, the graduates are eligible to apply to sit for the American Registry of Radiologic Technologists certification examination and obtain a New Jersey State license.

To be eligible for Graduation the student must have satisfactorily completed:

- the attendance requirements for the program
- the academic course requirements of the program
- the clinical education requirements of the program

Pinning Ceremony

Students completing all requirements of the Radiography Program will participate in a pinning ceremony to be held on-campus at the end of the summer session. Family and friends are invited to attend. Students are responsible for the cost of the pin, and may elect to participate in the Radiology Club fundraisers to cover expenses of the pins and ceremony.

Radiography Program Academic Achievement Award

This award is presented during the Pinning Ceremony to the graduating student who has displayed academic excellence in Radiography courses.

Radiography Program Clinical Excellence Award

The Clinical Excellence Award is determined based on the specific clinical criteria. The award is presented during the pinning ceremony to the graduating student, based on the following criteria:

- Clinical GPA
- Attendance
- Communication & Problem solving skills
- Patient care skills
- Adherence to policies

The recipient of the award is determined by the college program personnel after consultation with the clinical instructors.

Lamda Nu Society – New Jersey Gamma Chapter

National Honor Society for the radiologic and imaging sciences. Students must achieve a GPA of 3.5 in radiography courses and have completed 3 semesters in the program to be eligible to apply for membership.

AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS (ARRT)

The American Registry of Radiologic Technologists was first organized in 1922. The main function of the Registry is to administer examinations for persons who have graduated from approved schools. To be certified as a registered Radiologic Technologist (R.T.) it is necessary to take an examination given by the Registry.

ARRT Mission Statement

The American Registry of Radiologic Technologists promotes high standards of patient care by recognizing qualified individuals in medical imaging, interventional procedures and radiation therapy.

Registry Examination

At the completion of the Radiography Program, the graduate is eligible to apply for the American Registry Examination in Radiography.

General Qualifications

Candidates must comply with the "Rules of Ethics" contained in the ARRT Standards of Ethics. This includes, but is not limited to, compliance with State and Federal laws. A conviction of, or a plea of guilty to, or a plea of nolo contendere to a criminal procedure must be investigated by the ARRT in order to determine eligibility.

Candidates can avoid delay by requesting a pre-application review of the violation before or during training, rather than waiting until completing the program. The pre-application form is downloadable from the "Ethics" section of the ARRT website, or you may request a copy by phone.

Educational Requirements

The ARRT Rules and Regulations require that candidates must have successfully completed a program of formal education, which is accredited by a mechanism acceptable to the ARRT. Applicants for registration as radiographers, nuclear medicine technologists, or radiation therapists must have successfully completed an accredited program in radiography, nuclear medicine technology or radiation therapy technology, respectively. Application for examination must be made within three years of graduation.

Upon successful completion of the Registry Examination, the graduate is a qualified radiographer, using the initials RT(R), Registered Technologist in Radiography.

The American Registry of Radiologic Technologists
1255 Northland Drive
St. Paul, MN 55120-1155
www.arrt.org
(651) 687-0048

NEW JERSEY STATE LICENSURE REQUIREMENTS

The State of New Jersey requires licensure for all operators of medical x-ray equipment.

1. License is a requirement for all technologists to work in the State of New Jersey.
2. License may be obtained through: State of New Jersey, Department of Environmental Protection.
3. Holders of ARRT Certification must also possess a current New Jersey License.
4. Once a student passes the ARRT examination, the student must submit the following items to the address below:
 - Application
 - Application Fee
 - Letter of Program Completion
 - A copy of current ARRT card, score report, or print out of the ARRT's website verifying certification.

At that time, a permanent New Jersey License will be issued.

***NJ Department of Environmental Protection
Bureau of X-Ray Compliance
PO Box 420
Trenton NJ 08625- 0420
www.state.nj.us/dep/rpp/rppindex.htm***

Professional Societies

Cumberland County College radiography students are encouraged to become a member of the following societies:

- **[The New Jersey Society of Radiologic Technologists \(NJSRT\)](#)**

The NJSRT is the state representative to the ASRT. The membership is comprised of radiographers throughout the state. The New Jersey Society assists the ASRT by providing two-way communication regarding local operations and issues of concern. They also provide in-service educational opportunities, information on the job market and student seminars. Membership applications are available from the Radiography Program office.

- **[The Philadelphia Society of Radiologic Technologists \(PSRT\)](#)**

The Philadelphia Society of Radiologic Technologists, Incorporated, is a non-profit educational organization for graduate and student Radiologic Technologists that includes Diagnostic, Medical Sonographers, Nuclear Medicine Technologists, and Radiation Therapists.

- ***The American Society of Radiologic Technologists (ASRT)***

The American Society of Radiologic Technologists functions as the principal governing agent in the representation and welfare of the Radiologic Technologist. The Society is constantly developing and coordinating rules, regulations, and by-laws upgrading the quality and availability of education for the technologist, and regulating radiation safety principles. The Society unites all technologists through its constant efforts.

The ASRT instituted a mandatory Continuing Education (CE) program for technologists. CE's purpose is to provide a means whereby a technologist's participation in seminars, conferences, demonstrations, lectures, publishing, etc., would be documented and recognized by the Society. Students are not held to CE requirements, but as a Registered Radiologic Technologist it is important to become aware of the requirements of this program.

To contact the American Society the address and website are as follows:

American Society of Radiologic Technologists
15000 Central Avenue, S.E.
Albuquerque, New Mexico 87123
<http://www.asrt.org>

Competency-Based Clinical Education Master Plan of Policies and Procedures

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Philosophy of Clinical Education

It is the philosophy of the program to provide the student with optimal clinical experience. We believe that each student should receive the highest standard of education supported by an environment that is both stimulating and conducive to the learning process. The role of the radiographer has grown in complexity with the development of more sophisticated procedures and equipment in the field of radiology. The individual student will acquire knowledge of a wide variety of radiologic procedures and modalities, including general diagnostic and special procedures, CT scanning, Ultrasound, Magnetic Resonance Imaging, Nuclear Medicine, Bone Densitometry, and Radiation Therapy. In addition, the student will become cognizant of providing optimal radiological services with the least possible radiation exposure.

The faculty and staff are committed to instructing and guiding the student to progress in the clinical setting from the passive role of the observer, to active participation, and ultimately, to perform studies with proficiency. During the course of the program, the student's performance will be evaluated routinely by certified radiographers, Clinical Instructors, and the Clinical Coordinator for the purpose of correcting deficiencies and providing the student with feedback to increase technical and professional competency.

This philosophy of the program faculty is accomplished by faculty demonstration, supervision, observation, counseling, and evaluation in the clinical setting so the student will effectively accomplish the goals of the program.

Clinical Education and Competency Progression Plan

The primary goal of the Cumberland County College, Radiography Program's clinical phase of education is to correlate clinical experience with the academic portion of the program.

- A. Students begin to acquire the knowledge needed in the classroom through lecture, laboratory demonstration, and practice. While in clinical situations, the student will be observing and assisting a qualified Radiographer in radiographic procedures.
- B. In a classroom laboratory setting, students perform simulated procedures and are graded on their abilities using laboratory conditions. Example of a chest x-ray laboratory evaluation: a student, using another student as a patient, will bring the patient into the room, ask all pertinent questions of the patient, position the patient and equipment, set the image factors on the equipment, use radiation protection, give the patient the proper breathing directions, and complete the simulated procedure. The student is then graded for the laboratory evaluation. In order to progress, the grade must be at least 90%. If the grade is lower than 90%, the student will review, practice, and repeat the laboratory evaluation until accuracy is achieved. (See Remediation Plan on page 20)
- C. When the laboratory evaluation has been passed, the student may gain experience radiographing a patient under the direct supervision of a qualified radiographer. Each procedure must be performed to the satisfaction of the qualified radiographer before the student can advance to an initial competency evaluation. The minimum number of required practice exams per study is indicated on the Pre-Competency Tracking Form. Procedures cannot be performed unless a laboratory competency evaluation has been passed.

The number of procedures the student radiographs prior to requesting a competency evaluation is dependent upon the skill level of the student and the frequency of the procedure on which a competency evaluation is requested. Competency evaluations may only be performed by recognized Clinical Instructors.

- D. A clinical competency is a graded evaluation of a procedure. Using the example of a chest x-ray: the student performs a chest x-ray under direct supervision of a Clinical Instructor. The radiograph is reviewed and the procedure discussed between the Clinical Instructor and the student. A minimum grade of 90% must be earned to be "clinically competent" to perform the procedure. If less than 90% is achieved, review, practice, a repeat simulated competency, and more experience is needed before the competency evaluation can be repeated. When a minimum grade of 90% is achieved, the student is able to perform that examination under the indirect supervision of a qualified radiographer. There may be times when the clinical instructor feels that the student is not performing the procedure in a professional manner and patient care is being compromised. In that case, the instructor will stop the competency evaluation and complete the procedure. The student will then need to review prior to a repeat competency evaluation. A maximum of three (3) attempts to gain initial competency on any procedure is allowed. Failure to obtain initial competency after three attempts and remediation will result in automatic failure for the clinical course.
- E. Throughout the clinical experience, continual competency evaluations are part of the student's clinical file. Though the student has passed a "clinical competency evaluation," he/she must increase his/her skills and be competent on that same procedure under progressively difficult and varying patient conditions.
- Continual competency evaluations and recorded observations from the clinical instructors, with input from qualified radiographers are indicators of student progress and skill level.
- F. Prior to graduation, during the last semester of Clinical Practicum, the student will be responsible for completing 10 terminal competency evaluations to pass the clinical course. The number of required competency evaluations is subject to change to comply with accreditation requirements. A variety of radiographic and fluoroscopic examinations will be evaluated. Consistent with all competency evaluations, the student must achieve a minimum grade of 90% to be considered competent. Failure to successfully complete the terminal competency evaluations will delay completion of the clinical segment of the program.

For any level of competency testing (initial, continual, terminal) the follow policy will be in effect:

- There is no limit to the number of practice exams a student may achieve in a single day.
- There is no limit to the number of competency evaluations attempted in a single day.
- Once the required number of practice exams are successfully completed, the student is eligible to request an initial competency evaluation.
- A student may request multiple competency evaluations on the same patient.
- Only one student may perform exams on the same patient.
- Inability to perform exams in a proficient and professional manner will result in loss of competency.

The minimum number of completed patient competency evaluations required for graduation is: 41 initial competency evaluations on mandatory procedures (includes CT & DEXA), 15 initial competency evaluations on elective procedures, 7 continual competency evaluations, plus 10 terminal competency evaluations, for a total of 73 competency evaluations.

Up to 8 of those mandatory procedures may be performed under simulated conditions, if necessary. The Clinical Coordinator will make the determination as to which studies the student may simulate.

Each semester, students are required to complete a minimum number of competency evaluations as listed in the clinical course outline and the competency goal sheet (see Appendix A).

Remediation Plan

For those instances when a student is unable to achieve a passing grade, the following protocol will be used:

Didactic (procedures course)

The instructor will record the grade achieved.

The student will review the corresponding text information.

The student will retake the test until a 75% or better is achieved. The original grade earned will be the one used to calculate the course grade. A Laboratory competency may not be completed until the passing test grade is earned.

Laboratory competency evaluation

The instructor will record the grade achieved.

The instructor will identify problem areas and demonstrate proper procedure, if needed.

The student will review and practice the procedure with classmate(s).

The student will make a new appointment to complete a laboratory evaluation.

Patient competency evaluations (initial, continual, terminal)

The instructor will record the grade achieved.

The instructor will identify problem areas and demonstrate proper procedure, if needed.

The instructor will develop an educationally valid plan of remediation as based upon the specific reason for failure and complete documentation on the remediation form.

As per the flowchart on page 24, the student will go back to direct supervision status.

The student will apply reinforced knowledge in the clinical setting.

The student will repeat the procedure for competency evaluation.

Indirect supervision status will be restored upon successful completion of the evaluation.

Student Supervision

The Radiography Program follows the standards set by the JRCERT and the New Jersey Department of Environmental Protection concerning supervision of students during all phases of their clinical assignments. During the 24 months of clinical education, the student will progress through various phases of development in clinical practicum. Clinical education during each of the phases is coordinated with academic classes and laboratory simulations

Education ---- Simulation ---- Observation ----- Assistance ---- Practice ---- Application ----
Competency ---- Continual Competencies ---- Terminal Competencies ---- Graduation

A clinical flow chart will be posted in a convenient location in the Radiology Department demonstrating the phase each student has completed.

DIRECT SUPERVISION

By definition the following parameters constitute direct supervision:

The Licensed Diagnostic Radiologic Technologists shall:

- 1. Review the request for examination in relation to the student's achievement***
- 2. Evaluate the condition of the patient in relation to the student's knowledge***
- 3. Be present during the conduct of the procedure***
- 4. Review and approve the radiographs***

INDIRECT SUPERVISION

By definition the following parameters constitute indirect supervision:

The Licensed Diagnostic Radiologic Technologists shall:

- 1. Be immediately available to assist students regardless of the level of student achievement.***
- 2. "Immediately available" is interpreted as the presence of a licensed diagnostic radiologic technologist adjacent to the room or location where a radiographic or fluoroscopic procedure is being performed.***

3. *This availability applies to all areas where ionizing radiation equipment is in use.*
4. *Based on these parameters, a student cannot be assigned to a surgical or mobile rotation or assigned to a room that is not adjacent to another radiographic or fluoroscopic room (i.e., PAT or ER) unless a licensed diagnostic radiologic technologist is present in that room or in the adjacent room.*

Phase I - Direct Supervision:

The student observes and assists the certified radiographer as the radiographer performs procedures. Once laboratory competencies have been achieved in the classroom, the student may radiograph patients while under the direct supervision of a registered radiographer. Laboratory competencies must be completed for a procedure prior to the student radiographing a patient or advancing to the remaining phases.

Phase II - Direct Supervision:

Students completing Phase I will radiograph a patient and obtain a completed Record of Clinical Experience/Signature Sheet (see Appendix C) for that exam.

Phase III - Direct Supervision:

In Phase III, the clinical instructor evaluates a student as the student radiographs the patient. Successful completion of Phase III with a minimum grade of 90% will enable the student to radiograph a patient under indirect supervision.

Phase IV – Indirect Supervision:

The student now advances to Phase IV with the following conditions:

The status of the patient must be evaluated by a certified radiographer prior to allowing the student to radiograph the patient.

As written in the Standards for an Accredited Educational Program for the Radiographer (1997), indirect supervision is defined 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 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.

All images/exams must be approved by the radiologist or technologist responsible for quality control before the patient is dismissed or the image is deleted from the system.

Phase V – Continual Competency:

At any time, the clinical instructor may observe and evaluate the student as the student radiographs patients for procedures in which competency has been established.

The minimum requirements for continual competencies will be as follows: one continual in the Spring of the first year, two continual evaluations in the Summer session of the first year; 2 continual evaluations for the Fall and Spring semesters of the second year, for a total of 7 evaluations per student.

Phase VI - Terminal Competency:

Prior to graduation, the student will be evaluated for the ability to successfully radiograph a variety of radiographic and fluoroscopic procedures. Consistent with all competency evaluations, the student must achieve a minimum grade of 90% to be considered competent.

During the **last three months of the program**, the student will be evaluated for terminal competencies. The goal is to determine the student's readiness to graduate from the program and become a staff radiographer in an imaging department. The student will need to prove competency on a variety of studies with a higher level of difficulty than those studies completed for initial and continual competencies. With this goal in mind, Cumberland County College Radiography Program requirements for terminal competencies are as follows:

1. Each student must successfully complete ten (10) terminal competencies.
2. A variety of procedures from each of the following categories is required:
 - Thorax / Abdomen
 - Upper Extremity
 - Lower Extremity
 - Spine
 - Contrast Studies
 - Portable / O.R.

If the availability of the studies creates a problem, substitutions may be made.

3. *Either* the student may request a study for terminal competency *or* the clinical instructor may select the study to be performed by the student.
4. Some of the patients selected need to be of a higher level of difficulty. The following patient types are examples of progressive levels of difficulty:
 - Geriatrics
 - Pediatrics (6 and under)
 - Very obese or extremely underweight
 - Trauma
 - Arthritis or other pathology that requires positioning adjustments
 - Language barriers or other factors which make communication difficult
 - Non-responsive patients

Note: Not *all* patients need to be extremely difficult in order to qualify as a terminal competency. A *variety* of patient types is required. In the event that the chosen study would require a staff technologist to seek lifting or other assistance, then the student should be afforded the same level of assistance to complete the exam. The Clinical Instructor will make the final determination as to progressive level of difficulty.

5. Terminal competencies may only be performed on studies the student has already achieved an initial competency in.
6. **In the event a grade of less than 90% is earned on a terminal evaluation, refer to the remediation plan on page 20.** When indirect supervision status has been restored, the student will be reevaluated for terminal competency in that procedure.

Repeat Procedure Policy (extremely important!)

All repeat examinations must be directly supervised by a certified radiographer. The student will analyze the unsatisfactory image with the supervising technologist and form a correction plan prior to making a second exposure. A student may repeat an exposure under direct supervision only one time. If additional retakes are needed, they must be performed by a certified radiographer.

The staff radiographer assigned to the area is at all times ultimately responsible for the patient and the finished radiographs.

Radiography of Pediatric Patients

To insure quality radiography for pediatric patients, students radiographing patients under the age of twelve (12) years must have direct supervision. Direct supervision is defined as a certified radiologic technologist present, in the radiographic room, during the procedure. There are no exceptions to this policy. (As per ASRT policy, children must be aged 6 or under for any pediatric competency testing.)

Contrast Media Injections

To insure quality patient care students must be directly supervised while preparing contrast media for injections. At the time contrast media is injected, students will be directly supervised for that period of time which has been specified by the Clinical Instructor to be the amount of time which needs to pass to assure that no adverse life threatening contrast media reactions will occur.

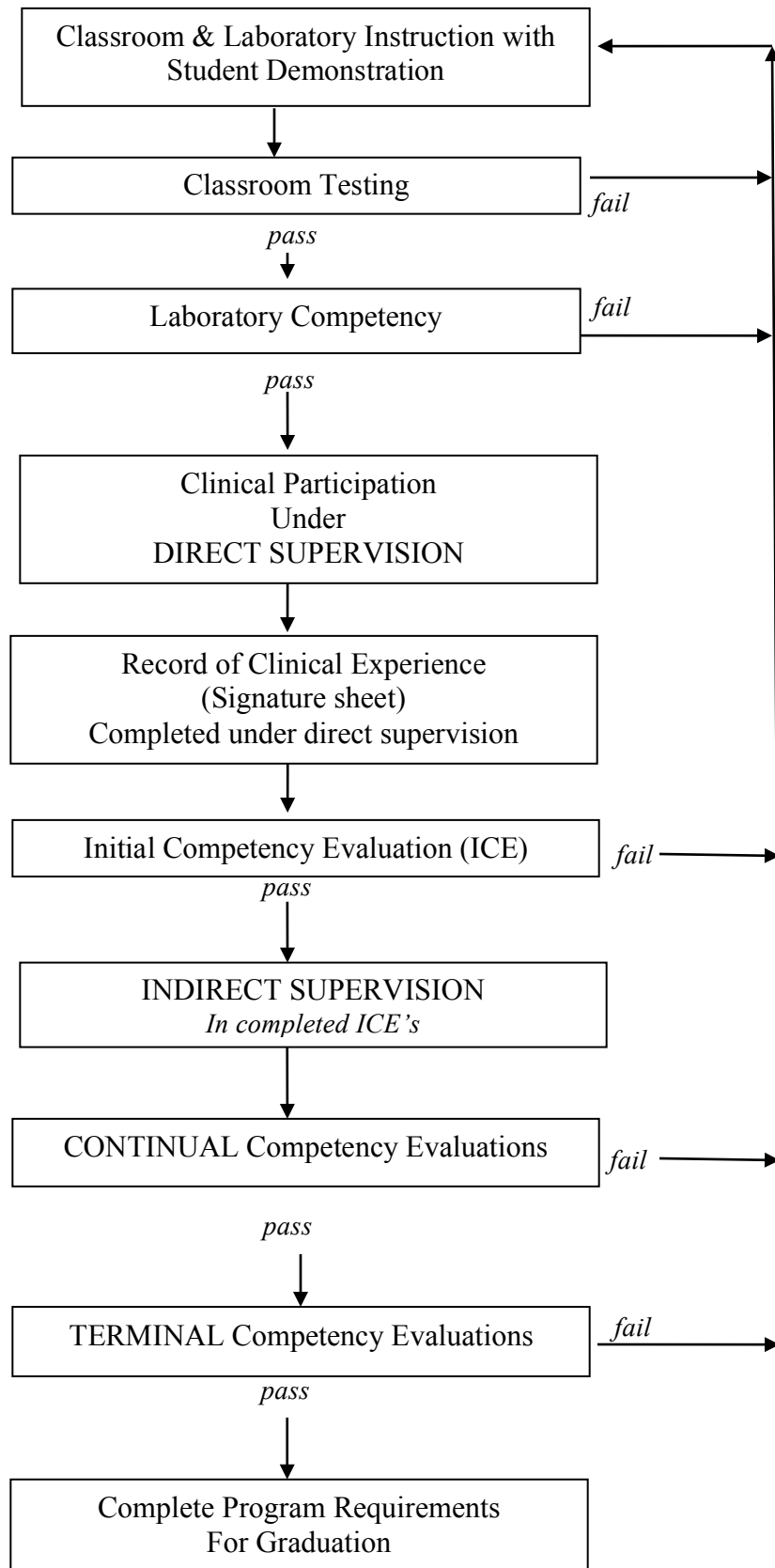
Mammography

All students are advised that placement in a mammography rotation is not guaranteed and is subject to the clinical setting policy.

Staff Technologists:

- Are required to supervise students participating in radiologic exams.
- Should provide guidance and offer suggestions to improve performance.
- Must approve all images before the patient is released, even when a student performs the study independently.
- Is ultimately responsible for the patient and images.
- May complete a “Signature Sheet” documenting that they observed the student perform a study competently.
- May decline to sign a “Signature Sheet” if the student does not perform well and requires more practice.
- Are not allowed to complete any evaluations, such as the Competency Evaluation or Performance Evaluation, which involves computing a grade.
- Should report any student behavioral or performance problems to one of the Clinical Instructors at the site, prior to the end of the day, whenever possible.
- May be asked (depending on the site) to complete a “Staff Evaluation” of a student. This is not a graded evaluation, just a check-off form that provides feedback to the CI prior to the completion of the graded Performance Evaluations.

COMPETENCY-BASED CLINICAL EDUCATION FLOWCHART



Clinical Competency Requirements

Progression Sequence:

Each semester, the students' clinical assignments correlate with classroom instruction. The clinical instructor may make changes of the scheduled room assignment for the enhancement of the students' clinical education experience.

Listed below are the primary procedures associated with a radiology department. These procedures are listed under the title of Mandatory or Elective. Clinical competencies in mandatory procedures are required for graduation. Clinical competencies in elective procedures will enable the student to increase skills and grades. A minimum of 15 ARRT approved elective competencies must be completed on patients to fulfill program requirements.

There are times when a mandatory procedure is not available for the student. A maximum number of eight (8) competencies may be completed under simulated conditions if the clinical instructor verifies infrequent or limited volume of the mandatory procedure

*ARRT defines pediatric studies as those on a child 6 years or younger.

By the end of the First Semester, the student will be prepared to be evaluated in the following areas:

Mandatory

Introduction - competency in these areas must be achieved before progressing:

Image Processing	Fileroom (if applicable)
Patient Transport	Office Procedures
Patient Communication	Computer Systems
Room Readiness	Equipment Operation

In addition, competency in a minimum of two radiographic procedures must be achieved to successfully complete the semester.

By the completion of the Second Semester, the student will be prepared to be evaluated in the following areas:

Mandatory

Thorax:

Chest Routine
Chest – wheelchair or stretcher
Ribs

Elective

Chest decubitus
Sternum
Soft tissue neck

Abdomen:

Abdomen (supine)
Abdomen (upright)

Abdomen (decub)
IV Urogram

Upper Extremity:

Finger/thumb
Hand
Wrist
Forearm
Elbow
Humerus
Shoulder
Trauma shoulder (Y or transthoracic view)
Trauma extremity (other than shoulder)
Clavicle

Scapula
A/C joints

Mandatory

Lower Extremity:

Foot
Ankle
Tibia-Fibula
Knee
Femur
Trauma extremity

Spine and pelvis:

Cervical spine
Thoracic spine
Lumbar spine
Cross-table lateral spine
Pelvis
Hip
DEXA
Cross-table hip

Fluoroscopy Studies :

Elective

Oscalcis
Toe
Patella

Sacrum / coccyx
Sacroiliac joints
Scoliosis Series

*UGI
*BE
Esophagus
ERCP
Small Bowel
Cystogram / VCU
Myelogram
Arthrogram
Hysterosalpingiogram

*(Must achieve competency on a real patient for either the BE or GI AND one other study in this category)

At the completion of the fifth semester, students will be prepared to be evaluated in the following areas:

Mandatory

Cranium:
C.T. head

Elective

Skull
Sinuses
Facial Bones
Orbits
Nasal Bones
Zygomatic Arches
Mandible (Panorex acceptable) / TMJ's

(Must achieve competency on a real patient for a minimum of one study from this category)

At the completion of the sixth semester, the student will be prepared to be evaluated in the following areas:

Mandatory

Mobile Procedures:

Portable chest
Portable abdomen
Portable orthopedics

Surgical Procedures:

C-arm (*multiple planes*)
C-arm (*sterile*)

Elective

Pediatric Studies:

Pediatric chest

Pediatric upper extremity

Pediatric lower extremity

Pediatric Abdomen

Pediatric mobile

**Geriatric Studies:*

Chest

Upper extremity

Lower Extremity

**Defined by the ARRT as “over 65 years of age and physically or cognitively impaired as a result of aging”*

During the second year of the program, the student will be assigned a one-day observation rotation in each of the following modalities:

Ultrasound

Nuclear Medicine

Magnetic Resonance Imaging

The following modalities are optional. Requests for assignment must be made in writing to the Clinical Coordinator during the second year Spring semester.

Radiation Therapy

Cardiac Catheterization

Also during the second year of education, the student will be assigned to CT rotations on a regular basis. At the completion of these rotations, the student will be evaluated for competency in 1 CT examination of the head. Students who excel in the first year of education may request to begin the CT rotation. Students will be assigned to observe and participate in angiographic and interventional procedures based on the availability of cases at the clinical education center.

During the final 3 months of the program, the student will be evaluated for terminal competencies. The student will demonstrate the ability to perform a variety of radiographic procedures, of varying levels of difficulty, prior to graduation.

Infrequent Studies Policy

Purpose: To allow the student the opportunity to prove competency in studies that are rarely performed in the radiology departments affiliated with the college.

In the event the student has the opportunity to perform any of the radiographic procedures deemed “infrequent” the following protocol is in effect:

1. The student may request a competency evaluation provided that a laboratory competency has been successfully completed on that study.
2. The student does not need to have completed a “technologist signature sheet” prior to attempting the competency evaluation on an infrequent study.
3. If a final competency is granted without a signature by a staff technologist, it is recommended that the clinical instructor complete an ongoing (continual) competency in that exam if the opportunity presents itself in the future. As with all competencies, this would be documented on the competency flow chart.
4. If the student is unable to complete the study with 90% accuracy, they would remain at the direct supervision level and review relevant textbook information prior to attempting another competency on that study.
5. **The Clinical Instructor makes the final determination if a study is infrequent at that clinical site**

Coordination of Clinical Education Settings

The Clinical Coordinator is responsible to develop, initiate, and maintain uniformity of clinical experiences for all students in all clinical education sites.

A Master Plan of Clinical Education book has been developed which includes all policies and procedures to guide the Clinical Instructors at independent sites to be able to function in the same capacity, offering all students equal clinical education opportunities with as much objectivity as possible. A copy of this book is in the Radiography Program office, and on the program website.

Clinical Instructor meetings are scheduled throughout the year to ensure a cooperative achievement of program goals and student success. Updates, revisions, and review of policies and/or forms are completed at these meetings.

The Clinical Coordinator and Adjunct Clinical Instructors visit each clinical education center on a regular basis for the purpose of:

- Observation of student performance
- Discussion with the Clinical Instructors to remedy any clinical areas of concern
- Periodically meeting with the department manager for feedback and institutional updates
- Conducting positioning lab or image evaluation sessions with the students, as needed

Evaluation of Clinical Performance

The Clinical Instructor is responsible for evaluating and grading each student's clinical performance for the semester. Staff Technologists participate in the evaluation process by providing direct and indirect supervision during the clinical practicum. Staff Technologists may provide verbal feedback or completed Staff Evaluations to the Clinical Instructor at the completion of the clinical assignment.

Each semester the grades for clinical courses are compiled by averaging the following three components:

1. **Image evaluation sessions** – each semester the program official will complete the required number of image evaluation classes per student. The grades earned on each of those evaluations will be averaged together to become $\frac{1}{4}$ of the clinical grade.
2. **Performance evaluations** – two times per semester (midsemester and end of semester) the clinical instructor will complete clinical performance evaluations on each student. These evaluations rate the attendance, appearance, technical skills, patient care skills, and behavioral aspects of the student while in the clinical assignment. The average of the grades earned on these evaluations will become $\frac{1}{2}$ of the clinical grade.
3. **Number of competencies achieved** – the student must successfully complete the minimum required competency evaluations (see Clinical Competency Goals, Appendix A) for each semester. The cumulative number of competencies earned is equivalent to the number grade listed on the goal sheet. The student must achieve the minimum number of competencies designated for the semester to successfully complete the clinical course, regardless of the grades earned on other evaluations. This portion is $\frac{1}{4}$ of the clinical grade.

Student Records in the Clinical Area

The following records are maintained in the clinical setting by the Clinical Instructor (CI) and are available to the students for signature and review under the supervision of a CI. It is necessary for some of the records to be posted on bulletin boards to be available to the technical staff to identify the level of competency of individual students. Individual student books will be kept in a secure location to ensure student confidentiality.

Records posted:

1. **Flow chart** - This is a chart with the student's name and all the names of the procedures.
 - If a block is blank, the student may observe and assist
 - If a " / " is in a block, the student has passed a laboratory competency
 - If an " X " is in a block, the student has completed a practice patient exam, and a signature sheet is signed by the supervising staff technologist.
 - When the student has passed an initial competency evaluation, the block will be highlighted.
2. **Room schedules** - This is the radiographic room or area to which the student is assigned.

Records in an individual student book:

1. Student Information Sheet
2. Competency evaluations – Laboratory, Initial, Continual, Terminal
3. Performance evaluations
4. Image evaluations
5. Conference memos
6. Attendance & Grades
7. Record of supplemental clinical experiences

Clinical Education Setting Room Assignments

FIRST YEAR:

Semester I (Fall)

*1st - 1 full day in transport, 1 day in "CS" which includes computer system, desk area & image processing. These rotations are provided to give the student an understanding of the flow of people, paper, digital information and images through the radiology department. The goal is to ensure the students are aware of how the department functions prior to being assigned to the radiology rooms.

After successful completion of these rotations, and the completion of the corresponding evaluation forms (by CI or other department/hospital personnel), the student will be scheduled for two-week rotations (4 days) in general and fluoroscopic radiography rooms.

Semester II (Spring)

The student continues with two-week assignments in general and fluoro rooms. In addition, the student may accompany a radiographer on portable exams throughout the semester.

Semester III (Summer)

The student will be scheduled for one-week room rotations in general, fluoro, O.R. /portables.

SECOND YEAR:

Semester IV (Fall)

The student will be scheduled for brief rotations in ancillary areas to learn the computer system, patient flow, hospital layout, and department flow. These rotations are not to exceed one week (3 clinical days). The student will then be assigned one-week room rotations in general, fluoro, OR/portables. The student will now begin regular rotations through Computed Tomography.

Semester V (Spring)

The student will continue with the same one-week rotations as Fall semester. In addition, each student will complete mandatory one-day observation rotations in Ultrasound, Nuclear Medicine, and MRI. Dependent upon the availability of studies, students should be encouraged to observe in Special Procedure suites. The student may also request, in writing, *optional* one-day rotations in Radiation Therapy and Cardiac Catheterization.

Semester VI (Summer)

Students will be assigned to rooms based on their needs in obtaining Terminal Competencies and other program requirements.

*** The C.I. will ensure all assignments are equitable. In addition, room rotations will be reviewed by the Clinical Coordinator to ensure uniformity among the clinical sites.**

CODE OF ETHICS

As students of Cumberland County College, you will be meeting and caring for members of the local community surrounding your assigned clinical education center. Each day you serve the public you represent not only yourself and your family, but also the profession and the college. The American Society of Radiologic Technologists has published a Code of Ethics for Professional Conduct that serves as a guide for the ethical conduct of Radiologic Technologists.

1. *The radiologic technologist conducts herself or himself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.*
2. *The radiologic technologist acts to advance the principle objective of the profession to provide services to humanity with full respect for the dignity of mankind.*
3. *The radiologic technologist delivers patient care and service unrestricted by the concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race creed, religion, or socioeconomic status*
4. *The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the purposes for which they were designed and employs procedures and techniques appropriately.*
5. *The radiologic technologist assesses situations; exercises care, discretion, and judgment; assumes responsibility for professional decisions; and acts in the best interest of the patient.*
6. *The radiologic technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.*
7. *The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in minimizing radiation exposure to the patient, self and other members of the health care team.*
8. *The radiologic technologist practices ethical conduct appropriate to the profession and protects the patient's right to quality radiologic technology care.*
9. *The radiologic technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy and reveals confidential information only as required by law or to protect the welfare of the individual or the community.*

The radiologic technologist continually strives to improve knowledge and skills by participating in continuing education and professional activities, sharing knowledge with colleagues and investigating new aspects of professional practice.

PROFESSIONAL BEHAVIOR AND CONDUCT FOR STUDENTS

As a student, you are in the clinical education center to gain clinical experience, reinforcing the skills learned in the classroom. It is expected that you adhere to the ASRT Code of Ethics and codes of behavior specific to the college.

1. Students are required to follow the directions of the technologist to whom they are assigned. If there are any technical or personal problems between the student and the technologist, both should speak in confidence to resolve the issue. If the problem cannot be resolved, additional counseling or guidance is available from your Clinical Instructor at your clinical education center. If further assistance is needed please seek help from the Clinical Coordinator and then the Program Director.
2. Students will be courteous, considerate, and tactful in dealing with instructors, patients, physicians, fellow students, and other departmental and clinical education center personnel. The use of unprofessional language or conduct with patients, visitors, or staff will subject the student to disciplinary action. Students participating in verbal or physical altercations will be sent home immediately. Any student removed from the clinical site must meet with Program officials to discuss suspension or dismissal from the program.
3. Gratuities shall not be accepted from anyone.
4. Patients are to be addressed with title and last names, (i.e., Mr. Jones, Miss Smith, Mrs. Doe, etc.). All physicians are to be addressed as "Dr."
5. Students are to refrain from disturbing others with irrelevant noise, conversation, or gossip in the classroom, department, or while walking through the halls of the clinical education center.
6. Eating, drinking, or chewing gum in the clinical areas is not permitted.
7. The use of cellular phones is prohibited in the Clinical Education Settings. Most hospitals forbid the use of these electronic devices due to their electronic interference with patient essential medical devices.
8. Students are forbidden to have visitors during clinical hours.
9. **Confidentiality is an utmost priority in all aspects of the medical environment. HIPPA regulations and their relevance to the radiography department will be discussed in class. It is expected that all students adhere to HIPPA regulations. Computer access to patient information makes patient information more accessible and confidentiality is even more of an issue of importance. Computer access to unauthorized patient information is strictly forbidden.** Information pertaining to the diagnosis, x-ray findings, treatment, condition, or personal problems of any patient is confidential and may not be discussed with other students or personnel in the Department or outside the hospital. If, for educational purposes, it is necessary to discuss a patient's test findings or condition with a radiographer or other member of the hospital team, make certain it is not discussed in the presence of, or within hearing distance of patients or visitors.

Professionalism will be stressed throughout the duration of the program. The professional skills of each student will be evaluated by the supervising technologists and the clinical instructor on a regular basis. The first concern as a health care professional is the patient. Students unable to demonstrate professionalism and provide quality patient care may not be permitted to progress in the program.

Students are expected to use any down time (*when no patients are available*) wisely. Practicing positioning skills with classmates, reviewing images, and studying are considered constructive use of down time.

Critical Incidents

The following incidents are considered to be of such a serious nature that one occurrence will result in a completion of a “Critical Incident Form” and a reduction of one letter grade for the clinical course. (see form in Appendix)

- Performing the wrong exam on a patient
- Performing an exam on the wrong patient
- Performing a repeat exam without a technologist present
- Performing a portable exam without a technologist present
- Performing an exam in the OR without a technologist present
- Releasing completed images without an RT approval
- Causing injury to a patient due to gross negligence
- HIPAA violation

The faculty of the college reserves the right to suspend or dismiss a student for unprofessional or unethical behavior while on clinical assignment regardless of the theory grade.

Immediate dismissal will follow if the student is found to:

- Possess or be under the influence of drugs or liquor, or engage in their use while on clinical assignment or on hospital property. Failure to take or failure to pass any scheduled or unscheduled drug screening tests.
- Engage in behavior that creates a hostile environment.
- Be sleeping during clinical assignment.
- Engage in theft of any articles from the clinical education center.
- Engage in any immoral conduct while on clinical assignment.
- Endanger the welfare of a patient or provide inadequate patient care.
- Fail to abide by program and clinical education center policies.
- Is found to receive payment for use of ionizing radiation on human beings to produce medical images.
- Violate patient confidentiality or computer access rules.
- Accumulation of 2 Critical Incident forms.

In the event that a student is released from a clinical assignment for any of the above reasons, the student must meet with the Program Director and Clinical Coordinator to consider consequences and the ability to return to the clinical education center. A student released from a clinical assignment at the request of the radiology administrator may be unable to continue the program if an alternate clinical education center is unavailable.

Program Pregnancy Policy

The following policy procedure is in compliance with the U.S. Nuclear Regulatory Commission Regulatory Guide 8.13 Instruction Concerning Prenatal Radiation Exposure. The scientific community generally assumes that any exposure to ionizing radiation may cause undesirable biological effects and that the likelihood of these effects increases as the dose increase. The NRC has reviewed the available scientific literature and has concluded that the 0.5rem (5mSv) limit specified in 10 CFR 20.1208 provides an adequate margin of protection for the embryo/fetus.

Should a student become pregnant, she has the option to:

- Maintain the privacy of her pregnancy and not declare or inform anyone of the pregnancy. Should the student decide to not declare her pregnancy, no additional counseling or monitoring will take place.
- Declare and inform the Program Director of her pregnancy in writing

It is strongly suggested that the student declare her pregnancy to take advantage of the lower exposure limit, dose monitoring provisions, and counseling. A form letter for declaring pregnancy is available in the Radiography Program Office. With the declaration, submit a letter from your physician indicating that you are pregnant, the expected delivery date, and identify any physical limitations. A separate written declaration should be submitted for each pregnancy.

Should a pregnant student elect to declare her pregnancy, the Program Director and clinical education center Radiation Safety Officer will provide the student with individual counseling on radiation protection and provide the student with a second radiation monitoring badge to be worn under the apron at the pelvic area to document fetal dose.

During her pregnancy, the student may choose to:

- Option 1** Continue the academic and clinical component of her education. It is the responsibility of the student to apply all proper radiation protection guidelines.
- Option 2** Request a leave of absence from the program.
- Option 3** Continue the academic portion of the program and request a leave of absence from clinical education. The clinical assignments will then be completed after the birth of the child, at the discretion of the Program Officials. It is essential that the academic and clinical learning experience be correlated.
- Option 4** At any time the student may undeclare her pregnancy in writing and thus would return to the status she held prior to her declaration.

The pregnant student will be required to complete all program requirements (clinical and academic) prior to being recommended to sit for the American Registry of Radiologic Technologists examination. This may delay graduation pending time missed and availability of course offerings.

Although it is both the procedure and practice of this program to offer the utmost in radiation protection to the student, the school or its Clinical Education Settings will not assume liability of the mother or child in case of pregnancy.

Information regarding federal guidelines for prenatal radiation exposure may be found at www.nrc.gov

N.J. Department of Environmental Protection's Student Pregnancy Policy

1. No pregnant female student should receive a radiation dose of more than 0.5 REM during the nine-month gestation period.
2. ALL students shall wear whole-body radiation dosimeters when in the vicinity of radiation-producing machines. This practice must be particularly enforced with respect to pregnant students.
3. The relative risk to the embryo and/or fetus from X-rays should be thoroughly explained to all students prior to actual operation of X-ray machines. United States Nuclear Regulatory Commission (NRC) Regulatory Guide No. 8.13, "Instruction Concerning Prenatal Radiation Exposure," and NCRP Report No. 91, "Protection of Embryo-Fetus," are suggested as references for all students.
4. The Radiologic Technology Board of Examiners recommends that adequate controls and monitoring be instituted to limit the dose to all students to as low as is reasonably achievable. The Radiologic Technology Board of Examiners recommends a total dose equivalent limit (excluding medical exposure) of 5 mSv (0.5 rem) for the embryo-fetus. Once a pregnancy has been declared, exposure of the embryo-fetus shall be no greater than 0.5 mSv (0.05 rem) in any month (excluding medical exposure).
5. The Program Director and the appropriate institutional Radiation Safety Office should periodically review student radiation exposure reports to assure compliance with the above dose limit.
6. Provision shall be made for reentry into the program when the student takes a leave of absence.
7. All didactic and clinical education hours as mandated by the program must be completed prior to graduation.

Health Policy

Students accepted to the Radiography Program must be in good health as evidenced by a physical examination report and laboratory test results supplied by the applicant's physician. Students will not be admitted to the first or second year unless the physical examination and test reports are in the possession of the Clinical Coordinator, and have been reviewed by Nursing faculty, prior to the first day of class.

Students are required to maintain health insurance and are responsible for their own healthcare expenses. A copy of the student insurance card will be kept in the Radiography Program office.

Students injured or developing medical problems during the school semester should advise the Clinical Coordinator if the condition will affect the student's clinical performance. A physician's note may be required before a student can return to clinical duties for conditions such as, but not limited to, contagious diseases, surgery, extremity or spinal injuries, or any absence of three or more consecutive days. Every effort will be made to accommodate the student's needs.

Students returning from a leave of absence due to illness must submit the aforementioned current document before they will be permitted to reenter the Radiography Program. The physician's note must state that the student is permitted to resume clinical duties without restriction and include a date of return.

The following health policies are in effect for students while attending Clinical Practicum.

Communicable Disease Policy:

As healthcare professionals, one of our primary concerns is to prevent the spread of disease among patients, staff, and students; therefore, the following policy will be implemented:

Any student of the radiography program who comes in contact with a person who has a communicable disease or who has the communicable disease themselves is to immediately report the situation to the Clinical Coordinator. Depending on the nature of the communicable disease, a physician's note may be required prior to the student's return to the patient contact area.

Please refer back to Code of Ethics, #3, pg 31.

Injuries During Clinical Education Assignment

In order to ensure prompt medical care and required documentation of health care injuries the following procedure is to be followed:

1. Students are to report the incident to the Clinical Instructor or supervisor.
2. An incident report must be completed, signed and filed in the student clinical binder.
3. Students injured at the clinical education center and requiring medical care should be seen in the Emergency Room prior to their leaving the building. Fees incurred are to be billed to the student's medical insurance.
4. Students will provide the Radiography Program with documentation of any injuries, incident reports, or treatments rendered.

Liability Insurance Requirement

To provide protection against legal action, all students are required to purchase liability insurance upon enrollment in the Radiography Program. The cost is nominal and is made available through the college. The insurance protects the student, the college, and the clinical education center in case any medical situation results in a lawsuit.

Inclement Weather Policy:

In the event of weather-related emergencies, announcements about the status of Cumberland County College closings will be incorporated into the college's outgoing voice mail message and on the college website www.cccnj.edu. Each student should be sure to update their personal contact info in the CCC Emergency Alert System.

The college website, voice mail message, or Emergency Notification Alerts are the only official college closing announcements.

If the College is officially closed due to inclement weather, the student is not required to be in attendance at the clinical education center. In the event of early closure or delayed opening the clinical schedule follows the college schedule.

Students may attend their clinical education center if traveling to that site does not present a hazardous situation. Please take into consideration your individual driving ability and the ability of your vehicle to get to the clinical education center or college. Those students in attendance on a declared snow day will be credited with extra clinical rotation hours. At no time should the student jeopardize their safety due to inclement weather conditions.

Radiation Monitoring

Radiation monitoring is required. Students enrolled in the Radiography Program of Cumberland County College will adhere to the following procedures:

1. Radiation monitors are worn at collar level and outside of a lead apron at all times while assigned to a radiation area of the clinical education center.
2. Radiation monitors are not to be worn out of the hospital.
3. **Students will not be permitted in the radiographic areas without a monitoring device.** Replacement monitors are obtained from the Clinical Coordinator.
4. If a monitoring device is misplaced or abused, replacement must be immediate and at the student's expense.
5. Students are required to review and initial their reading monthly.
6. Any readings over 10mrem will be documented on a Radiation Report and placed in the student's file. The possible cause of the reading will be investigated and reviewed with the student. The student will be counseled regarding radiation safety procedures as indicated.
7. It is each student's responsibility to exchange the radiation monitor promptly each month.
8. Students must immediately report any and all unusual incidences concerning the radiation badge to the Clinical Coordinator.
9. In accordance with the National Council on Radiation Protection Report #48, "No person shall be employed specifically to hold patients, nor shall members of the Radiology Department who are classified as radiation workers, be asked to do so".
Students are strictly forbidden to hold patients or imaging receptors during an radiographic procedure.
10. The radiation-monitoring badge provided by the college should NOT be worn when a student has radiographic procedures performed on self for diagnostic or therapeutic purposes, nor when working as a paid employee of an imaging department.

Clinical Attendance:

Students are required to attend all clinical assignments as scheduled by the Clinical Coordinator and are required to be prompt. Clinical attendance will be documented.

Recognizing that there may be times when lateness or absence is unavoidable the following policies are in effect:

- Students are entitled to clinical absences amounting to two days, or 16 hours, per semester. Due to the reduced number of clinical hours in the final summer semester, there are no allowed absences. Any failure to report to a clinical assignment on a scheduled day will be counted as an absence.
- Clinical absences are factored into the Performance Evaluation. In addition, each absence in excess of the allotted hours results in a 5 point deduction from the Performance Evaluation portion of the clinical grade.
- Allowed absences may not be rolled over to the next semester due to the vast difference in clinical activities and experiences.
- Students missing clinical experiences due to absenteeism in excess of the allotted hours will be afforded the opportunity to complete clinical education hours during semester breaks.
- Students are required to notify the hospital Clinical Instructor of their absence prior to their expected time of arrival. If the Clinical Instructor is not available, record the name of the individual who received the message. If a student fails to comply with the “Call-Out” policy, the absent day must be made up at the end of the semester, regardless of the number of absences on record. All absences will affect the clinical evaluation grade.
- Appointments should be made so as not to interfere with clinical and didactic courses.
- Students are required to be prompt and to remain the entire day in each of their clinical experiences. For every 5 latenesses over five minutes there will be a 5 point deduction from the Performance Evaluation portion of the clinical grade.
- Students exhibiting habitual lateness or absences will be counseled and may be subject to dismissal from the program.
- In the event the Program Officials approve an activity on a scheduled clinical day, the student must attend the activity or report to their clinical site. Failure to do so will be counted as a clinical absence.

Conference memos regarding promptness and absences will be used at the end of the student's educational experience to establish reference information for future employers.

Supplemental Clinical Educational Experience:

Students may request supplemental clinical education experience hours to enhance their skills, achieve competency in radiographic procedures, and fulfill the attendance requirements of the clinical courses. The scheduling will be arranged with the clinical instructor and approved by the Clinical Coordinator. The supplemental clinical education experience form will be completed and filed in the student's clinical record book. The Clinical Instructor will assign the student to a clinical area. The room assignment will provide the opportunity to obtain needed clinical competencies. All assignments will not exceed forty hours of clinical experience in any week's time.

Employment Interview Policy

In order to provide the soon-to-be graduate students with opportunities for job interviews, senior students will be permitted three, four-hour absences for job interviews during the summer semester prior to graduation. Students must make arrangements for the desired time off with the Clinical Instructor and Clinical Coordinator, and will provide documentation from the interviewer.

Clinical Education Days

First Year, Fall and Spring Semesters: Clinical days are Tuesday and Thursday.

First Year, Summer Session : Clinical days are Monday through Friday.

Second Year, Fall and Spring Semesters: Clinical days are Monday, Wednesday and Friday.

Second Year, Summer Session: Clinical days are Monday through Friday.

Clinical education days correlate with the college calendar. Clinical education days are completed for the semester on the day classes end.

Clinical Education Hours

Total clinical and classroom hours will not exceed forty hours per week, unless requested by the student. Clinical assignments on any one day will not exceed eight hours.

The number of clinical assignment hours for students is based on eight hours per day. Clinical hours at the Clinical Education Settings are 8:00 a.m. - 4:00 p.m.; however, no student will be permitted to leave a patient during the course of a procedure, even if such completion requires remaining past 4:00 p.m. The student is required to complete the procedures (this includes getting images checked for necessary repeats or additional projections and seeing that the patient is dismissed from the department). Students will be credited for the time spent in patient care.

Students are not permitted to be at the clinical education center outside of assigned hours. Violation of this policy may be grounds for dismissal from the program.

Any requests for adjustments to the clinical hours must be submitted in writing to the Clinical Coordinator. If reasonable accommodations can be arranged with the clinical education center, a counseling form will be completed to document the changes made.

Students will be assigned a lunch period each day. The lunch break will be commensurate with the practice of the department and area assignments. The lunch break may not be used to make up or accrue time. **Lunch breaks are required for all students.**

Off-hour Rotations

All clinical assignments will be scheduled Monday through Friday, 8:00 am to 4:00 pm. No off-hour rotations will be permitted.

Clinical Education Dress Code

Students are required to present a professional appearance at all times. It is the patient's right to be treated with dignity and care by clean individuals. It is, therefore, required that each student practice good personal hygiene.

All students will:

1. Wear navy blue uniform (scrub) pants and shirts, solid white socks or stockings, and white uniform shoes or solid white sneakers.
2. Undergarments must not be visible through the uniform.
3. Refrain from wearing clogs, sandals, or open-toed shoes. (If uniform clogs are purchased, they *must* have a back strap for a secure fit.)
4. Be freshly showered and shampooed.
5. Nails must be kept clean, short and unpolished. Fake nails, gel polish or overlays of any kind are NOT allowed.
6. Tie back long hair.
7. A solid white or navy cardigan sweater (button-down front) or lab coat can be worn when necessary. No sweatshirts are allowed.
8. Follow all clinical education setting dress code requirements.

Male students will:

1. Keep hair, mustache, and beards neatly trimmed according to clinical site policy.

Female students will:

1. Wear makeup conservatively.

The following regulations will also be applicable:

1. Keep jewelry to a minimum. Earrings should be of the small post type -- not hoops. Numerous chains, rings, and bracelets will not be permitted.
2. Refrain from wearing strong perfumes/body scents. These can often be problematic for the ill patients or those with allergies.
3. Students are responsible for keeping shoes neat, clean, and polished. Shoelaces should also be kept clean.
4. Students are required to wear identification name badges at all times
5. A pen, pocket-sized notebook, and dosimetry badge are required as part of the uniform.
6. Scrub uniforms of other colors are to be worn *only* when a student is assigned to a surgical rotation and in accordance with the CEC policy.

Any student found out of uniform or inappropriately dressed will be asked to leave the clinical assignment. This will be documented on a conference memo form and reflected on the performance evaluation. The missed clinical time will count as clinical absence.

Clinical Education Assignments

Clinical education assignments are made to correlate classroom knowledge with actual patient care experience. Students will be assigned a clinical education site for the first year, from September through August. To provide the student a greater variety of educational experiences, the student will be reassigned to a new clinical education center for the second year, September through July. In addition, students meeting the minimum requirements will be assigned a rotation in a private imaging center during the second year of education. The Clinical Coordinator and Program Director will determine the clinical education site assigned to the student and the length of the rotation. These clinical assignments are subject to change, at the Clinical Coordinator's discretion, in the event of changes in approved Clinical Education Sites, continual personality conflicts within the department, or at the request of a radiology department administrator.

The imaging centers used as Clinical Education Sites are:

Atlanticare – City Campus
1925 Pacific Ave.
Atlantic City, NJ 08401
(609) 345-4000

Atlanticare – Mainland Campus
Jimmie Leeds Road
Pomona, NJ 08240
(609) 748-4087

Inspira Vineland
1505 W. Sherman Ave.
Vineland, NJ 08360
(856) 641-8000

Kennedy Health – Washington Township
435 Hurffville-Crosskeys Rd
Turnersville, NJ 08012
(856) 582-2765

Inspira Elmer
W. Front Street
Elmer, NJ 08318
(856) 363-1553

Kennedy Health - Stratford
18 East Laurel Rd
Stratford, NJ 08084
(856) 346-7712

Inspira Woodbury
509 N Broad St
Woodbury, NJ 08096
(856) 845-0100

Kennedy Health – Cherry Hill
2201 Chapel Ave. West
Cherry Hill, NJ 08002
(856) 488-6459

Memorial Hospital of Salem County
Salem-Woodstown Road
Salem, NJ 08079
(856) 339-6054

Cape Regional Medical Center
2 Stone Harbor Blvd.
Cape May Court House, NJ 08210
(609) 463-2121

Arthritis & Rheumatology Ass. of SJ
2848 S. Delsea Drive
Vineland, NJ 08360
(856) 794-8845

Inspira Bridgeton
Irving Ave
Bridgeton, NJ 08302
(856) 451-6600

Center of Diagnostic Imaging
1550 E Chestnut Ave., Bldg 4, Suite A
Vineland, NJ 08360
(856) 794-1700

Atlantic Medical Imaging
3100 Hingston Ave. – Suite 102
Egg Harbor Township, NJ 08234
(856) 363-1533

Kennedy Out Patient Center
900 Medical Center Drive, Suite 101
Sewell, NJ 08080

Additional clinical educational sites may be added to enhance the clinical experiences

APPENDIX

A - Competency Goals

B - Laboratory Competency Evaluation

C - Record of Clinical Experience (Signature Sheet)

D - Competency Evaluation Form

E – Competency Evaluation Criteria

F - Performance Evaluation Form

G - Image Evaluation Form

H - Critical Incident Form

I - JRCERT Non-Compliance Policy

A
*** DIAGNOSTIC RADIOGRAPHY COMPETENCY GOALS**

Competency requirements are cumulative throughout the program. Minimum requirement must be met to receive a passing grade for the clinical course.

<u>Fall Semester</u>		(September - December, First Year)
A = 6 or more	6 = 96%	7 = 100%
B = 5	5 = 87%	
C = 4	4 = 78%	
F = 1 or less		

<u>Spring Semester</u>		(January – May, First Year)		
A = 18 to 21	18 = 92%	19 = 95%	20 = 98%	21 = 100%
B = 14 to 17	14 = 83%	15 = 86%	16 = 89%	17 = 91%
C = 10 to 13	10 = 75%	11 = 78%	12 = 80%	13 = 82%
F = 9 or less				

<u>Summer Semester</u>		(July – mid August, Third session)		
A = 25 to 28	25 = 92%	26 = 95%	27 = 98%	28 = 100%
B = 21 to 24	21 = 83%	22 = 86%	23 = 89%	24 = 91%
C = 17 to 20	17 = 75%	18 = 78%	19 = 80%	20 = 82%
F = 16 or less				

<u>Fall Semester</u>		(September – December, Second Year)		
A = 32 to 35	32 = 92%	33 = 95%	34 = 98%	35 = 100%
B = 28 to 31	28 = 83%	29 = 86%	30 = 89%	31 = 91%
C = 24 to 27	24 = 75%	25 = 78%	26 = 80%	27 = 82%
F = 23 or less				

<u>Spring Semester</u>		(January – May, Second Year)		
A = 40 to 43	40 = 92%	41 = 95%	42 = 98%	43 = 100%
B = 36 to 39	36 = 83%	37 = 86%	38 = 89%	39 = 91%
C = 32 to 35	32 = 75%	33 = 78%	34 = 80%	35 = 82%
F = 31 or less				

Summer Semester (May – June, First Session)
 Clinical grades will be based on performance evaluations and image evaluations.
 Students must have completed all required competencies to be eligible for program completion.

B
Laboratory
Competency Evaluation Form

Student's Name: _____

Date: _____

Procedure: _____

Grade: _____

Views: *A* _____ *B* _____ *C* _____ *D* _____ *E* _____

Automatic Failure: The evaluation should be discontinued, and the form completed by the CI, if any of the following items is checked:

_____ attempted wrong exam or wrong side _____ patient's safety in jeopardy

_____ any zeros in an (*)asterisked category below

3 = Satisfactory 2 = Needs Minor Improvement 1 = Needs Major Improvement 0 = Unsatisfactory

	A	B	C	D	E	Comments:
1. Evaluation of patient history	X	X	X	X		
2. Readiness of physical facilities	X	X	X	X		
3. *Positioning						
4. *Equipment Manipulation						
5. Technique						
6. Efficiency						
7. *Patient Care & Rapport						
8. Radiation Protection						
9. Image ID						

Total possible POINTS: 27 48 69 90 111 **Points earned:** _____

Lab instructor signature: _____

Student signature: _____

Comments:

C

Record of Clinical Experience

_____ has successfully completed
(student name)

_____ under my direct supervision.
(procedure)

Exam I.D. # _____

Technologist signature _____

Date _____

D
Clinical
Competency Evaluation Form

Student's Name: _____ Date: _____
 Procedure: _____ Grade: _____
 Views: *A* _____ *B* _____ *C* _____ *D* _____ *E* _____

Patient difficulty level (check one):

Pediatric: _____	Adult: _____	Geriatric: _____	Trauma: _____ Yes _____ No
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Competency level (check one): Simulation? _____ Yes _____ No (only used for initial competency)

Initial: _____	Continual: _____	Terminal: _____
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Automatic Failure: The evaluation should be discontinued, and the form completed by the CI, if any of the following items is checked:

____ wrong patient ____ attempted wrong exam or wrong side ____ patient's safety in jeopardy
 ____ any zeros in an (*)asterisked category below

3 = Satisfactory 2 = Needs Minor Improvement 1 = Needs Major Improvement 0 = Unsatisfactory

	A	B	C	D	E	Comments:
1. Evaluation of patient history	X	X	X	X		
2. Readiness of physical facilities	X	X	X	X		
3. *Positioning						
4. *Equipment Manipulation						
5. Technique						
6. Efficiency						
7. *Patient Care & Rapport						
8. Radiation Protection						
9. Image ID						
10. Image Critique						

Total possible POINTS: 30 54 78 102 126 **total earned:** _____

Verification of adequate signatures: _____ (*CI initials*)

C. I. signature: _____

Student signature: _____

Comments:

E

Competency Evaluation Criteria

1. Evaluation of Patient History:

- a. Ask pertinent history prior to starting exam
- b. Records history on x-ray request using medical terminology

2. Readiness of Physical Facilities:

- a. Cleans room prior to entry of patient
- b. Have all needed supplies for exam
- c. Prepares equipment for exam

3. Positioning:

- a. Place patient in proper position
- b. Place body part in proper position
- c. Centering point located properly
- d. Correct tube angle used
- e. Used immobilization as needed

4. Equipment Manipulation:

- a. Properly moves tube, bucky, table, etc.
- b. Proper SID used
- c. Selects correct image receptor (wall/table/nonbucky, size, orientation)

5. Technique:

- a. Measures patient when appropriate
- b. Uses technique charts as needed
- c. Selects proper technical factors
- d. Adjusts technique for patient condition

6. Efficiency:

- a. Expedites procedure
- b. Anticipates next step

7. Patient Care and Rapport:

- a. Identifies patient & self
- b. Maintains pt. privacy & comfort
- c. Awareness of pt. IV's & O₂
- d. Removes opaque objects from field
- e. Gives clear & precise directions

8. Radiation Protection:

- a. Obtains LMP /possibility of pregnancy
- b. Provide shielding as needed
- c. Collimates appropriately
- d. Observes patient during exposure

9. Image ID:

- a. Hospital & patient ID info on image
- b. Markers correctly placed on image
- c. ID/markers not obscuring anatomy

10. Image Criteria:

- a. Pertinent anatomy included
- b. Identifies visible anatomy
- c. Correctly assesses positioning
- d. Correctly assesses technique
- e. Identifies artifacts & motion
- f. Determines if image is acceptable
- g. Identifies corrective measures needed to obtain optimal image

GRADING

Evaluation grade is determined by tallying the points earned and dividing by the total possible points for the exam. For example: Column A = 30 possible points. If a student has 2 points deducted – $28/30 = 93\%$. If the student performs a 2 view exam, then the total possible points would be 54. If the student gets 1 point off for the PA and 4 off for the lateral, then it would be $49/54 = 91\%$

Total Points Possible:

- 1 view exam = 30
- 2 view exam = 54
- 3 view exam = 78
- 4 view exam = 102
- 5 view exam = 126

F – Performance Evaluation

G IMAGE EVALUATION

NAME _____

Clinical Education Setting _____

DATE _____

EXAMINATION _____

	0 <i>Poor</i>	1 <i>Adequate</i>	2 <i>Good</i>
Technical Factors:			
1. State technical factors employed			
2. Discuss density & contrast			
3. Suggest correct technique adjustment / <i>Digital equip - discuss exposure index #</i>			
4. Correct use of markers			
5. Film size, placement, & holder (<i>L.W./C.W., grid/nongrid, bucky</i>)			
6. Proper SID/OID			
7. Artifacts (<i>medical devises, buttons, motion, fog, gridlines, etc.</i>)			
Radiographic Anatomy:			
1. Identify anatomical structures			
2. Point out any pathology			
3. State anatomy best demonstrated			
Positioning:			
1. State department routine			
2. Identify each projection			
3. Central ray for each view - must state CR direction & # of degrees			
4. Part/Patient position			
5. Suggest improvements needed (<i>student should be able to state 2 image criteria from text for each projection and be able to decide if the image meets criteria</i>)			
6. Breathing instructions			
Radiation Protection:			
1. Collimation & Shielding			
Presentation:			
1. Films properly displayed on viewbox / image on digital monitor			
2. Displayed professionalism & confidence			

H

Critical Incidents

Any student found to have performed the following actions will have the semester grade for Clinical Practicum and Image Evaluation reduced by one letter grade:

Check below	Critical Incidents:	Clinical Instructor Signature
	Performing the wrong exam on a patient	
	Performing an exam on the wrong patient	
	Performing a repeat exam without a technologist present	
	Performing a portable exam without a technologist present	
	Performing an exam in the OR without a technologist	
	Releasing completed images without an RT approval	
	Causing injury to a patient due to gross negligence	
	HIPAA violation	

Student Name (*please print legibly*) _____

Date of Incident: _____

Date of Review with Student: _____

Student Signature: _____

A copy of this form must be faxed to CCC at 856 690-0084 or via email bpeacock@cccnj.edu

The original should be filed in the student clinical binder behind the grade sheet.

I PROGRAM NONCOMPLIANCE WITH JRCERT STANDARDS

The Program is required to be in compliance with Joint Review Committee on Education in Radiologic Technology (JRCERT) Standards for Accredited Educational program in Radiologic Sciences.

These Standards are found on the JRCERT website, www.jrcert.org. Accreditation Page, Standards.

If a student refers to these pages and believes a violation has occurred, he/she may chose from several options:

1. Contact the Health and Science Chairperson with the option of remaining anonymous.
2. Contact a Program Official with the option of remaining anonymous. The student may wish to use campus mail as an undetectable method.
3. Contact the JRCERT directly to obtain information. Options are listed on www.jrcert.org, Contact.
Complaints of non compliance sent to the JRCERT must be written and signed. (JRCERT Procedure 80.001B).
The JRCERT will maintain confidentiality of the complainant (JRCERT Procedure 80.001C).
4. Contact the NJDEP, Bureau of Radiologic Health, 609-984-5890 (telephone), 609 984-5811(fax) or www.state.nj.us/dep/rpp.

Complaints concerning clinical education settings will be investigated first by the Clinical Coordinator who will report to the Director.

Other complaints will be investigated by the Director.

The complaint will be responded to within 30 days.

The response will be presented to students and Program Personnel.

If the complaint is received from either the JRCERT or the NJDEP, both of the organizations will receive a written response within 30 days.

The Program will maintain a record of any complaints of violation and the resolution of the complaint.

ACKNOWLEDGMENT OF CLINICAL EDUCATION ASSIGNMENTS

I understand that the following Clinical Education Settings are approved for the clinical rotations of students:

- Atlanticare: Atlantic City & Pomona
- Inspira: Woodbury, Vineland, Elmer, & Bridgeton
- Kennedy Health System: Washington Twp, Stratford, Cherry Hill & Sewell
- Cape Regional Medical Center, Cape May Courthouse
- Memorial Hospital of Salem County, Salem
- Center for Diagnostic Imaging, Vineland
- Atlantic Medical Imaging, Egg Harbor Twp.
- Arthritis & Rheumatology Association of South Jersey, Vineland

Additional educational centers may be added to enhance the clinical experiences.

Under normal circumstances, students will be assigned a clinical education center for the first year, from September through August. To provide the student a greater variety of educational experiences, the student will be reassigned to a new clinical education center for the second year, September through July. In addition, students meeting the minimum requirements will be assigned a rotation in a private imaging center during the second year of education. This arrangement may be subject to change, at the Clinical Coordinator's discretion, in the event of changes in approved Clinical Education Settings, continual personality conflicts within the department, or at the request of a radiology department administrator.

I understand that I will be assigned to the above Clinical Education Settings and that I am responsible for travel means and expenses to and from the clinical education center (or possible relocation) during my clinical assignments. **I agree to comply with this policy.**

NAME(print): _____ **Signature:** _____

DATE: _____

(Student Copy – This is your copy. Another copy will be given to you during orientation to be signed and placed on your student file.)

ACKNOWLEDGMENT OF STUDENT HANDBOOK

I have received and thoroughly read the Radiography Student Handbook. I understand the policies and regulations contained therein including the pregnancy policy, and the responsibilities to be undertaken.

I understand that failure to comply with the established policies may result in dismissal from the program.

I agree to comply with these policies.

Name (print) _____

Signature _____

Date: _____

(Student Copy – This is your copy. Another copy will be given to you during orientation to be signed and placed on your student file.)