

The Division of Health Professions Radiography Program Student Handbook **Welcome Statement** 

Welcome to the Radiography Program sponsored by Bergen Community College! We

are pleased to have you as a part of the Radiography Program. This program is one of

eleven disciplines within The Division of Health Professions.

The Bergen Community College Radiography Program has a diverse number of clinical

education centers that afford our students with extensive experience with a wide variety

of patient conditions, imaging cases, and equipment. Presently, we have six clinical

education centers located in the northern New Jersey area.

Our energized laboratory is located on the first floor of the Health Professions Building

of Bergen Community College. It has state of the art imaging technology that consists

of digital imaging, computed radiography. The x-ray laboratory affords the opportunity to

learn, apply, and perfect skills that are essential for the clinical education aspect of the

radiography curriculum. Our lab is equipped with an energized x-ray unit, computed

radiography processor, digital portable X-ray machine, 6-computer stations with related

software, and a large number of imaging phantoms.

It is crucial that these documents are placed orderly in a three-ring binder so that you

will have access to, maintain all clinical, and program documents and forms for the

duration of the two years.

We wish to welcome each of you to the program and hope for much success in all of

your educational endeavors!

My best,

Professor Tyrone C. de Leon, M.Ed., R.T. (R)

Radiography Program Director

## **Accreditation Agencies**

Bergen Community College is accredited by the Middle States Association of Colleges and Schools.

The radiography program, sponsored by Bergen Community College, is accredited by Joint Review Committee on Education in Radiologic Technology (JRCERT) <a href="www.jrcert.org">www.jrcert.org</a> and New Jersey Radiologic Technology Board of Examiners (NJRTBE).

The radiography program adheres to the <u>Standards of an Accredited Program in Radiologic Sciences</u> as published by the Joint Review Committee on Education in Radiologic Technology. Students are provided a copy of this document in their manual. Students having issues are to follow the official protocol.

## **BCC Program Administration, Radiography Program Officials and Faculty**

The following are the program officials for the *Radiography Program:* 

Dr. Susan Callahan-Barnard DHSc, R.D.H Dean, The Division of Health Professions 201-493-7024, Office: HP 312 sbarnard@bergen.edu

Professor Amy Diaz M.B.A., R.T. ®(T)(ARRT) Health Professions Academic Chair Radiation Therapy Technology Program Director adiaz@bergen.edu Office: HP 323

Professor Tyrone de Leon M. Ed R.T ( R) (ARRT) Radiography Program Director tdelon@bergen.edu, Room HP306

Professor Elizabeth Ministero-Romano Clinical Education Coordinator <a href="mailto:eromano@bergen.edu">eromano@bergen.edu</a> Room HP308

MS Ed, R.T. (R)(M) ARRT

Professor Maria Cerbone
M.A.S, R.T.(R)(M)(ARRT)
Senior Laboratory Instructor
mcerbone@bergen.edu, HP306/ HP127

Julian Cromelin
A.A.S., R.T. R. (A.R.R.T.)
jcromelin@bergen.edu
Laboratory Instructor HP 127

Dr. Joseph A. Mamatz, Jr EdD, R.T.(R)(T) (ARRT) Radiography Educator Room: HP306|jmamatz@bergen.edu 201.879.1839

#### Radiography Program Mission Statement

The Bergen Community College Radiography Program cultivates graduates who possess knowledge, clinical competence, ethics, and meet the needs of a diverse community. The program uses engagement and collaboration to help instruct radiography principles that are integral to health care.

The radiography program is a 24-month course of study that is designed to prepare the graduate for employment in the medical imaging profession. Radiographers use radiation to create radiographs of the human body for the medical doctor to diagnose disease. A study of anatomy, patient care, imaging equipment, technique, and radiation biology are integrated into each course. Students learn principles related to medical imaging and apply these to practice in clinical settings. The program has three components- classroom, laboratory, and off site clinical education. Students spend approximately 1700 hours in clinical practice. Upon completion of the program students are eligible to apply for certification examination with the American Registry of Radiologic Technologists (ARRT) and apply for state licensure (if a license is required for that particular state).

The radiography program at Bergen Community College is accredited with the Joint Review Committee on Education in Radiologic Technology and the New Jersey Radiologic Technology Board of Examiners. This ensures that our graduates will be eligible for the American Registry of Radiologic Technologists certification examination in Radiography.

#### **Program Goals and Outcomes**

Upon completion of the program, our students will be prepared to:

- 1. Students and graduates will be academically and clinically competent.
- 2. Students and graduates will speak and write in a professional manner.
- 3. Students and graduates will use critical thinking strategies to solve academic and clinical issues.

#### Student Competency

- 1.1 Students will demonstrate competent patient positioning skills in a clinical setting.
- 1.2 Students will demonstrate competent equipment use in a clinical setting.
- 1.3 Students will demonstrate skills in radiation protection in a clinical setting

#### Communication

2.1 Students will demonstrate effective use of the AIDET model on verbal communication.

#### Critical Thinking system for problem solving

- 3.1 Students will use clinical thinking strategies to solve issues with imaging cases.
- 3.2 Students will demonstrate the ability to analyze and modify exposure to meet the specific needs of a patient.

## **Curriculum Learning Objectives**

- Use professional oral and written communication
- Demonstrate knowledge of human structure, function, and disease
- Provide patients with the proper level of care and comfort

Program effectiveness data about BCC can be found here: <u>JRCERT - PED</u>

#### **Professional and Technical Standards of Practice**

The applicant for admission to the Bergen Community College Radiography Program should have the following technical skills to perform procedures competently, proficiently and safely:

- The student must be able to read and interpret patient information in charts, electronic medical records or Doctor's orders.
- The student must be able to communicate in English in order to converse with and instruct the patient to relieve anxiety and gain their cooperation during procedures.
- Reasonable corrective devices which pertain to sight or hearing, are acceptable.
- The student must be able to hear a patient talk in a normal tone from a distance of 20 feet.
- The student must be able to observe the patient in order to assess the patient's condition and/or needs from a distance of at least 20 feet.
- The student must be able to render services and/or assistance to all patients depending on the individual patient's needs and ability in moving, turning, getting on and off the x–ray tables, etc.
- The student must be able to push, pull, and lift 40 pounds.
- The student must be able to stand for long periods, while also possibly wearing a lead apron, and be able to walk a distance of 2 miles during a normal clinical day.

- Safely move a stretcher and/or wheelchair without injury to self, patient, or others.
- Safely manipulate mobile imaging units, turning corners, getting the unit on and off an elevator, and manipulating the unit inside the patient's room.
- Manually move the x-ray machine and manipulate the tube at standard and nonstandard heights and angles up to 7 feet.
- Draw up sterile contrast media and other solutions without contaminating the syringe and/or needle, etc.
- Select exposure factors by manipulating dials, buttons, and switches.
- Place an image receptor in Bucky trays and spot film devices and properly manipulate all locks.
- Physically administer emergency care including CPR.
- Evaluate radiographic images to make certain that radiographs contain proper identification and are of diagnostic value.

## **Radiography Professional Organizations**

Joint Review Committee on Education in Radiologic Technology (JRCERT) 20 N. Wacker Drive, Suite 2850 Chicago, Illinois, 60606-3182 Phone 312-704-5300

Email: www.jrcert.org

New Jersey Department of Environmental Protection Bureau of X-ray Compliance (BXC) Trenton, NJ 1-609-984-5890

American Registry of Radiologic Technologists (ARRT)
1255 Northland Drive,
St. Paul, MN 55120-1155

Phone: 651-687-0048 Email: www.arrt.org

American Society of Radiologic Technologists (ASRT)
15000 Central Ave. SE,
Albuquerque, NM 87123-3909

Phone: 800-444-2778 Phone: 505-298-4500 Email: www.asrt.org

## Radiography Program Policies and Requirements

## **CPR Policy**

Students must be certified in "CPR-BLS for Healthcare Professional/Providers", certificates must be from an American Heart association approved course, prior to the beginning of clinical education. Copies of the card will be made and placed on file. The cards are maintained as a part of the student's clinical folder.

## **Graduation Requirements Policy**

In order to graduate from this program, the student must meet all of the following requirements. Below are the graduation requirements needed for the Associate Degree in Applied Science degree in Radiography:

- Completion of all didactic and clinical education radiography (RAD) courses with a final grade of at least a 77% (C).
- Maintain (C) and a 2.50 Grade Point average throughout the program.
- Completion of all General Education courses.
- Completion of all required clinical competency evaluations.
- Completion of all general patient care simulations.
- Pass the Freshmen Comprehensive Examination (RAD 283) with 80% or higher.
- Pass Radiography Program Exit/Final Examination (RAD 290) with 80% or higher.

# Compliance with the American Society of Radiologic Technologists: Code of Ethical Practice Policy

The ASRT hyperlink is included as part of the student's professional handbook. The program reinforces the content during orientation and throughout each radiography course in this program. See Addendum of the ASRT Code of Ethics. The website can be located by logging onto:

https://www.misericordia.edu/uploaded/images/academics/mi/other links/mi codeofethics.pdf

## New Jersey State Licensure Requirements Policy

A New Jersey State licensure is required for employment in the capacity of a

**Radiographer** (Radiologic Technologist). Graduates are not permitted to work in that capacity without a New Jersey license. States vary with respect to licensure laws. Students are responsible to be aware of state specific mandates with respect to licensure requirements.

Upon successful completion of the ARRT examination in Radiography, graduates may APPLY for a New Jersey State license through the following agency:

State of New Jersey
Department of Environmental Protection
Bureau of X-ray Compliance
25 Arctic Parkway
P.O. Box 420 (Mail Code 25-01)
Trenton, New Jersey, 08625-0420
Phone: (609) 984-5634

#### **Employment Policy**

Students are not to schedule their work times during scheduled radiography lectures, laboratory, or clinical times. Employment at the clinical sites MUST NOT involve taking radiographic images.

## Radiography Program Letter Grade Assignment Policy

Letter grades for each radiography course are assigned as follows:

- A 92-100%
- B+ 89-91.9%
- B 83-88.9%
- C+ 80-82.9%
- C 77-79% (the minimal passing cut-off score is 77%)
- D 75-76.9% (Unsatisfactory-not acknowledged by the program)
- F 74.9% and below (Unsatisfactory

Health professions students are held to a higher academic, laboratory, and clinical standards.

Students enrolled in the program must have a working knowledge of the entire Radiography curriculum.

## **Trajecsys Clinical Tracking Application**

Registered students will utilize Trajecsys clinical application software as part of their clinical education. Students will register for the use of the program by the end of September in their first year. Items such as grades, evaluations, and attendance will be monitored through the use of the Trajecsys. It is the student's responsibility to purchase access to Trajecsys as soon as it becomes available. The cost of access is **\$150** for two-years.

## Successful Course Outcome Policy

The minimal passing grade for all Radiography Courses is 77%. Numerical final grade averages that are less than 77% are unsatisfactory and require the course to be repeated. If any two radiography courses are unsuccessful, at any time during the two-year duration, the student will be permanently dismissed from the program.

Students have a three-year span to complete the program. However, the following is the protocol that is followed by this program. Readmitted students must repeat the entire program.

#### **Examinations Policy**

The use of any electronic devices (including, but not limited to, cellphones, smart watches, earbuds/headphones or Bluetooth devices, tablets) or any other electronic item is PROHIBITED during testing. No electronic device is to be on the person during any test or assessment (except for any approved calculators or personal devices with which the student is permitted to use to access the assessment). Electronic devices must be safely locked in a book bag or backpack or stored away from the testing area. Use of any unapproved device is considered a breach of academic integrity. Any occurrence will be reported to the Radiography Program Director. Students might be subject to disciplinary action.

## **Course Attendance Policy**

Students are expected to be present for each class and laboratory session and arrive on time. Poor attendance and tardiness is unprofessional, unacceptable, and will not be tolerated. Poor attendance can affect your ability to meet course objectives. It is unfair to the other students who regularly attend to allow for consistent late or absent events by others.

More than two absences per course is considered excessive. This will result in loss of points from the final course grade. The loss of 2 points per additional absence, will begin with absence three. Students may present a doctors/ lawyers note for consideration of extenuating circumstances.

## **Liability Insurance Requirement**

Bergen Community College requires all Health Professions students to carry his or her own Professional Liability Insurance. Students are given the information to obtain HPSO Insurance. Proof of Professional Liability insurance must be provided to the Clinical Education Coordinator.

For legal and safety compliance, students are to be in the clinical site during assigned times only and when supervised by a Bergen Community College Clinical Preceptor or designee.

#### **Medical Insurance Requirement**

Proof of medical insurance must be given to the Office of Health Services. Any medical charge incurred while at clinical is the responsibility of the student.

The college may or may not offer low- cost medical insurance plans. This is dependent upon current college policies.

## **Student Maintenance of Medical Record Policy**

Students must have a physical examination and immunizations, before the start of clinical. There are no exceptions to this policy. Those students who are not in compliance will not be able to participate in clinical education activities. Each day missed, as a result, will be recorded as an unexcused absence.

Medical records will be maintained in the Bergen Community College Health Office. It is the student's responsibility to keep their medical requirements and records up to date each semester. An electronic clearance letter will be provided to the program Clinical Education Coordinator before the start of each semester.

## **Buckley Amendment (Privacy Policy)**

Bergen Community College's Radiography Program informs students of the Family Educational Rights and Privacy Act of 1974. The program maintains strict confidentiality practices of all clinical and didactic information. Your records are locked in secured areas.\_This Act is designated:

- -To protect the privacy of education records
- -To establish the right of students to inspect and review their education records,
- -To challenge the contents of their education records,

- -To have a hearing if the outcome of the challenge is unsatisfactory, to submit an explanatory statement for enclosure in the record if the outcome of the hearing is unsatisfactory
- -To prevent disclosure, and to secure a copy of the College policy, which includes the location of all education records.
- -Students also have the right to file complaints about issues concerning alleged failures of the college to comply with the Act. Complaints may be sent to the address below:

Family Educational Rights and Privacy Office (FERPA), Department of Education, Room 4511, Switzer Building, Washington, D.C. 20202, telephone (202) 655-4000

## **Communicable Disease / Covid Policy**

The purpose of this policy is to prevent exposure to and manage communicable diseases and infection to prevent its spread to others. Medical examinations and immunization requirements must be met. These include but are not limited to FDA/CDC recommendations for Covid shots, and mandatory annual FLU shots.

The program must be informed immediately whenever the student discovers a communicable condition. If this occurs at the clinical education center, the student will be dismissed from clinical participation. Students are responsible for seeking medical attention.

Students may participate in clinical education when a medical clearance note from a physician is received by the Clinical Education Coordinator.

In the event a student comes down with a communicable disease, the Clinical Education Coordinator, and the school nurse MUST be informed.

## **Radiation Safety Practices Policy**

Freshmen students will be introduced to radiation safety during orientation. Subsequently, concepts of radiation safety are reinforced in all academic and clinical courses. Professor de Leon, serves in the capacity of Radiation Safety Officer for the program. Specific policies relating to the use of dosimeters and allowable exposure amounts are in the Clinical Handbook.

All students are given one dosimeter to wear for clinical and laboratory classes. Dosimeters must be worn at all times in a radiation-producing environment and must be changed on a regular basis. It is the responsibility of the student to bring, wear and exchange the dosimeter to the laboratory and clinical education center. A student is not allowed, for safety reasons, to participate in clinical or lab activities without a dosimeter.

Student's are allowed an effective dose limit of 0.1 rem (1mSv) annually. Student's radiation dosimeter reports are available for student review and are maintained by the Radiation Safety Officer indefinitely. Students will be notified of their most recent dosimeter report within thirty (30) days of report receipt by the school.

In the event that a student receives an exposure of 50 mrem (0.5 mSv) or greater on any monthly radiation dosimetry report, or 100 mrem (1.0 mSv) or greater on any bimonthly radiation dosimetry report, or 150 mrem (1.5 mSv) or greater on any quarterly report, or an exposure that exceeds any of the occupational limits in N.J.A.C. 7:28-6.1, the school shall begin an investigation to find the cause and prevent recurrence of the exposure. The investigation report shall be completed within 30 calendar days of the school's receipt of notification of the exposure. This investigation report shall include any action to be taken to reduce unnecessary radiation exposure. The investigation report shall be given to the student and shall be maintained in the student's file. If any of the occupational limits in N.J.A.C. 7:28-6.1 is exceeded, a copy of the investigation report must be submitted to the department. Within 90 calendar days of departure from the school, the school shall provide each student with a complete record of his or her radiation exposure history.

<u>Pursuant to Subchapter 19 discussing Radiologic Technology, the NJDEP requires under 7:28-19.12 the following provisions:</u>

- 1. Ensure that students are not in the primary beam
- 2. Students are not permitted to remain in the x-ray room outside the control booth during an x-ray exposure unless the student is provided with a protective apron or shield that is at least 0.5 mm of lead equivalent; or
- 3. Students are not permitted to engage in any other practices likely to result in unnecessary exposure to ionizing radiation.

<u>Students are not permitted to hold an image receptor during any radiographic procedure.</u>
<u>Students are not permitted to hold patients for any reason during an exposure.</u>

Bergen Community college MUST wear lead when doing portables. Non-compliance will result in a two week suspension from clinical practice and a five page paper written about the importance of Radiation Safety Practices.

## **Magnetic Resonance Imaging Safety**

Students are provided an orientation regarding MRI screening and safety prior to the start of clinical. Students are made aware that due to the nature of the MRI equipment, access to specific locations within the clinical setting will be limited in nature or completely restricted. Students are allowed to assist with patients located in MRI zones I & II.

Completion of an MRI screening form is required prior to the start of a student's clinical rotation. Should a student's MRI clearance change, they are to notify the program and complete an updated screening form. All MRI screening forms will be held in the student's personal record on file.

## **Smart Electronic Devices and Cellular Phone Usage Policy**

The use of cellular phones/electronic devices in the classroom is **distracting** to the instructor and other students, and, therefore prohibited during all class, laboratory, and clinical sessions, unless the student has an accommodation from the Office of Special Services.

There is to be **no texting** or use of the phone to peruse the internet while in class. Cell phones and texting is prohibited in the clinical site as well.

Once entering the classroom and or clinical education center, cell phones MUST be turned off and kept in a designated place (to be determined by the instructor) during the classroom or clinical site. If you are found to be using this device or any electronic devices during lecture, class, exam, lab, or clinical time, this is considered as insubordinate behavior by the program and you will be asked to leave. If the student becomes argumentative, Public Safety will be called.

UNDER NO CIRCUMSTANCE IS THE USE OF AN ELECTRONIC DEVICE PERMISSIBLE DURING TESTING OR WHEN THE TEST IS BEING REVIEWED. PHOTOGRAPHING OR DISTRIBUTING THE CONTENTS OF ANY TEST QUESTIONS/CONTENTS IS A SERIOUS FORM OF ACADEMIC DISHONESTY. ANY CASE INVOLVING SUCH WILL BE REPORTED TO THE RADIOGRAPHY PROGRAM DIRECTOR.

#### **Jury Duty Policy**

Students who are called for jury duty must take their summons to the Program Officials upon receipt of the summons. Delay in bringing the summons to the proper attention may jeopardize the chances of being excused by the court and will create academic hardships for the student.

## **Military Services Policy**

Those students, who are presently in Military Service, must inform the Program Director and Clinical Education Coordinator.

When a military student is called to duty, they must: (1) inform the program officials, and (2) present documentation of the dates that their service is needed.

## **Stages of Disciplinary Action**

- Students will receive a verbal warning. Documentation of such is kept as a part of the student's record.
- Students will receive a written warning. Documentation of such is kept as a part of the student's record.
- Students will be subjected to suspension.
- Students will be subjected to dismissal.

## **Non Continuation of the Program**

Students who are unsuccessful with one radiography course, they may continue with the program after waiting one year due to the sequential order of the courses in the radiography curriculum. The unsuccessful course MUST be repeated to obtain a passing grade.

Students wishing to return after 1 year or more out of the program: Students are expected to complete the program within 3 years. Students who leave the program for more than 1 year will be required to start over. Students must write a letter of intention of your return to the program by 10/15 of the current year.

## **Dismissal from the Program**

The student MAY reapply for admissions after a period of three (3) years if the issue is related to academic performance. This will afford the time needed to make academic or any other changes that are needed for success. The student must repeat the radiography program again. Students must write a letter of intention of your return to the program by 10/15 of the current year.

## Causes for permanent dismissal from the radiography program are the result of:

- Acts(s) of insubordination
- Serious, illegal acts; unethical actions and behaviors that violate the Professional Code of Ethics.
- Unsafe clinical practices, negligence or incompetence.
- Health problems that interfere with the student's educational goals.
- Misuse of the clinical education centers privileges.
- Consistently failing to follow the program's policies.
- Dismissal from a clinical site.
- Unsafe practices (radiation & patient safety).
- Dismissal from more than one clinical education center.
- Cases of Academic dishonesty

#### Clause:

A student who is dismissed from the Radiography Program for the *violations above* is ineligible for readmission. The student has the right to appeal the decision by following the Appeal Process as outlined in the handbook and College catalog. The student will be notified verbally [and in writing] through the Student Conference form.

## Substance and or Alcohol Usage/ Abuse Policy

Students are not to attend clinic, classroom/ lecture, or laboratory activities when under the influence of alcohol, drugs, or any substances or medications not prescribed by a Physician.

The provision of client care in a safe and appropriate manner cannot be compromised at any time. The health and safety of affected students, other students, and others in the workers' clinical setting or laboratory setting cannot be jeopardized.

Bergen Community College has in place, personal counselors to help students who are encountering difficulty with prescribed, un-prescribed medication and alcohol usage. Sessions with these counselors are private and fully maintaining your privacy is protected by the law.

#### **Workplace Safety Practices Policy**

Students are introduced to factors involved in various workplace hazards in RAD 180-Introduction to Radiography. Any injury from chemicals, water, electrical, or blood borne pathogens is brought to the attention of the compliance officer and the Department of Health Services for evaluation. The nurse-in-charge will decide if care at one of our local community hospitals is warranted for injuries of any kind.

# Reporting of Noncompliance Allegations with the Joint Review Committee in Education in Radiologic Technology

# \*\*Reporting Allegations (Non-Compliance of the Joint Review Committee's Educational Standards) taken from the JRCERT's website

https://www.jrcert.org/accreditation-for-students/allegations

- The JRCERT is required to be responsive to allegations of non-compliance with any of its Standards.
- Please be advised that the JRCERT cannot advocate on behalf of any one student.
- An investigation into allegations of non-compliance addresses only the program's compliance with accreditation standards and will not affect the status of any individual student.
- The JRCERT takes it seriously and follows up appropriately any allegation that an accredited program is not maintaining compliance with its accreditation standards.
- Before the JRCERT will take action to investigate the program, however, it must be assured that the complainant has addressed the matter internally.
- If you have addressed the matter internally and wish to make a formal complaint,
   please complete an allegations reporting form.
- The allegations must reference the specific accreditation standards/objectives with which you believe the program to be in non-compliance.

## Reporting Process

## Important Notes for Reporting Allegations Against a Program

The JRCERT cannot advocate on behalf of any student(s). An investigation
into allegations of non-compliance addresses only the program's compliance
with accreditation standards and will not affect the status of any individual
student.

- 2. The investigation process may take several months.
- 3. The JRCERT will not divulge the identity of any complainant(s) unless required to do so through legal process.

#### **Process**

Before submitting allegations, the individual must first attempt to resolve the complaint directly with program/institution officials by following the due process or grievance procedures provided by the program/institution.

- 1. Each program/institution is required to publish its internal complaint procedure in an informational document such as a catalog or student handbook.
- 2. If the individual is unable to resolve the complaint with program/institution officials or believes that the concerns have not been properly addressed, he or she may submit allegations of non-compliance to the JRCERT:

Chief Executive Officer

Joint Review Committee on Education in Radiologic Technology

20 North Wacker Drive, Suite 2850

Chicago, IL 60606-3182

Phone: (312) 704-5300

e-mail: mail@jrcert.org

- A. The Allegations Reporting Form must be completed and sent to the above address with required supporting materials.
- B. All submitted documentation must be legible.
- C. Forms submitted without a signature or the required supporting material will not be considered.
- D. If a complainant fails to submit appropriate materials as requested, the complaint will be closed.
- E. The Higher Education Opportunities Act of 2008, as amended, provides that a student, graduate, faculty or any other individual who believes he or she has been aggrieved by an educational program or institution has the right to submit documented allegation(s) to the agency accrediting the institution or program.

- F. The JRCERT, recognized by the United States Department of Education for the accreditation of radiography, radiation therapy, magnetic resonance, and medical dosimetry educational programs investigates allegation(s) submitted, in writing, signed by any individual with reason to believe that an accredited program has acted contrary to the relevant accreditation standards or that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students.
- G. Joint Review Committee contact:

Joint Review Committee on Education in Radiologic Technology 20 North Wacker Drive, Suite 2850

Chicago, IL 60606-3182 Phone: (312) 704-5300

e-mail: mail@ircert.org

## Radiography Programs Procedure for Allegation of Non-compliance

## Radiography Program Chain of Command

A two-day period is needed to research the issue, event, or complaint. An electronic notification will be sent to you upon receipt of the response letter from the program.

The student's letter must contain only facts regarding the issue, not opinions or suspicions. Detailed facts such as dates, times and locations are needed for accurate investigation of the issue. Opinions are not to be included in any documents or forms.

Below is the chain of command that be concerning about academic/ clinical related issues:

- 1. Students must meet with the *instructor or preceptor* involved. An attempt must be made to try and rectify the problem or issue.
- 2. If there is no resolve and the issue is clinical related, the student is advised to make an appointment to meet with the *Clinical Coordinator*.
- 3. If there is no resolve, the student is advised to make an appointment to meet with the *Radiography Program Director*.
- 4. If there is no resolve, the student is advised to make an appointment to meet with the *Dean of Health Professions*.
- 5. If there is no resolve, the student is advised to meet with the *Vice President of Academic Affairs*.

Two days (2) after each meeting, or as soon as possible (feasible) an email with an outcome should be received. This is a worthwhile opportunity to potentially solve the situation/ issue or offer suggestions to you.

#### BERGEN COMMUNITY COLLEGE RELATED ISSUES

Bergen Community College catalog on page 59. Students must manage the situation with the faculty member. This document may be found electronically on the Bergen.edu web site.

## Criminal Background Check and Policy

The student is advised that this is not a BCC policy. CHBCs are required by JCAHO, the accreditation body to which our clinical partner MUST adhere to. All students are required to complete a criminal background check prior to being accepted to the program.

- This is required by the clinical education affiliates as is required by their external accreditation agency.
- Issues of Non-compliance will adversely affect the students ability to graduate from the program.

#### **Potential Infractions OF CHBC**

The student is apprised that any infractions that result in a change of their CHBC status must be reported to the Dean of Health Professions and the Radiography Program Director. Such infractions could affect your opportunity to:

- Continue the clinical education experience.
- Be deemed eligible for the certification examination sponsored by the American Registry of Radiologic Technologists.
- Be deemed eligible for an NJ State License, Department of Environmental Protection, and Bureau of X-Ray Compliance (BXC) NJ Radiologic Technology Board of Examiners.

It is imperative that the student maintains a "clean" record while in the program and after. Violations could affect ARRT eligibility, licensure and certification renewal, and potential work opportunities.

## Freshmen Comprehensive Examination Policy

The Freshmen Final Exam is administered at the end of RAD 283 (Freshman Summer U semester). It consists of items that are derived from the content delivered throughout the first year.

To prove didactic competence on the exam, students must achieve a minimum of 80% or higher.

#### Senior Exit Examination Policy

Upon completion of RAD 290, the radiography student will take the Senior Final (Exit) Examination (Senior Summer U semester). It consists of items that are derived from the content delivered over the past 2 years. To prove didactic competence on the exam, students must achieve a minimum of 80% or higher. Students have three (3) attempts to pass the examination or an UNSUCCESSFUL GRADE grade will be entered, regardless of the other grades acquired in RAD 290.

#### **ETHICS**

Students are bound by the ARRT Code of Ethics and the ASRT Standard of Practice. The program has adopted the code of ethical practices and policies pertaining to student behavior from the ARRT/ASRT. Enrollment in Bergen Community College Radiography Program constitutes an agreement to comply with the policies of the school, program, and clinical sites. Regulations affecting admission, promotion, and other policies may be changed at any time by the program faculty and will apply to all students. Students will be notified in writing and required to sign acknowledgement of any policy changes. The program adheres to the Family Education Rights and Privacy Act of 1974. The program does not release any student information to parents or any agency without a signed release of information for the student or a court subpoena for the information. Family Education Rights and Privacy Act (FERPA) and Federal Trade Commission guidelines are followed.

#### AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS (ARRT) CODE OF ETHICS

- 1. The Radiologic Technologist acts 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 humankind.
- 3. The Radiologic Technologist delivers patient care and service unrestricted by concerns of personal attributes or the nature of the disease or illness, and without discrimination, regardless 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 purpose 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 management 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 the 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 individuals or the community.
- 10. 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.
- \*\*\_Adopted by: The American Society of Radiologic Technologists & the American Registry of RadiologicTechnologists

## **Academic Dishonesty Policy**

The radiography program has a zero-tolerance policy regarding issues related to academic dishonesty. Students will receive a zero for infractions to this policy. This failing grade will be factored into the weight of the quiz, test, or examination that is published on the course syllabus. Refer to the policy in the BCC Catalog regarding Academic Integrity & Consequences.

No test, quiz, or examination is to be printed, photographed, or copied in any way. Students who compromise this policy will receive a zero or F grade. The program has a zero-tolerance policy for academic integrity infractions.

Our "on-line" platform, Canvas, web enhanced classroom, instructional and testing format, tracks all student activity with dates, times, computer number, IP address etc. It can deliver a history of what a student accessed, how many and what kind of attempts were made to access material posted on the Canvas course rooms. This includes, but is not limited to all exams, quizzes and powerpoint lecture presentations. Any access to any material that the student was not given permission for, or any unauthorized access to any exams, printing or saving of exams or exam content will be considered academic dishonesty and subject to program dismissal.

Academic integrity is challenged when a student is charged with academic irregularities, such as cheating during an examination or plagiarism in the preparation of an essay, laboratory report, or oral presentation.

The program will adhere to BCC Policies regarding academic regulations as found in the pages named academic dishonesty in the 2016-2017 College Catalog.

## Bergen Community College and the Radiography Program Accreditation and the JRCERT Standards

- Bergen Community College is fully accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools.
- The Bergen Community College Radiography Program is accredited by the New Jersey Radiologic Technology Board of Examiners (NJRTBE) and the Joint Review Committee on Education in Radiologic Technology (JRCERT)
- Radiography educational programs, follow the Standards of an Accredited Program in Radiologic Sciences.
- The Standards are posted in the classroom and laboratory, and may be made available to the student upon request.
- Issues of non-compliance with the Standards must be brought to the attention of the Program Director.
- The program will immediately act to investigate the allegation(s)
- If found to be in non-compliance, the program will take immediate action for correction.
- Corrective action will take place within 30 days of the initial report.
- Issues of non-compliance with the Standards should be addressed or reported with the following agencies:
  - Joint Review Committee on Education in Radiologic Technology 1. 20 North Wacker Drive, Suite 2850 Chicago, Illinois, 60606-3182 312-704-5300 mail@ircert.org
    - 2. New Jersey Radiologic Technology Board of Examiners Department of Environmental Protection Bureau of X-Ray Compliance P.O. Box 415 Trenton, New Jersey 08625 609-984-5890

## Videotaping, Audiotaping and Social Media

Students are to abide by the college's social media policy and the clinical affiliate policy. These are designed to protect yourself as well as the institution. Using social networking sites and creating unprofessional posts may be viewed as harassment, slander, or defamation. Social media networks must be used carefully while in the program and professionally. It is in violation to record a person without their consent. Future employers may use social media in their interviewing or hiring process. The program is often contacted for references post-graduation.

The Radiography Program supports the use of social media to reach audiences important to the Program such as students, prospective students, faculty, and staff. The College presence or participation on social media sites is guided by college policy. This policy applies to radiography students who engage in internet conversations. Distribution of sensitive and confidential information is protected under HIPAA and FERPA whether discussed through traditional communication channels or through social media.

Social media is defined as mechanisms for communication designed to be disseminated through social interaction, created using highly accessible and scalable publishing techniques. Social media is commonly thought of as a group of Internet-based applications that are built on the ideological and technological foundations of the web that allows the creation and exchange of user-generated content. Examples include but are not limited to LinkedIn, Wikipedia, Second Life, Flickr, blogs, podcasts, RSS feeds, Twitter, Facebook, YouTube, and Myspace.

While this policy may need to be modified as new technologies and social networking tools emerge, the spirit of the policy will remain the protection of sensitive and confidential information. Social media often spans traditional boundaries between professional and personal relationships and thus takes additional vigilance to make sure that one is protecting personal, professional, and program reputations.

As students, you will want to represent the Radiography Program and the school in a fair, accurate and legal manner while protecting the brand and reputation of the institution. When publishing information on social media sites, remain cognizant that information may be public for anyone to see and can be traced back to you as an individual. Since social media typically enables two-way communications with your audience, you have less control about how materials you post will be used by others.

#### POLICY:

- Protect confidential, sensitive, and proprietary information: Do not post confidential or proprietary information about the school, program, staff, students, clinical facilities, patients/clients, or others with whom one has contact in the role of a Radiography student.
- Respect copyright and fair use. When posting, be mindful of the copyright and intellectual property rights of others and of the College. For guidance, visit the College Library.
- Do not use Bergen Community College or Radiography Program marks, such as logos and graphics, on personal social media sites.
- It is expected that during clinical times, cell phones and other personal forms of electronic devices will not be used.
- No personal phone conversations or texting are allowed at any time while in patient/client areas or in the lab or classroom.
- Use of computers (PDAs, Notebooks, etc.) during class shall be restricted to note taking and classroom activities. Use otherwise is distracting for not only the student involved in the activity but those in the immediate area/vicinity.
- No student shall videotape/ photograph professors or fellow students for personal or social media use without the express written permission of the faculty or fellow student. At NO time shall patients/clients be videotaped or photographed. Lectures and any documents or powerpoint presentations are the property of the instructor, Bergen Community College or the published book or paper referenced. Therefore, any photographing, copying, reprinting or any other disseminating manner of those materials is strictly prohibited without written permission. Permission for audio or video recording of lectures is at the instructor's discretion.
- Be aware of your association with Bergen Community College and the Radiography program, in online social networks. If you identify yourself as a student, ensure your profile and related content is consistent with how you wish to present yourself to colleagues, clients, and potential employers
  - HIPAA/Privacy guidelines must be followed at all times. ANY identifiable information concerning clients/clinical rotations must not be posted in any online forum or web

1

page nor taken from the institution, such as the patient's name, information on history, including images.

•

• Ultimately, you have sole responsibility for what you post. Be smart about protecting yourself, and others privacy, and most especially confidential information.

#### Procedure/Considerations:

There is no such thing as a "private" social media site. Search engines can turn up posts years after the publication date. Comments can be forwarded or copied. Archival systems save information, including deleted postings. If you feel angry or passionate about a subject, it is wise to delay posting until you are calm and clear-headed. Think twice before posting. If you are unsure about posting something or responding to a comment, ask your faculty. If you are about to publish something that makes you even the slightest bit uncertain, review the suggestions in this policy and seek guidance.

Future employers hold you to a high standard of behavior. By identifying yourself as a Bergen Community College student through postings and personal web pages, you are connected to your colleagues, clinical agencies, and even clients/patients. Ensure that content associated with you is consistent with your professional goals.

- Radiography students are preparing for a profession that provides services to a public that also expects high standards of behavior.
- Respect your audience.
- Adhere to all applicable college and program privacy and confidentiality policies.
- You are legally liable for what you post on your own site and on the sites of others.
   Individual bloggers have been held liable for commentary deemed proprietary, copyrighted, defamatory, libelous or obscene (as defined by the courts).
- Employers are increasingly conducting Web searches on job candidates before
  extending offers. Be sure that what you post today will not come back to haunt you in
  the future.
- Monitor comments. You can set your site so that you can review and approve comments before they appear. This allows you to respond in a timely way to comments. It also allows you to delete spam comments and to block any individuals who repeatedly post offensive or frivolous comments.

- Do not use ethnic slurs, personal insults, obscenity, pornographic images, or engage in any conduct that would not be acceptable in the professional workplace.
- You are responsible for regularly reviewing the terms of this policy.

#### Consequences:

- Violations of patient/client privacy with an electronic device will be subject to HIPAA procedures/guidelines and consequences.
- Students who share confidential or unprofessional information do so at the risk of disciplinary action that includes dismissal from the program.
- Each student is legally responsible for individual postings and may be subject to liability if individual postings are found defamatory, harassing, or in violation of any other applicable law. Students may also be liable if individual postings include confidential or copyrighted information (music, videos, text, etc.).

#### **Sexual Harassment**

Sexual Harassment is defined as unwelcome sexual advances or sexually explicit comments. Bergen Community College is committed to providing all students and employees an environment free from sexual harassment or discrimination. As stated in the College catalog, the College and the Radiography Department deems sexual harassment in any form as prohibited, unprofessional and unacceptable behavior and in violation of Title VII of the Civil Rights Acts of 1964 and 1990, as amended, Title IX of the Education Amendments of 1972, and the New Jersey Law Against Discrimination, established case law and State Policies. Additional information regarding Bergen Community College Sexual Harassment Policy is published in the 2016-2017 College Catalog under Policies Prohibiting Sexual Harassment.

## Professional Attire and Appearance

#### Students MUST:

- Act in a professional manner while in the classroom, laboratory or clinical site
- Treat each other professionally and with respect at all times.
- Wear your uniform to all classes. Identification badges that include your full name and title
  as a radiography student is required.
- You must also wear closed toe, clinical uniform acceptable shoes in the lab.
- Hair must be up and fastened. Non-natural hair color is not accepted.
- Males- beards MUST be well groomed (it may be necessary for men to shave beards so that the N-95 masks, used for Covid protection, will make a good seal to the face).
- Maintain high levels of personal hygiene.
- Tattoos must be covered if possible. Tattoos on arms can be covered by sleeves, lab coat or long sleeve shirt if appropriate.
- Earrings either must be of the stud type. No hanging, open or dangling type of earrings.
- It is suggested that necklaces not be worn; however, if a student chooses to wear a "chain" that it be secured under a shirt and not accessible.
- Imitation nails, extensions, tips, gels, wraps, may not be worn to clinical. Refer to Clinical Coordinator and Clinical policies.

## **Instructor Response Time for Courses**

Instructors will routinely read electronic mail correspondences.

A reasonable response time frame is 1-2 days.

In order to afford a timely and accurate response for tests and examinations, Faculty reserves the right of a response timeframe of seven days. This is for an item analysis to take place and for question validity assurance.

## **Classroom Etiquette Policy**

Due to the nature of the course of study, it is essential to maintain a professional climate at all times while in class. This includes

- the use of cell phones,
- talking relentlessly,
- passing notes,
- disturbing faculty and other students,
- frequently leaving the classroom,
- failure to follow instruction and directions

Since these behaviors affect the education and learning climate, the disruptive student will be asked to leave.

## **Program Obligations Policy**

The radiography program is a full-time course of study. Clinical and academic courses are scheduled Monday-Friday, for two years (24 months). Students are made aware of the course times in web advisor and verbally by the faculty. Each year, students are afforded 9 weeks vacation per year see list below for planning purposes.. It is understood that you must work. This is not under the program's control. The program must follow national standards and state regulations. Some radiography laboratory sections run until 5 pm. It is the student's option to register for late afternoon courses. The amount of time is not to exceed 40 hours/ week.

#### **VACATIONS**

- Winter Break (December/Jan)
- Spring Break (March)
- Approximately one week between spring and summer terms
- Approximately three weeks in August

## **Late Arrival Policy During Testing**

Students who arrive late will not be admitted into the testing area. Thefaculties feel that late arrivals unfairly disturb the students who arrived on time and are diligently working at the task. Be advised that any makeup test format will vary from the original assessment. The academic test writing is the prerogative of the instructor.

#### Repeating Radiography Courses Policy

Students who are unsuccessful with a radiography course grade must repeat the course when the course is offered again. The student is advised that they may not progress in the program until the failed course is successfully repeated. Should the repeat of a course yield the second F grade, the student will be permanently dismissed from the program. Please note that the failure of any two radiography courses, at any time, results in the permanent dismissal from the program.

#### Student Responsibility Policy

Students enrolled in a college program are responsible to keep track of their earned grades. Students are afforded an opportunity to review prior assessments as long as the process remains educational and non-argumentative. Students must keep on them, at all times, the course syllabus, which gives grading weight values so that the student can tabulate their grade and process throughout the courses.

## Withdrawal, Academic Forgiveness and Academic Appeal Policy

Academic Forgiveness and Academic Appeal are two policies that must be completed with the collaboration of an academic/personal counselor and the Office of Enrollment Services. Students must be apprised of the college calendar and official withdrawal dates. Students who seek Forgiveness or a Grade/Academic Appeal for a radiography course may NOT re-enter the program.

Students who choose to withdraw from the program may do so by the *stipulated college deadline* only. However, should the student choose to do so, he/she must reapply for admissions if the student would like to return. Re-application is due by *no later than 10/15* of the current year. The applicant will have to *complete the criminal history background check and the Radiography Admissions Examination again with no guarantee of readmission.* 

The program must be informed in writing of intent to return by 10/15 of each year.

If readmitted into the program, the student will have to retest all technical skills in the laboratory in the presence of the laboratory instructor. The technical skills must be passed before the student may be permitted to attend clinical education courses. The rationale is to assure the maintenance of knowledge, competency and safety.

## **Program Completion Time**

The admitted student MUST complete the program within a maximum of 3 years from the start of the program.

## **Professionalism Policy**

Unprofessional/unacceptable behaviors include:

- Academic or clinical dishonesty, such as cheating, plagiarism, or knowingly furnishing false information to the college or clinical site.
- Falsification, forgery, alteration, or misuse of college, instructor, and/or affiliate documents, records, or identification.
- Any disruption of class sessions by use of abusive / obscene language, disorderly, or threatening behavior.
- Insubordination (defined in Webster's Dictionary as "unwilling to submit to authority; disobedient; rebellious").
- Fighting at the clinic site or on college premises.
- Being intoxicated or under the influence of drugs or alcohol while on clinical assignment or college premises. (See drug and Alcohol policy)

- Misuse of clinical affiliate equipment or supplies.
- Sleeping while on duty at a clinical assignment.
- Failure to adhere to any duly established BCC Radiography Program policy or protocol following appropriate counseling.
- Inappropriate communication or breach of confidentiality, HIPAA violations
- Negligence in patient care situations, seriously jeopardizing patient safety

#### INC Grades (Academic and Clinical Grades)

Although this handbook addresses academic issues, clinical performance affects your ability to graduate and be signed off for the registry. All mandatory competencies must be completed before starting ANY continual and terminal evaluations.

All mandatory competencies, electives, continual and terminal evaluations must be completed by the end of RAD 290. If competency evaluations are not completed, the student who earns an Incomplete must sign a contract with the Clinical Coordinator agreeing to the conditions and periods of the contract.

The Clinical Education Coordinator, sets the minimal number of competencies in all categories for each term based on state and ARRT requirements.

#### **ARRT and State License Application**

The graduate will be issued an application to the ARRT when the degree is conferred. No sign offs will occur before that point. You need proof of passing the ARRT and the degree for licensure.

## **Pregnancy Policy Statement**

- The disclosure of pregnancy on the behalf of the student is **voluntary**; however, it must be in writing. Students may withdraw, in writing, the pregnancy disclosure at any time.
- It is strongly recommended that female students disclose their pregnancy status to the Program Director and Clinical Education Coordinator.
- They can obtain the necessary monitoring devices to ensure a safe pregnancy during clinical rotation.
- The radiography program complies with the policy of the New Jersey Radiologic Technology Board of Examiners regarding pregnant students in an accredited training program in New Jersey.
- No pregnant student should receive a radiation dose of more than 0.5 REM(5.0 mSv)/ 9 months gestation or 0.05 REM(0.5 mSv)/ month.
- All students shall wear whole body dosimeters when utilizing radiation-producing machines.
  This practice must be strictly enforced with respect to pregnant students. The relative risk to
  the embryo/ fetus should be thoroughly explained to students prior to the actual operation of
  x-ray machines.
- NRC #8.13 "instruction concerning prenatal exposure" and NCRP # 91 protection of the fetus-embryo is used for reference.
- The NJRTBE recommends that adequate controls and monitoring be instituted to assure that the dose complies with the ALARA principle.
- The radiation safety officer will review the student's radiation exposure reports to assure compliance with the indicated dose limits.
- The student will be provided the option to continue the BCC Radiography program without modification.
- Provisions shall be made for re-entry into the program, when the student takes a leave of absence.
- All didactic and clinical education requirements as mandated by the program must be completed.
- A student may notify the Program Director of her pregnancy by submitting a completed Pregnancy Declaration Form.
- The student will be provided the option for written withdrawal of the declaration.
- A student's declaration of pregnancy is voluntary. A physician's note supporting the student's chosen option must be presented to the Program Director at the time of declaration.

## **Bergen Community College**

## **Radiography Program**

	gon community concept	radiography regram
Volu	untary Pregnancy Declaration Form	
Last	t Name:	
Firs	t Name:	
Date	e of the Completion of this form is	
and	ve read the policy statements indicated. Before co discussed the options posed. I have met with the cer and have chosen the following option (sign you	Program's appointed Radiation Safety
	to withdraw immediately from the program AND pregnancy.	return after conclusion of the
	to continue with didactic courses and discontinucent conclusion of the pregnancy.	ue clinical education until the
	to request a leave of absence and return in the curriculum.	next appropriate semester in the
	to remain in the clinical and didactic portions of conclusion of the pregnancy.	the program during the pregnancy until
	derstand that I have the right to withdraw this declars ase initial	aration form at any time.
Stud	dent Signature	Date
 App	ointed Program Radiation Safety Officer	 Date

REV 2.29. 24 JM

## **Student Copy of Acknowledgement**

- ✓ By signing this document, I agree to abide by the terms here stated and published in the policy.
- ✓ Any aspect of the Policy is subject to change. Students will be informed both verbally and electronically.
- ✓ I am also aware that photography by any means for any purpose, utilizing a cell phone, I-pad or camera is prohibited and is a serious infringement of academic integrity. Students are not to take images of any class or lab materials, tests or other persons. Infringements will be reported to the Dean of Health Professions and the Dean of Student Judicial Affairs.
- ✓ Cell phones and electronic devices are NOT to be visible during any assessment (test, quiz, or examination). If the instructor sees a cell phone or other electronic device, utilized during an assessment, that assessment will be collected and the student will forfeit the assessment receiving a zero or F grade.
- ✓ I further acknowledge that if I do not understand any policy, or portion of this document I am free to ask the Program Director and/or the Clinical Education Coordinator.

Please be advised that ALL policies and course requirements may be subject to revision on a semester-to-semester basis. Students will be notified of ANY revisions at the beginning of the semester in which the change is being implemented. This will take place at the first meeting of the semester.

## **Bergen Community College**

## **Division of Health Professions**

## **Radiography Program**

## Student Handbook, Policies, and Regulations Compliance

Print Last Name:
Print First Name:
Date:
I read the handbook and agree to:
comply with all program policies, accreditation benchmarks and state requirements, as is stipulated in this manual.
I understand that my failure to comply with the published policies is considered insubordinate.
failure of two radiography courses will lead to permanent dismissal.
My signature below validates that I have read the entire Student Handbook, understand, and agree to comply with the policies and regulations in this handbook. My signature below does not indicate agreement or disagreement with said policies.
<del></del>
Student's signature
DATE:

## **STUDENT NOTES:**

## **Estimated Student Expenses**

- Textbooks \$1,000
- Uniform including patches (Two sets) \$130
- Student Name Tag \$10
- Trajecsys Clinical Reporting System (2 year access) \$150
- Clover Learning RadTech Bootcamp (Senior year academic license) \$200
- Kettering National Seminar (Senior year, summer) \$295
- Initial ARRT Registry Examination \$225
- Tuition Cost Tuition and Fees
  - o \$219.65 in county per credit hour
  - \$385.55 out of county per credit hour
  - \$402.40 out of state per credit hour

## Radiography Program Outline & Curriculum

First Semester			
BIO-109	Anatomy and Physiology 1	4 cr	
WRT-101	English Composition 1	3 cr	
RAD-180	Introduction to Radiography	2 cr	
RAD-181	Radiography 1	4 cr	
RAD-182	Radiography Practicum 1	1 cr	
	Total Credit Hours:	14	
Second Semester			
BIO-209	Anatomy and Physiology 2	4 cr	
WRT-201	English Composition 2	3 cr	
-	or		
WRT-202	Technical Writing	3 cr	
RAD-276	Principles of Imaging Equipment	2 cr	
RAD-281	Radiography 2	4 cr	
RAD-282	Radiography Practicum 2	2 cr	
0 0 1	Total Credit Hours:	15	
Summer Semester			0 -
RAD-280	Principles of Image Production and Acquisition		3 cr
RAD-283	Summer Radiography Practicum	E	2 cr
Third Semester	Total Credit Hours:	5	
Tillia Semester	Free Elective	3 cr	
MAT-150	Statistics 1	3 cr	
RAD-183	Radiographic Pathology	1 cr	
RAD-185	Radiography 3	3 cr	
RAD-286	Radiography Practicum 3	2 cr	
TAD 200	Total Credit Hours:	12	
Fourth Semester	Total Ground Hours		
	Humanities Elective	3 cr	
	Social Science Elective	3 cr	
RAD-288	Radiography 4	3 cr	
RAD-289	Radiography Practicum 4	2 cr	
	Total Credit Hours:	11	
Summer Semester			
RAD-290	Advanced Radiography Practicum	3 cr	
	Total Credit Hours:	3	

## **Course Description:**

#### RAD-180 Introduction to Radiography:

In this course, the healthcare system and the radiography profession are studied. Specific topics related to patient care management include communication, medical law, ethical practice, vital signs, basic pharmacology, infection control, transfer techniques, medical equipment and emergencies are addressed.

#### RAD-181 Radiography 1:

This course introduces the study of radiography. The theory and application of positioning of the chest, abdomen, and upper limb will be explored. Basic principles of radiation protection and radiographic exposure and medical terminology will be reinforced in class and in the laboratory.

## RAD-182 Radiography Practicum 1:

This course is designed to introduce the student to the physical layout and operation of a department of radiology. This course requires the performance of some routine examinations under the direct supervision of a registered radiographer and a college clinical instructor. The student rotates throughout three affiliated hospitals during this experience.

## RAD-276 Principles of Imaging Equipment:

This course orients the student radiographer to the fundamental principles, operation, and application of radiation-producing imaging equipment used in diagnostic imaging. Topics in this course include atomic structure, radiation, diagnostic x-ray circuit, tomography, image intensification, mobile and automatic exposure control units. Radiation safety and patient care principles are reinforced.

#### RAD-281 Radiography 2:

This course continues the study of radiographic procedures. The theory and application of positioning of the lower limb, spinal column, and an introduction to the contrast studies will be explored. Principles of positioning techniques, exposure, and critique will be explored in the laboratory.

#### RAD-282 Radiography Practicum 2:

This course requires students to spend two clinical days a week in a radiology department where students will perform routine as well as some complex examinations under the direct supervision of a registered radiographer and a college clinical instructor. Procedures performed are evaluated on the basis of a competency-based clinical education system.

#### RAD-280 Principles of Image Production and Acquisition:

This course involves the study of the theoretical and practical aspects of image creation. The photographic, geometric, and imaging systems will be explored. Evaluation of changes caused in the radiographic image with equipment and recording systems, demonstrated, and discussed. Also included in this course are the basic concepts of the origin and effects of ionizing radiation on the patient and radiographic image.

#### RAD-283 Summer Radiography Practicum:

This course requires students to spend two clinical days a week in a radiology department where students will perform routine as well as some complex examinations under the direct supervision of a registered radiographer and a college clinical instructor. Procedures performed are evaluated on the basis of a competency-based clinical education system.

#### RAD-183 Radiographic Pathology:

This course is a survey of medical and surgical diseases designed to acquaint the student with changes caused by diseases that have a relation to the scope of medical and imaging diagnostics.

#### RAD-285 Radiography 3:

This course continues with the study of radiographic procedures, theory, and application of basic skull, advanced skull, an overview of the management and care of trauma, geriatric and pediatric patients. It also includes a study of contrast agents typically utilized and their respective radiographic examinations. This course includes a component of faculty guided independent study of medical terminology.

#### RAD-286 Radiography Practicum 3:

This course requires the performance of routine, complex, and advanced X-ray procedures under the supervision of a registered radiographer and college clinical instructor in a Radiology Department. Students spend 16 hours a week for 15 weeks meeting the established requirements for competency based clinical education.

#### RAD-288 Radiography 4:

This course incorporates three major areas of study - radiation protection, computed tomography, and sectional anatomy. There will be an introduction to sectional anatomy. The use of computer software programs will also be used in the laboratory.

This course requires the performance of routine, complex, and advanced X-ray procedures under the supervision of a registered radiographer and a college clinical instructor in a radiology department. Students spend 24 hours per week for 15 weeks meeting the established requirements for competency based clinical education. Rotations into specialty areas and elective rotations are also begun.

#### RAD-290 Advanced Radiography Practicum:

This course involves the performance of routine, complex and advanced radiographic procedures under the supervision of a registered radiographer and college instructor in the radiography department. The students will spend twelve [12] weeks meeting the established requirements for a competency-based clinical education. The specialty elective rotations will continue. Upon completion of all required radiography core and clinical competency based requirements, the students are eligible to apply to the ARRT for the radiography certification examination.