

**HAZARD COMMUNITY AND TECHNICAL COLLEGE /  
SOUTHEAST KENTUCKY COMMUNITY AND TECHNICAL COLLEGE**

**REGIONAL RADIOGRAPHY PROGRAM**

**STUDENT HANDBOOK**



Revised: Fall 2019

**WELCOME TO  
HAZARD COMMUNITY AND TECHNICAL COLLEGE /  
SOUTHEAST KENTUCKY COMMUNITY AND TECHNICAL COLLEGE  
REGIONAL RADIOGRAPHY PROGRAM**

Although Hazard Community and Technical College has provided the people of Southeastern Kentucky with quality education since 1968, the radiography program was not developed until 1991. With Ashok Patel, M.D. as Medical Director and Dr. G. Edward Hughes as President of the College, the radiography program was established. In 1991, fifteen students were admitted into the program. Two years later, thirteen of those fifteen HCTC radiography pioneers successfully completed the program and graduated. In the Summer of 1999 the program expanded to include Southeast Kentucky Community and Technical College and is now a Regional Radiography Program. You will be the next group of students to pursue the study of radiography at HCTC/SKCTC. So, fasten your seat belts and hold on tight... you are about to embark on a fantastic voyage into the depths of radiography!

**ACCREDITATION**

Southeast Kentucky Community and Technical College and the Hazard Community and Technical College are accredited by the Commission on Colleges, Southern Association of Colleges and Schools (SACS), 1866 Southern Lane, Decatur, Georgia 30033; Telephone: (404) 679-4500.

The HCTC/SKCTC Regional Radiography Program is accredited by the Joint Review Committee on Education of Radiologic Technologist (JRCERT), 20 North Wacker Drive, Suite 2850, Chicago, Illinois 60606-3182; Telephone: (312) 704-5300; Fax: (312) 704-5304; Website: [www.jrcert.org](http://www.jrcert.org); Email: [mail@jrcert.org](mailto:mail@jrcert.org); JRCERT Accreditation Standards website: <http://www.jrcert.org/programs-faculty/jrcert-standards/>.

## **MISSION STATEMENT**

The mission of the Radiography Program is to prepare the graduates to become radiographers who are highly competent and qualified to administer ionizing radiation for medical and diagnostic imaging purposes.

## **PROGRAM GOALS AND OUTCOMES**

### **Goal 1: Students will exhibit clinical competency in performing radiographic procedures.**

- Students will employ proper positioning skills, technical factors and radiation protection.
- Students will demonstrate progression in the performance of clinical skills.
- Students will demonstrate proper radiation protection.

### **Goal 2: Students will demonstrate communication skills.**

- Students will apply effective oral communication with the patient and members of the healthcare team.
- Students will demonstrate written communication skills.

### **Goal 3: Students will demonstrate professionalism.**

- Students will conduct themselves in a professional and ethical manner.
- Students will maintain a professional appearance in the clinical setting.
- Students will develop professional interview skills.
- Students will develop a professional resume.

### **Goal 4: Students will display critical thinking skills.**

- Students will critique radiographs to determine diagnostic quality.
- Students will determine the need to modify a procedure based on patient condition.

Attainment of the program goals entails a highly specialized curriculum which included not only scientific and technical learning, but also the development of character and moral integrity. In addition, the program should provide a basis for further formal education and informal continuing education. The curriculum has been developed with these considerations in mind. Through its administration, faculty, staff, physical facilities, and under the guidance of the program advisory committee, the program endeavors to meet these needs, provide competent role models, and provide other necessary services to its students.

It is equally important for the student to learn the meaning of human dignity through responsibility to themselves and patients with whom they come in contact. The prime purpose of the program, then, is to educate the student as a whole person to be a total professional; one who is not only polished on skills and techniques, but who has also practices with good ethical principles, compassion, and understanding.

The profession of radiography requires the ability to provide appropriate healthcare services. Radiographers are highly skilled professionals qualified by education to perform imaging examinations and accompanying responsibilities at the request of physicians qualified to prescribe and/or perform radiologic procedures.

*Program Technical Competencies:*

1. Accurately displays anatomical structures on imaging receptors.
2. Demonstrates a knowledge base in technical factors that govern the image production process.
3. Assesses radiographic exposure on radiographic images.
4. Evaluates images for positioning, centering, appropriate anatomy, and overall image quality.
5. Applies acceptable radiation safety factors for the patient, healthcare personnel and family
6. Concentrations on providing optimal patient care in an evolving and diverse society.
7. Recognize emergency patient conditions and initiate life-saving procedures.
8. Evaluate the performance of radiologic systems, know the safe limits of equipment operation, and report malfunctions to the proper authority.
9. Exercise independent judgment and discretion in the technical performance of medical imaging procedures.
10. Participate in radiologic quality assurance/quality control programs.
11. Ability to work collaboratively within a dynamic healthcare environment.
12. Focuses on the importance of continuing education and life-long learning.

**RADIOGRAPHY PROGRAM  
CARDINAL VALUE**

**WE HONOR THE RIGHT OF EACH PERSON TO A QUALITY RADIOLOGIC EDUCATION.**  
Because we honor the right of each person to a quality radiologic education,

We are committed to a **PARTNERSHIP** for educating that integrates the strengths of students, the knowledge of the faculty and the service of the College.

We are committed to a **QUALITY OF EDUCATION** that included the effective use of technology and provides extraordinary service through respect, competence, and encouragement.

We are committed to a **LEADERSHIP** that is innovative and liberating in its efforts to reform radiography education.

We are committed to honor the **DIGNITY AND WORTH** of each person, and support their pursuit of higher education.

**Hazard Community and Technical College/  
Southeast Kentucky Community and Technical College**

**Associate Degree In Applied Science  
Regional Radiography Program Approved Curriculum**

**\*PRE-REQUISITE FOR ENTRY INTO PROGRAM**

(Must be completed prior to taking IMG 100)

\*BIO 137/139            Human Anatomy & Physiology I & II            8

General Education Requirements

(General education courses can be completed while active in the Regional Radiography Program)

|         |  |          |
|---------|--|----------|
| MA 109  | College Algebra <b>OR</b>                          | 3        |
| MT 150  | College Algebra & Functions <b>OR</b>              | (3)      |
| MAT 150 | College Algebra <b>OR</b>                          | (3)      |
|         | Higher Level Quantitative Reasoning Course         | (3)      |
| ENG 101 | Writing I  | 3        |
| PHY 171 | Applied Physics <b>OR</b>                          | 4        |
| PHY 172 | Physics for Health Sciences <b>OR</b>              | (2)      |
| PHY 152 | Introduction to Physics                            | (3)      |
| CLA 131 | Medical Terminology from Greek and Latin <b>OR</b> | 3        |
| AHS 115 | Medical Terminology <b>OR</b>                      | (3)      |
| AHS 120 | Medical Terminology                                | (1)      |
|         | Heritage/Humanities                                | 3        |
|         | Social/Behavioral Sciences                         | <u>3</u> |
|         | Subtotal:  | 23-27    |

**Please Note:** Documentation of computer literacy as defined by KCTCS is required **prior** to admission to IMG Courses. Competency exam or college level courses: CIS 100, CIT 105, OST 105, CAD 103, DLC 100, IMD 100 or VCC 150.

Additional General Education: (Highly Recommended for Transfer Purposes)

PSY 223            Developmental Psychology  
ENG 102            Writing II

Radiography Program Requirements:

**First Year**

FIRST SEMESTER

|         |                        |   |
|---------|------------------------|---|
| IMG 100 | Radiography I          | 7 |
| IMG 101 | Radiography I Clinical | 4 |

SECOND SEMESTER

|         |                         |   |
|---------|-------------------------|---|
| IMG 110 | Radiography II          | 7 |
| IMG 111 | Radiography II Clinical | 4 |

**Second Year**

SUMMER SESSION

|         |                          |   |
|---------|--------------------------|---|
| IMG 201 | Radiography III Clinical | 3 |
|---------|--------------------------|---|

FIRST SEMESTER

|         |                         |   |
|---------|-------------------------|---|
| IMG 210 | Radiography IV          | 4 |
| IMG 211 | Radiography IV Clinical | 6 |

SECOND SEMESTER

|         |                        |          |
|---------|------------------------|----------|
| IMG 220 | Radiography V          | 4        |
| IMG 221 | Radiography V Clinical | <u>6</u> |

Subtotal: 45

Total Credit Hours 68-72

\*A CPR certificate must be obtained prior to the beginning of IMG 100 and certification must be kept current throughout the program.

\*Evidence of receiving the Hepatitis B vaccine series or a vaccine declination form must be submitted to the Program Faculty prior to beginning IMG 100.

\*Evidence of current flu vaccination as required by the clinical facilities.

The curriculum requires course attendance in the summer, fall and spring semesters.

## **RELEASE OF HOSPITAL INFORMATION**

In general, all information regarding patients, visitors, staff or faculty of the college and the clinical education centers is considered confidential. As such, this information is not to be discussed by the student to anyone. Students should refer all requests for hospital information from the news media to the Director of Public Relations of that hospital, with the exception of inquiries regarding a patient's condition, which should be referred to the hospital information desk personnel. Any request to take photographs on hospital premises must also be referred to the Director or Public Relations.

**Confidentiality:** The HCTC/SKCTC Regional Radiography Program will comply with the safekeeping of patient data and information as to restricted individuals who have need, reason, and permission for access to such data and information.

## **COMMUNICABLE DISEASE POLICY**

Detection and control of infectious disease is accomplished to assure a safe environment for students, hospital staff, patients, visitors, college faculty and staff. Students should be referred promptly to their physicians for evaluation when suffering from potential infection (ex. fever, diarrhea, skin lesions). If indicated, the student should be examined bacteriologically. Students who developed infections while in the program shall be sent home from school until danger of infection is no longer hazardous to employees, others students, and patients.

The student is responsible for immediately reporting physical conditions related to infection or exposure to infectious disease to the Program Coordinator. Authorization for the return to school must be received from the student's private physician prior to school re-attendance. The Program Coordinator must receive this authorization and a report of any medical evaluation that was performed.

If the student does not comply in a timely manner in regards to the communicable disease policy, the student may be dismissed from the program.

## **SAFETY PROCEDURES RELATED TO COMMUNICABLE DISEASE**

These guidelines have been considered and adopted in accordance with the current consensus of the medical and scientific community that many diseases such as A.I.D.S. cannot be transmitted by causal body contact in the clinical setting. Should it ever appear that the implementation of this procedure presents a danger to our student; the program reserves the sole discretion to make appropriate revisions. The risk of contracting Hepatitis B is greater than the risk of contracting A.I.D.S. Therefore, recommendation for the control of Hepatitis B will effectively prevent the spread of A.I.D.S. All such recommendations are therefore incorporated herein.



1. Sharp items (needles, scalpel blades, and other sharp instruments) should be considered as potentially infective and handled with extraordinary care to prevent accidental injuries.
2. Disposable syringes and needles, scalpel blades and other sharp items should be placed in puncture resistant containers located as close as practical to the area in which they are used. To prevent needle stick injuries, needles should NOT be recapped, purposely broken, removed from disposable syringes, or otherwise manipulated by hand.
3. When the possibility of exposure to blood or other body fluid exists, routinely recommended precautions should be followed. The anticipated exposure may require gloves alone, as in handling items soiled with blood or other body fluids, or may also require gowns, masks and eye-coverings when performing procedures or post-mortem examinations. Hands should be washed thoroughly and immediately if they accidentally become contaminated with blood.
4. To minimize the need for emergency mouth-to-mouth resuscitation, mouth-pieces, resuscitation bags, or other ventilation devices should be located and available for use in areas where the need for resuscitation is predictable.
5. Pregnant students engaged in health care are not known to be at greater risk than students who are not pregnant. However, if a student develops infection with the A.I.D.S. virus during pregnancy, an infant has an increased risk of infection by prenatal or perinatal transmission. Because of this risk, pregnant students should be especially familiar with precautions for preventing the transmission or acquisition of the A.I.D.S. virus.
6. Students engaged in health care who have the A.I.D.S. virus are not involved in invasive procedures (those in which the body is entered, e.g. by use of a tube, needle device, etc.) need not be restricted from work unless they have some other illness for which any health care worker would be restricted.
7. The Hepatitis A and Hepatitis B vaccines are highly recommended to help assure that the student will not be infected with the virus.

### **HEPATITIS B VACCINE POLICY**

After admission and prior to enrollment in the Radiography Program, each student must show evidence that he/she:

- a. has received a Hepatitis B vaccination,  
**OR**
- b. is in the process of receiving the Hepatitis B vaccine series,  
**OR**
- c. has signed a declination form if the student chooses not to receive the Hepatitis B vaccine series.

## ACCIDENT POLICY

### General Guidelines:

1. If the emergency occurs in the classroom, the instructor of the class assumes responsibility for carrying out the emergency procedures.
2. If the emergency occurs outside the classroom, the first college employee on the scene assumes responsibility for carrying out the emergency procedure.
3. The emergency number for the ambulance service is: 9-911.
4. A report of all accidents/emergencies should be filed within 24 hours. Forms are available from the HCTC/SKCTC Business Office or from program faculty.

## CLINICAL ACCIDENT POLICY

1. In the event of a student injury which occurs in the course of the clinical experience. The clinical instructor must be notified as soon as possible.
2. The student will be referred to the emergency room for evaluation of the injury. This will be at the student's expense.
3. Submit the following documents to the Radiography Program Coordinator within 24 hours.
  - a. A signed statement by the instructor involved, summarizing his/her knowledge and perception of the event.
  - b. A signed statement by the student in his/her own words as to what happened.
  - c. A copy of the completed Student Accident Form that is obtained from, and required by the HCTC/SKCTC Business Office or from program faculty.
  - d. A copy of any incident reports that are completed.

## FIRE

In the event of a fire within the clinical education center, remove all patients and others from the vicinity of the fire and smoke. Isolate the fire by closing all interior doors exposed to the area involved. Notify the switchboard operator and report the exact location of the fire, and/or sound the building fire alarm at the closest fire pull station. Attempt to extinguish the fire using the nearest proper type of fire extinguisher. Use good judgment in extinguishing the blaze. **DO NOT ENDANGER YOURSELF!**

## IONIZING RADIATION

All students are provided with introductory instruction in radiation protection measures during the initial three weeks of the program. **Students are NOT permitted to hold patients or image receptors during a radiologic examination!** A student is required to exercise sound radiation protection practices at all times. At no time may a student participate in a procedure using unsafe protection practices. Unsafe radiation practices are grounds for dismissal from the program.

## IONIZING RADIATION PROTECTION

### *This includes, but is not limited to:*

1. Taking exposures, intentionally or unintentionally on another student or while another student is in the energized lab. All exposures on human beings are to be taken for a medically valid reason only.
2. Attempting any procedure under indirect supervision until competency has been achieved.

A student will always wear a dosimeter while in the clinical education center and in the energized lab. A student may secure a currently dated dosimeter from the program faculty on the first day of each month. Dosimeters *must* be picked up by the fifth day of the month.

Dosimeters are worn at the collar and outside a lead apron. Dosimeters are to be removed if undergoing diagnostic procedures as a patient.

*Patient radiation protection is a serious obligation and should never be taken lightly.*

### *Other obligations of the student include:*

1. Wear a current monitor in lab and clinic. Lack of a dosimeter will be grounds for asking the student to leave until the dosimeter has been retrieved. The student will be counted absent. Clinical/Lab time missed will be made up.
2. Any loss of or accident or misuse of a dosimeter must be reported in writing to the appropriate program faculty.
3. Monthly dosimeter reports are available in faculty office or on course shell in Blackboard.

*In accordance with ALARA, the program has set the following limit for exposure that should not be exceeded:*

**30 mrem/mo of deep, whole body radiation according to dosimeter.**

At this level, students will be counseled. Students shall not exceed state and federal guidelines for radiation exposure.

## MRI SAFETY

The student is required to complete the MRI Safety Questionnaire and acknowledge by signature that they understand MRI Safety. It is the students responsibility to up-date the form and inform the faculty if their status changes.

## **HOSPITAL ELEVATORS**

Hospital passenger elevators are to be used by patients, visitors, students, and employees. Students are encouraged to walk up and down two flights of stairs and only use the elevator for further distances. Service elevators are to be used for transportation of patients in wheelchairs or carts, supplies, and equipment.

## **SMOKING / TOBACCO PRODUCTS**

One of the primary purposes of any hospital is to maintain, restore, and preserve the health and safety of its patients, personnel, and the public. The use of tobacco in any form is inconsistent with this purpose. Most hospitals have policies that prohibit the use of combustible tobacco products except in specifically designed areas. These areas may be outside of the building. Smoking is prohibited in all patient areas and in all areas where readily ignitable material/combustion supporting materials are used and/or stored. The college is also a smoke-free environment. The student is required to follow all established clinical facility and college policies regarding tobacco use including E-cigarettes.

## **CLINICAL SMOKING / TOBACCO PRODUCTS POLICY**

The Hazard Community and Technical College/Southeast Kentucky Community and Technical College Radiography students who choose to use tobacco products while on clinical rotation are allowed to do so on their morning, evening and lunch breaks only. Students who violate this policy will be given a verbal warning on the first offence; the second offence will be a written warning and a clinical grade reduction of one letter grade for that semester. Continued violation will lead to dismissal from the Radiography Program. The Radiography faculty strives to encourage and promote a healthy lifestyle for Radiography students. All students are discouraged from the use of tobacco products.

## **FERPA**

The Family Educational Rights and Privacy Act (FERPA) of 1974, as amended, is a federal law that protects the privacy and confidentiality of personally identifiable information contained within student education records. Colleges in the Kentucky Community and Technical College System comply with FERPA's confidentiality protections and adhere to procedures dealing with student education records and directory information recommended by the American Association of Collegiate Registrars and Admissions Officers.

In its discretion, a college or KCTCS as appropriate may provide Directory Information in accordance with the provisions of FERPA to include:

- Student name
- Address
- Email address
- Telephone number
- Date and place of birth
- Major field of study
- Dates of attendance
- Degrees and awards received

- The most recent previous educational agency or institution attended by the student
- Participation in officially recognized activities and sports

The HCTC/SKCTC Regional Radiography Program maintains full compliance with the FERPA regulations.

KCTCS FERPA website: [http://www.kctcs.edu/current\\_students/regulations/ferpa/](http://www.kctcs.edu/current_students/regulations/ferpa/)

### **ACCESS TO PROGRAM RECORDS**

Students have the right to inspect and review all radiography records directly related to the student. This includes any material incorporated into the student's record folder intended for school use or to be made available to outside parties.

Student must request inspection of their radiography file by written request and will be granted access within 10 days of receipt of the written request. The student's radiography file must be inspected in the program coordinator's office and in the presence of the program coordinator, during normal program hours, or by special arrangement.

No records can be sent to any institution without the written consent of the student, with the following exceptions:

- \* Transmittal of personal information to state and local governmental authorities as required by state statute.
- \* Release of director information including the student's name, address, telephone number, major field of study, place of birth, participation in official recognized activities, dates of attendance, degrees and awards received, and the most recent previous educational institution attended.
- \* Information may be sent out in compliance with a judicial order.

### **STUDENT WORK POLICY**

Students enrolled in the Regional Radiography Program are not allowed to work as a radiographer per Kentucky Law.

### **INCLEMENT WEATHER POLICY**

In order to maintain a symmetrical schedule for all campuses of the Regional Radiography Program, the following inclement weather policy is in effect:

Listen to media for closing of either sponsoring institution. If one is closed then neither campus is to report to Radiography classes. Applies to semesters utilizing ITV only.

Example: HCTC closed - HCTC students do not go  
 SKCTC open - SKCTC students do not go

## ATTENDANCE POLICY

A significant portion of the educational process in radiography is the development of a strong sense of responsibility on the part of each student to the patient, fellow radiographer, the department, hospital, and faculty. One of the primary manifestations of this responsibility is regular, punctual attendance in clinical and didactic areas. Since it is recognized that absence is occasionally unavoidable, the following policy has been established:

Absences must be reported to the appropriate program faculty (HCTC) at 606-487-3389 or (SKCTC) at 606-589-3310 no later than 8:30 a.m. for clinical and didactic assignments. The clinical instructor or chief technologist must also be notified of clinical absence. Notification by voice mail is unacceptable. Failure to notify faculty or the clinical instructor will result in an additional incident of absence.

Any didactic work missed must be made up to the satisfaction of the instructor involved. One day or consecutive days of **excused absence**, regardless of length, are considered one incident of absence. Radiography Faculty must be notified in advance of consecutive days. Tardiness in the clinical, didactic, or lab is considered an incident of absence and is unacceptable. Leaving early from class, clinical or lab will also count as an incident of absence.

Any clinical time missed (excused or unexcused) must be made up to the satisfaction of the Clinical Instructor and Radiography Faculty within 30 days. A clinical time change form with the appropriate signatures must be submitted.

Progressive corrective action occurs as follows, when a student accumulates a number of incidents that reflect an unacceptable pattern:

- one** incident of absence/semester = loss of perfect attendance award of 2 points.
- two** incidents of absence/semester = verbal reprimand, overall grade reduction of 2 points, students must submit a typed 5 page formal paper using APA format. Topic will be based on appropriate lecture material as determined by faculty.
- three** incidents of absence/semester = written reprimand, an additional 4 point overall grade reduction, and the student must submit a typed 8 page formal paper using APA format. Topic will be based on appropriate lecture material as determined by faculty.
- four** incidents of absence/semester = written reprimand, and additional course grade reduction of 1 letter grade. Student must submit a typed 12 page formal paper using APA format. Topic will be based on appropriate lecture material as determined by faculty.
- five** incidents of absence/semester = dismissal from program

**\*All papers are due in appropriate faculty office no later than 10 days from the first day of incident of absence.**

**\*Any submitted paper must be completed at a satisfactory level as evaluated by faculty or an additional 4 points reduction will be assigned.**

**\*Any student with perfect attendance will receive an additional 2 points on their final overall course grade.**

**The PROGRAM COORDINATOR has the authority to take corrective action by waiving the above actions if the unacceptable pattern is consistent in nature from one semester to the next.**

**Excused absence consist of documentation of; bereavement (immediate family only), jury duty, military duty, medical emergencies and extended illness.**

**Excessive absenteeism and/or tardiness will lead to dismissal from the program.**

### **CLASSROOM / CLINICAL SITE CELL PHONE POLICY**

Cell phones and smart technology devices are prohibited in the classroom and clinical sites. It should never be on the desk or visible to anyone in the classroom/clinical site. A student answering and/or viewing a cell phone during class/clinical will be required to leave class/clinical and meet with the instructor prior to attending class/clinical again.

### **SOCIAL MEDIA POLICY**

During scheduled radiography class, lab and clinicals, computer and internet services/access are for educational use only. The internet is a tool for teaching and learning, communications are therefore property of the school, and/or clinical site and violations can subject students to disciplinary action.

Social networking is not limited to name sites (Facebook, Twitter, etc.) as new sites are always being added. Private patient information must be kept confidential and can only be disclosed or used for specific purposes related to an individual's care. Students may not post comments that would compromise another person's (such as other students, clients/families, instructors, or clinical site staff) or organizations privacy (HIPPA) or comments that do not conform to professional American Registry of Radiologic Technologists (ARRT) standards, state, federal laws and KCTCS Policy.

Students should also be aware that postings and pictures on social networking sites may be viewed by KCTCS and potential employers and could reflect negatively on the individual and/or school and may be a violation of school policy. Confidentiality of medical information on patients and information regarding the conduct of health care personnel must be honored at all times.

I understand that all information regarding clients in the clinical setting must be kept confidential in accordance with Federal and State laws. I understand that the information which I receive may only be used for clinical purposes. I understand that it is not permitted to take photographs of a client, client body part, client family or anything else while in the clinical setting. **All cell phones/smart devices** are to be left outside of the clinical setting in order to avoid conflicts of interest.

All information contained in the medical records or either related records, including information contained in the automated data bank and PACS is considered privileged or confidential and is to be treated as such.

As a student, all efforts are directed toward the providing of quality services. Positive attitude, caring behaviors and courtesy are essential to assure quality radiography and imaging care. Students must observe health care ethics at all times.

Do not discuss a client's illness or personal problems with any unauthorized individual other than the healthcare team. Furthermore, all information regarding fellow student's academic progress is confidential and will not be discussed.

**Failure to abide by this policy will result in the dismissal** of the student from the Regional Radiography Program and an "E" for the course. This is extremely serious issue and will be treated as such.

### **STUDENT PREGNANCY POLICY**

In accordance with the standards for an Accredited Educational Program in Radiologic Science, which requires that a program publish and make known to accepted and enrolled female students Nuclear Regulatory Commissions (NRC) regulations regarding the pregnant student. Voluntary notification of any student who becomes pregnant should be given to the Program Coordinator in writing and indicate the expected delivery date. Without voluntary, written disclosure, the student cannot be considered pregnant. However, it is suggested and encouraged by the Radiography Faculty that the student's pregnancy be disclosed as early as possible for maintaining radiation safety; however, the HCTC/SKCTC educational program allows any pregnant student declared or undeclared to continue the educational program without modification. **The student may voluntary withdraw declaration of pregnancy at any time with a written statement.**

All students receive basic radiation protection instruction during the first three weeks of the program. The pregnant student is expected to protect herself in the presence of ionizing radiation through the use of maximized distance, maximized shielding, and minimized time spent in the presence of ionizing radiation. Additional protection measures may be discussed with the program coordinator.

Additional safety measures and practices are on file in the Program Coordinators office for students information and protection.



A leave of absence from the clinical rotation, modification of clinical assignment, or leave or absence from the program may be granted by the program coordinator for maternity purposes. It is the student's responsibility to maintain didactic assignments to the satisfaction of the instructor involved. This may require that the student repeat courses missed during the maternity leave. Any questions regarding the student's responsibilities should be directed to the program coordinator. A copy of Regulatory Guide 8.13, (revision 3, June 1999) Instruction Concerning Prenatal Radiation Exposure from the Nuclear Regulatory Commission (NRC) is on file in the Program Coordinators office for information and protection. Students may also view the Regulatory Guide on NRC's website at <http://www.nrc.gov>.

It is the student that must make the final decision in regards to declaring a pregnancy. It is also the student's decision as to the acceptance or non-acceptance of minimal risk of radiation exposure to the embryo or fetus.

If the student needs special accommodation, they must contact the Accommodation Officer on their campus. Once the pregnancy has been declared the following options are available to the student:

**Option #1**

**Remain In the Program Throughout the Pregnancy**

If the student so decides, she may continue in the program under the following requirements:

- a. The student shall review and implement radiation safety practices as outlined in her copy of NRC Appendix 8 and Appendix 13.
- b. The student shall wear an additional dosimeter at the waist level at all times in her clinical and laboratory situations.
- c. The student shall participate in all scheduled clinical rotations as assigned.

**Option #2**

**Leave of Absence During Pregnancy**

The student may request a leave of absence not to exceed one year and either withdraw from or attempt to complete the courses she is currently enrolled in. She may then apply for re-admission as described in the Radiography KCTCS Curriculum. This information may be obtained from Program Faculty.

## CLINICAL ATTIRE

The uniform for the student is a symbol of the profession. As such, it must always be cleaned and pressed. The student is required to present themselves to the clinical education center with attention being placed on personal hygiene.

The clinical dress code for students in the program is as follows:

- Dark gray uniform top and bottom.
- Uniform pants may be of any style except denim styles. Pant hems must be sewn – NO unsewn cuffs or rolled hems.
- No T-shirts are allowed or substituted as a top.
- Uniform dresses may be worn.
- Uniform shoes must be solid white, black or gray and must be leather. NO canvas shoes allowed. Shoes must be clean and polished at all times. No open toe or heel.
- Socks or hose are to be worn. NO tube socks with colored stripes allowed.
- Wedding rings, wrist watches, and small earrings are the only jewelry permitted.
- The student Dosimeter is considered part of the uniform and must be worn at all times.
- Long hair must be tied or pulled back at all times.
- Cosmetics should be worn in keeping with good taste. Excessive make-up, and/or nail polish are not permitted. Excessive cologne/perfume is not permitted.
- **Many clinical sites have prohibited visible body and tongue piercing.**
- **Body art must be completely covered and non-visible during clinical rotations.**

**NO DRESS CODE IS UNTIMATELY COMPLETE.** Please check with the faculty if you are considering purchasing a uniform or have a uniform to determine if it is acceptable.

**Failure to follow the established dress code will result in a verbal warning for the first offense.**

On the second offense, the student will receive a written warning and will be sent home. The time missed will be considered an incident of absence. The third offense will result in a reduction of the final clinical grade of one letter grade. Further offenses will lead to dismissal from the program.

## CRIMINAL BACKGROUND CHECK / DRUG SCREENING

All HCTC/SKCTC Regional Radiography students admitted to the program are required to have readily available a current criminal background check and drug screen as required by the clinical facility. Failure to follow this procedure will lead to dismissal from the program. The process to acquire criminal background/drug screening is addressed during the orientation and/or start-up activities. The program requires all students to sign a statement of understanding.

## **GRADES**

Individual course grades earned by the student in didactic and clinical areas, as well as the student's overall grade point average and demonstrated professional conduct serve as realistic indicators of future performance. Therefore, all students are required to maintain or exceed an established minimum level of performance while enrolled in the radiography program. The grading scale employed in the program may be higher than that of most high school or post-secondary education institutions. This philosophy helps to ensure that students maintain standards expected in the field and helps to motivate them to pursue academic and clinical excellence. The program grading scale is as follows:

A = 92 - 100

B = 84 - 91

C = 78 - 83

E = Below 78

## **GENERAL BEHAVIOR**

The student is responsible for his behavior as both an individual and as a member of the group. Rules of behavior which are endorsed as appropriate according to high social, ethical, and moral standards are expected to be followed. As a consequence, the student is held responsible for any acts which may violate these standards. The following rules have been established in accordance with the KCTCS Code of Student Conduct to provide guidelines for proper, professional conduct:

The student is expected to conduct himself in a professional manner at all times while in the hospital or classroom, or while participating in program functions outside the hospital or classroom.

The student is expected to be courteous to patients, staff, visitors, faculty, and other students. When speaking to or about a patient, the name of the patient must be used, unless circumstances dictate otherwise.

The student is expected to be cordial and congenial to all patients. Solicitation or acceptance of tips from patients or visitors is prohibited.

Visiting with a patient during school hours is not permitted. Friends who are hospital patients must be visited according to hospital regulations.

The student is to consider the affairs of patients, the program, and the hospital confidentiality. Such matters are not to be discussed with others students, staff, family, faculty, or friends.

Sleeping during clinical or classroom hours is unacceptable.

Students should act as responsible adults. Cheating or suspected cheating may result in dismissal from the program.

Telephone calls to the radiology department are to be answered promptly with identification of the department, area, and the individual answering the telephone. All messages should be taken in writing.

Personal telephone calls are not to be made or received while in the hospital, except in the case of an emergency.

All unusual incidents concerning patients, visitors, staff, etc., must be reported to the program coordinators or clinical coordinator and the proper form must be completed.

The following are considered examples of severe, inexcusable behavior, which may result in immediate dismissal from the program:

- \*Deliberate damage to college, hospital or other's property
- \*Stealing
- \*Physical assault of another individual
- \*Conviction of a felony
- \*Indecent or lewd conduct
- \*Sexual harassment
- \*Carrying a concealed weapon on college or hospital premises
- \*Falsification of any information/program documents to the college, hospital or program
- \*Smoking in hazardous or prohibited areas
- \*Consumption of intoxicants while on college or hospital property or attempting to perform duties while under the influence of alcohol or other drugs
- \*Falsification or misuse of college or hospital records
- \*Clinically working beyond the appropriate duties of a student
- \*Drug dealing or attempted drug dealing
- \*Excessive absenteeism/tardiness – refer to Attendance Policy in handbook and course syllabus
- \*Students with a tobacco dependency are **NOT** entitled to extra breaks

\*Plagiarism deemed to be deliberate and/or intentional will result in immediate dismissal from the program

\*Oblivious and intentional cheating will result in immediate dismissal from the program

It is impossible to compile a complete summary of misconduct that requires disciplinary action. The Program Coordinator is responsible for interpreting the rules of conduct, and any questions in this area should be addressed to the Program Coordinator.

Failure of the student to abide by general rules and regulations will result in disciplinary action. If disciplinary action is taken, the student will be advised of this action in private consultation with the program coordinator and the clinical coordinator. The action will be documented in the student's permanent radiography file and the student will be asked to sign the document to indicate their awareness of the action.

Whenever possible, a progressive disciplinary system is administered, beginning with a verbal warning. This is followed by a written warning and counseling. If the behavior or situation does not improve, probation and possible dismissal from the program will follow. Student behavioral problems will be dealt with on an individual basis depending upon the severity of the problem.

The KCTCS Code of Student Conduct can be accessed at <https://kctcs.edu/current-students/academic-resources/code-of-student-conduct.aspx> or a hard copy can be obtained from the office of Student Services.

## **ACADEMIC HONESTY AND PROFESSIONAL BEHAVIOR**

KCTCS faculty and students are bound by principles of truth and honesty that are recognized as fundamental for a community of teachers and scholars. The college expects students and faculty to honor, and faculty to enforce, these academic principles. The college affirms that it will not tolerate academic dishonesty including, but not limited to, violation of the academic rights of students located in the KCTCS Code of Student Conduct - Section 3.0 Standards of Conduct.

### **Complaint/Appeal Procedure:**

1. Program Coordinator: HCTC/SKCTC – Homer Terry
2. Division Chair: HCTC – NA  
SKCTC – Wendy Wright
3. Dean of Health and Human Services: HCTC – Dr. Paul Currie  
Vice President of Academic Affairs/CAO - SKCTC – Dr. Joel Michaelis
4. Chief Academics Officers:  
HCTC – Dr. Sandra Kiddoo  
SKCTC – Dr. Joel Michaelis

For information about academic rights and academic offenses and the student's right to appeal, students should be referred to the KCTCS Code of Student Conduct - Section 4 found on-line at <https://kctcs.edu/current-students/academic-resources/code-of-student-conduct.aspx>.

## **JRCERT RADIOGRAPHY PROGRAM COMPLAINT RESOLUTION POLICY**

If a student, faculty, or community of interest feel that the HCTC/SKCTC Radiography Program is not in compliance with the JRCERT Standards, he/she is requested to notify the program director in writing of any allegations or complaints.

### *Program Director Contact Information:*

Homer Terry, Director  
Hazard Community and Technical College  
One Community College Drive  
Hazard, KY 41701  
Phone: 606-436-5721, extension 73389  
E-mail: [Homer.Terry@kctcs.edu](mailto:Homer.Terry@kctcs.edu)

The program director will investigate the complaint and will answer the complainant within 5 working days. (Days can be changed by agreement of both parties).

If the complaint is not satisfied with the response, he/she should notify the College Provost in writing. The College Provost will investigate and respond to the complainant within 10 working days.

### *HCTC Chief Academic Officer Contact Information:*

Dr. Sandra Kiddoo, CAO  
Hazard Community and Technical College  
One Community College Drive  
Hazard, KY 41701  
Phone: 606-436-5721, extension 73090  
E-mail: [Sandra.Kiddoo@kctcs.edu](mailto:Sandra.Kiddoo@kctcs.edu)

### *SKCTC Vice President of Academic Affairs/CAO Contact Information:*

Dr. Joel Michaelis  
Southeast Kentucky Community and Technical College  
700 College Road  
Cumberland, KY 40823  
Phone: 606-589-3040, extension 93040  
E-mail: [Joel.Michaelis@kctcs.edu](mailto:Joel.Michaelis@kctcs.edu)

If the complainant is not satisfied with this response, he/she should notify the:

JRCERT

20 North Wacker Drive, Suite 2850

Chicago, IL 60606-2901

Phone: 312-704-5300

Website: [www.jrcert.org](http://www.jrcert.org)

Email: [mail@jrcert.org](mailto:mail@jrcert.org)

Complaints/Allegations website: <http://www.jrcert.org/students/process-for-reporting-allegations/report-an-allegation/>

## **PROGRAM ADVISING / COUNSELING**

As part of the Competency-Based Clinical Education Plan, students are evaluated and regularly advised/counseled. These conferences are scheduled by the Clinical Coordinator/Program Faculty to counsel students in reference to their progress and to discuss any problems which may have arisen throughout the semester. The student should feel free at all times to ask any faculty member for guidance and assistance. The faculty serves as an excellent source of information regarding possible career options and/or continuing education.

## **LIABILITY INSURANCE**

Professional liability insurance is **required** for each student. This insurance may be purchased through the college at a minimal cost or documentation of coverage through another company must be approved by the program coordinator. The purpose of this insurance is protection against legal liability incurred through error, negligence, or omission in the performance of clinical duties. **Professional Liability Insurance must be current at all times.**

## **ADVISORY COMMITTEE**

The prime overall direction and guidance for the program is achieved through the Advisory Committee and its subcommittees. This committee essentially advises program faculty in regards to all policies and procedures and the curriculum, identifies program goals, strengths and weaknesses, and determines methods of program improvement. In general, the committee usually meets two times per year. One advisory committee will be appointed to serve the program. Membership of the committee will be comprised of at least five representatives from the service area of each college.

## **ACCOMODATIONS POLICY**

Any qualified student with disabilities may request appropriate course accommodations to ensure that full benefits are received and that the instructor is aware and can make the proper adjustments. Students are encouraged to meet with the Disability Services Representative to develop and complete an Accommodations Plan.

The HCTC Disability Services Representative is Julie Caudill; phone (606) 487-3486; and e-mail: [jcaudill0129@kctcs.edu](mailto:jcaudill0129@kctcs.edu).

The SKCTC Disability Services Representatives:

*Whitesburg Campus* – Ron Brunty; phone (606) 633-0279, extension 93320; and email:

[Ron.Brunty@kctcs.edu](mailto:Ron.Brunty@kctcs.edu).

Every effort is being made to meet the ADA 508 and W3C guidelines but if you find any distance learning class to be limiting in any way please contact the course instructor and the Disability Services Representative.

## ITV COURSE INFORMATION

This course utilizes interactive television (ITV) as the mode of course delivery. A list of contacts and directions to each site will be made available to all Learners enrolled in ITV courses at the time they receive their syllabus. All ITV courses are web-enhanced. Learners must meet in specified ITV classroom sites. Course instructors have a home site, but must travel to remote sites throughout the semester at least twice per semester. All ITV exams will be monitored/proctored by a program faculty or designee.

### **Student rules and expectations:**

- No food or drink is permitted in ITV classrooms.
- Learners are expected to listen, respond to questions, and participate in course discussions.
- Learners must wait for one site to completely finish speaking before beginning additional communication.
- It is required that Learners remain quiet while other sites are speaking.
- Conversations at remote sites are only permitted with instructor consent.
- Upon the event, if ITV is not functioning properly, the primary instructor will provide directions for course make-up.
- Learners are to remain in the ITV classroom until directions are received from the primary instructor.

Please direct all ITV technical issues or problems to Donna Roark, HCTC Chief Information Officer. Please direct all course issues to Ella Strong, Dean of Distance Learning.

### **Contact Persons**

#### **HCTC Chief Information Officer**

If you have an ITV issue or technology problem in general, contact Donna Roark, CIO, phone (606) 487-3128, email [donnad.roark@kctcs.edu](mailto:donnad.roark@kctcs.edu) for assistance.

#### **SKCTC ITV Contact**

If you have an ITV issue the contact for the Whitesburg Campus is Chek Carruba, phone (606) 589-3080 or email [ccarruba0001@kctcs.edu](mailto:ccarruba0001@kctcs.edu).

#### **HCTC Distance Learning Assistance**

For assistance with questions for ADA-related need for distance learning courses or unresolved Blackboard problems, contact Ella Strong, phone (606) 487-3208, email [ella.strong@kctcs.edu](mailto:ella.strong@kctcs.edu) or Brad Roberts, phone (606) 487-3566, email [brad.roberts@kctcs.edu](mailto:brad.roberts@kctcs.edu).



### **Distance Learning Course Information**

The Internet can be used in multiple ways to deliver instruction, assess learning content, and provide interaction among Learners and between the instructor and Learners. Internet instruction can be designed to be accessed by Learners at their convenience.

#### **Student rules and expectations:**

- Students are expected to check their KCTCS email on a regular basis and keep the email Inbox clean. This is to prevent emails from bouncing back. HCTC and its instructors are NOT responsible for undeliverable emails due to exceeded storage limits on learners email account. Keep your Inbox clean.
- Students are expected to download and/or print and read the course syllabus and send the instructor an email stating the Learner understands the course policies otherwise directed by the instructor). If the Learner does not understand the syllabi, the Learner is to make an appointment with or send questions about the syllabus to their instructor.
- Students having problems with course access are to first contact the Blackboard Help Desk. Issues and problems can also be submitted online at <http://elearning.kctcs.edu/> (login and click the Help Tab. If you are unable to login contact the Help Desk by Phone at the number provided above). Then notify your instructor of problems not corrected within 24 hours. If issues are not corrected after 48 hours contact HCTC DL Help.
- Students are expected to have all course textbooks and supplies by the end of the first week of courses. If you receive financial aid, books can be charged 10 days prior to the course start date.
- Students are expected to follow the course outline and calendar for due dates. It is strongly suggested that Learners check the course site at least one week prior to the first day of course and continuously throughout the semester as all calendar entries may be tentative.
- Students are expected to attend all course meetings (if applicable). Web-enhanced courses will have course meetings similar to an in-person course. Web-local may or may not have associated course meetings. Web-Hybrid courses will meet approximately half of the course time and have online work for the other half of the course time. Completely online course typically do not have specified course meetings but may have live classrooms sessions (these are noted with a LC code).

#### **Basic How-to Information**

How to log on to a web-enhanced, web-hybrid, Live Classroom, or Online eLearning course

1. Point your browser to <http://elearning.kctcs.edu> to login.
2. Go to the login box in the middle of the window that opens and enter your username and password which is the same to access your email or Learner self-serve account.

## **How to Check Your KCTCS E-Mail**

As a Learner of the KCTCS System, you have been issued a login ID and password. NOTE: this is the same login as the one described with the Logging-on to an eLearning course account. Email is an integral part of the distance learning process as well as your everyday process as a Learner of HCTC/SKCTC as you will receive course information, campus information, registration information, and other related information on your email account. In addition, all of your KCTCS information will come through Learner email.

Click on the following link to check your e-mail: <https://webmail.kctcs.edu/>

NOTE: You are required to change your password every 180 days.

Enter your KCTCS (student) ID and password you were provided when prompted in the following format: The login entry (if asked or required) is the domain name (KCTCSACC), followed by a "right slash" (/), ending with the PeopleSoft Learner ID that you were given during registration (first initial + last name + four digit number).

Login: KCTCSACC/jdoe0001

Password: yourpassword (whatever the password is)

## **Resource Links**

### **KCTCS Student Code of Conduct:**

<https://kctcs.edu/current-students/academic-resources/code-of-student-conduct.aspx> refer to section 3 (Academic Offenses and Sanctions).

**KCTCS Disability Services:** [https://kctcs.edu/Current\\_Students/Disability\\_Services.aspx](https://kctcs.edu/Current_Students/Disability_Services.aspx)

### **Distance Learning Assistance:**

For assistance with questions for ADA-related need for distance learning courses or unresolved Blackboard problems, contact Ella Strong, phone (606) 487-3208, email [ella.strong@kctcs.edu](mailto:ella.strong@kctcs.edu) or Brad Roberts, phone (606) 487-3566, email [brad.roberts@kctcs.edu](mailto:brad.roberts@kctcs.edu).

### **HCTC Web Master:**

If you use the HCTC web site and have any problems or issues, contact Casey Brock, Webmaster, phone (606) 487-3167, email [cbrock0027@kctcs.edu](mailto:cbrock0027@kctcs.edu).

### **SKCTC Web Master:**

If you use the SKCTC web site and have any problems or issues, contact Joshua Howard, Webmaster, phone (606) 589-3119, email [jhoward0465@kctcs.edu](mailto:jhoward0465@kctcs.edu).

## **PROFESSIONAL ORGANIZATIONS**

Students are encouraged to join professional organizations which promote continuing education and provide a diverse learning experience through meeting and conferences. Students are urged to become members of the following organizations:

**Kentucky Society of Radiologic Technologists:** This is a state professional organization that presents a conference each Fall and Spring.

This professional organization also presents opportunities for students to compete in mock registry bowl competition each spring as well as registry prep sessions from various educators. All students from the HCTC/SKCTC Regional Radiography Program are highly encouraged to attend this educational event.

**American Society of Radiologic Technologist:** This is a national professional organization. A bimonthly professional journal is published by the A.S.R.T. which contains topics of interest for radiographers and students. The A.S.R.T. holds an annual meeting at various locations throughout the United States and this society offers benefits such as insurance policies and low interest loans available to members at reasonable rates.

**The American Registry of Radiologic Technologist:** The A.R.R.T. is a national certifying organization for the radiologic technology profession. Registration is not presently a mandatory prerequisite to practice as a radiographer, but it is a nationally recognized accomplishment requiring by most health care instructions. It is often a condition for employment and is often required for any professional advancement. All graduates of the HCTC/SKCTC Regional Radiography Program are eligible to apply to sit for the registry examination upon graduation.

Applicants to the A.R.R.T. are completed prior to graduation with the assistance of the radiography faculty. Graduates should apply for the examination as soon as possible. Application materials may be obtained from the Program Coordinator during the last two months in the radiography program.

**HAZARD COMMUNITY AND TECHNICAL COLLEGE /  
SOUTHEAST KENTUCKY COMMUNITY AND TECHNICAL COLLEGE**

**REGIONAL RADIOGRAPHY PROGRAM**

**COMPETENCY-BASED PLAN OF**

**CLINICAL EDUCATION**



## **CLINICAL COMPETENCY EVALUATION DEFINITION OF TERMS**

1. **OBSERVE**                      The student can observe the radiographer perform a radiographic examination.
2. **ASSIST**                        The students can assist the radiographer in the performance of a radiographic examinations in a manner determined by the radiographer, without actually performing the examination (i.e., bring patient into room, etc.)
3. **PARTICIPATE**                The student can take part in the performance of a radiographic examination with the help of, and under the direct supervision of the radiographer.
4. **PERFORM**                      The student conducts a radiographic examination under the direct supervision of the radiographer.
5. **DIRECT SUPERVISION**        A registered radiographer is present during the conduct of the procedure with the student in the ionizing radiation room.
6. **INDIRECT SUPERVISION**    A registered radiographer is present in the radiography department and/or readily available for guidance, but not necessarily with the student in the ionizing radiation room.
7. **RADIOGRAPHIC EXAMINATION**    This consist of a series of radiographs of any anatomical region, sufficient to perform diagnostic evaluation of that region, in accordance to the clinical affiliates procedures manual.
8. **CATEGORY**                      A series of related radiographic examinations which demonstrates a specific area of the human body (i.e., upper extremities), or group studies.
9. **COMPETENCY**                    The student can perform radiographic examinations under indirect supervision and assume those duties and responsibilities as described by the clinical objective.
10. **PROGRESS COMPETENCY EVALUATION**    Procedure by which the student's performance and the resulting radiographs for a specific examination are evaluated in route to category competency.
11. **CATEGORY COMPETENCY EVALUATION**    Procedure by which the student's performance and the resulting radiographs for a specific category. This consists of the performance of two (2) examinations from the specific category, chosen at random, as well as four (4) oral questions about examinations within the same category.

- |     |                                   |   |
|-----|-----------------------------------|---|
| 12. | FINAL<br>COMPETENCY<br>EVALUATION | Procedure by which the student's overall performance is evaluated. This consists of the performance of one examination from five categories, chosen at random and oral questions about examinations from the remaining five categories.                           |
| 13. | CLINICAL<br>INSTRUCTOR            | A registered staff technologist, recognized by the JRCERT, who understands the clinical objectives and clinical evaluation system. They provide the student with clinical instruction and supervision as well as evaluate the students' performance and progress. |
| 14. | CLINICAL<br>COORDINATOR           | A faculty member that coordinates and evaluates the Clinical Competency-Based Education Plan, and also serves as a Clinical Instructor.   |
| 15. | STUDENT<br>RATIO                  | The student to radiography clinical staff ratio is 1:1.   |
| 16. | PORTABLE<br>EXAM                  | When a student performs a portable radiographic examination under direct supervision, a qualified radiographer must be immediately available to assist students regardless of the level of student achievement.   |
| 17. | SURGICAL<br>PROCEDURES            | A student will need direct supervision during all surgical procedures without exception.  |

### **CLINICAL COMPETENCY-BASED EDUCATION OVERVIEW**

The implementation of a competency-based evaluation system conducted with a series of planned clinical rotations provides a standardized format for evaluation of the student in the clinical setting. In addition, the system is designed to allow each student to progress at an individual rate consistent with their abilities, knowledge, and motivation. However, minimum performance standards must be met to demonstrate satisfactory progress through the clinical program.

The didactic and laboratory aspect of the curriculum are well integrated with clinical assignments to allow each student the opportunity to achieve program goals and objectives in the optimum manner. Concurrent didactic and clinical experiences allow students to apply theoretical principles to the clinical situation in a systemic and organized manner, to achieve meaningful and productive clinical behaviors to be demonstrated in all areas of clinical instruction. As the student masters the didactic and laboratory objectives, he/she applies these principles in the clinical setting, guided by the clinical objective for each clinical rotation.

## ATTAINMENT OF CLINICAL COMPETENCY

The student begins the clinical rotation experience by observing and assisting the registered radiographer in the performance of radiographic examinations. This experience serves to familiarize the student with the care and radiography of patients for a given radiographic examination. Once the student masters the examinations as taught in IMG 100 and IMG 110 he/she moves from a passive role to one of active participation, thus allowing "hands on" experience in the performance of procedures. These examinations are performed under the direct supervision of registered radiographers in each given category.

After successful completion of the laboratory skills test or after a period of three weeks following classroom instruction the student can be evaluated on the procedure by a clinical instructor or faculty member. The evaluations are termed **Progress Competency Evaluations** and the student must obtain a minimum per semester.

The student may not receive more than two failed Progress Competency Evaluations per semester, with failure defined as a composite score of less than 85% OR the mark of zero on any portion of the examination. The failure will be reflected in the student's semester clinical grade. Should a student fail a procedure they will be required to seek remediation and to demonstrate competency before they are allowed to proceed. This is accomplished as circumstances allow, but **MUST** occur prior to the end of the following semester. If the student fails more than two Progress Competency Evaluations per semester they will be placed on Clinical Probation and must obtain a Clinical grade of "B" or better for the next semester in order to remain in the program. If the student fails to meet these conditions, they will be dismissed from the program.

## CATEGORY COMPETENCY EVALUATION

Once the student has received the specified minimum number of successful Progress Competency Evaluations in a given category in which competency clearance is sought, they can request the **Category Competency Evaluation** from the program faculty. In order to preserve an orderly sequence of instruction, the student cannot request this evaluation until all examinations within the specific category have been taught and tested in the didactic setting. Category Competency Evaluations are mandatory only for categories I, II, III, IV and VIII.

The Category Competency Evaluation consists of an evaluation of clinical ability and oral knowledge of the examinations within a given category. The student demonstrates competency by performing two examinations, chosen at random from the category, in the clinical setting. Simulations are used only when necessary and may not exceed one simulation per Category Competency Evaluation. In addition, the student must answer a total of four oral questions about two examinations chosen randomly from that category. To successfully complete the Category Competency Evaluation, the student must receive a composite score of at least 85%. The following describes the results of both pass and non-pass situations for the Category Competency Evaluation.

**Pass** Upon successful completion of the Category Competency Evaluation, the student can perform any examination within the category under indirect supervision. The student will continue to produce any requested examination within that category while progressing toward completion of the next category in a similar manner. Reported performance of these procedures allows the student to gain a proficiency in the performance of each examination in order to meet requirements of the **Final Competency Evaluation** required for graduation.

**However, a student may not perform repeat or portable radiographs without the direct supervision of a registered technologist, regardless of direct/indirect supervision status in a given category.**

**Non-Pass 1** If the student fails to pass the Category Competency Evaluation, he/she must perform the failed examination(s) in a simulation setting with a faculty member, in the clinical setting under the direct supervision of the clinical instructor or faculty member, **and** on the phantom, if applicable, to demonstrate competency before requesting the second attempt at the Category Competency Evaluation. This re-evaluation will include the failed examination plus one other examination, which is randomly chosen, in the same category. The student must also answer a total of four questions pertaining to examination in the given category. Successful completion of the re-evaluation allows the student to continue to progress through the remaining categories. However, this failure will be reflected in the student's semester clinical grade.

**Non-Pass 2** If the student does not successfully complete the second attempt at the Category Competency Evaluation; he/she is placed on Clinical Probation. The clinical coordinator will counsel the student in an attempt to correct the deficiency. The student must again successfully perform the failed examination(s) in a simulation setting with a faculty member, in the clinical setting under the direct supervision of the clinical instructor or faculty member, **and** on the phantom, if applicable. The student may then request the third attempt at the Category Competency Evaluation. He/she must obtain a Clinical grade of "B" or better for the next semester in order to remain in the program. If the student fails to meet these conditions, he/she will be dismissed from the program. The failure will also reflect in the student's semester clinical grade.

**Non-Pass 3** If the student does not successfully complete the third attempt at the Category Competency Evaluation, he/she will be dismissed, preventing him/her from continuing in the program.

When working on the requirements for the subsequent categories, the student must not receive any failed Progress Competency Evaluations in any category of demonstrated competency. If this should occur, the student returns to a direct supervision status in that category. He/she must successfully perform that failed examination in a simulation setting with a faculty member, in the clinical setting under the direct supervision of the clinical instructor or faculty member, and on the phantom, if applicable, before requesting another Category Competency Evaluation. This evaluation will be



from the same category, again chosen randomly, as well as four oral questions. This re-evaluation must be completed no later than one semester after the failure has occurred, unless circumstances dictate otherwise as determined by program faculty. Successful completion of this re-evaluation returns the student to indirect supervision status in that category. If, however, the student fails the re-evaluation, he is placed on clinical probation. He/she must then complete the above-stated process successfully within the existing semester and must obtain a clinical grade of "B" or better for the next semester in order to remain in the program. If the student fails to meet these conditions, he/she will be dismissed from the program. The failure will also be reflected in the student's semester clinical grade.

One fundamental aspect of a competency-based system is that it allows students to progress at their own rate. However, **it is equally important that the student demonstrate a reasonable degree of progress in the clinical area.** To accomplish this, the following guidelines suggest a minimum rate of competency achievement in the clinical setting:

FRESHMEN STUDENTS

| <u>Semester</u> | <u>Category</u> |
|-----------------|-----------------|
| 1st (Fall)      | I               |
| 2nd (Spring)    | II, III         |

SOPHOMORE STUDENTS

| <u>Semester</u> | <u>Category</u>  |
|-----------------|------------------|
| 3rd (Summer)    | IV               |
| 4th (Fall)      | VIII             |
| 5th (Spring)    | Final Competency |

The student will continue their progress through the system in the manner previously described. Upon successful completion of the Category Competency Evaluations, the student requests the **Final Competency Evaluation.**

**FINAL COMPETENCY EVALUATION**

The Final Competency Evaluation is designed to test the overall clinical performance of the student. To accomplish this, the student must successfully complete one examination each from a total of five randomly chosen categories. The student must also answer two oral questions per category of the remaining five categories. To successfully complete the Final Competency Evaluation, the student must receive a composite score of at least 85%. The following describes the results of both pass and non-pass status for the Final Competency Evaluation:

**Pass** Upon successful completion of the Final Competency Evaluation, the student will be allowed to perform all examinations under indirect supervision until graduation. However, all **repeat examinations must be taken under the direct supervision of a registered technologist.** No further Progress Competency Evaluations are required.

**Non-Pass 1** If the student does not successfully complete the Final Competency Evaluation, the clinical coordinator will counsel the student in an attempt to correct any areas of deficiency. The student must successfully perform the failed examination(s) in a simulation setting with a faculty member, in the clinical setting under the direct

supervision of the clinical instructor or faculty member, **and** on the phantom, if applicable. The student can then request the second attempt at the Final Competency Evaluation. This evaluation will consist of the performance of the failed examination(s) and one other randomly chosen examination from the failed category, and one examination from three other randomly chosen categories, and the student must answer two oral questions per category of the remaining five categories. After successful completion of the second Final Competency Evaluation, the student can perform any examination under indirect supervision until graduation. However, all repeat or portable examinations must be performed under the direct supervision of a registered technologist. No further Progress Competency Evaluations are required.

**Non-Pass 2** If the student does not successfully complete the second Final Competency evaluation he/she will be considered non-passing. Such a student has two available options:

1. Receive special clinical instruction and be re-evaluated in all categories in a manner determined by the faculty. This option is contingent upon available space and resources in the program as determined by the standards by the Joint Review Committee on Education in Radiologic Technology.
2. Elect not to continue in the program. Such a student will receive career counseling, if desired.

The student must have successfully completed the Final Competency Evaluation to be eligible for graduation and to sit for the national registry examination given by the American Registry of Radiologic Technologist (A.R.R.T.).

### CLINICAL MASTER PLAN GUIDE

| <u>Semester</u>          | <u>Clinical Weeks</u> | <u># of Progress Evaluations Required</u> |
|--------------------------|-----------------------|---|
| First Semester (Fall)    | 15                    | 9   |
| Second Semester (Spring) | 15                    | 15  |
| Third Session (Summer)   | 6                     | 6   |
| Fourth Semester (Fall)   | 15                    | 10  |
| Fifth Semester (Spring)  | <u>15</u>             | <u>10</u>                                 |
| <b>TOTAL</b>             | <b>66 weeks</b>       | <b>50 competencies</b>                    |

| <u>Suggested<br/>Clinical Area</u> | <u>Student Assignment Approximate</u> |
|------------------------------------|---------------------------------------|
| Diagnostic/Fluoroscopy             | 43-46 weeks                           |
| Portables                          | 8-10 weeks                            |
| Surgery                            | 4-8 weeks                             |

**All sophomore Radiography students will be allowed one week to rotate through advanced modalities to explore professional development. In addition, any student who has completed required program competencies shall be allowed an additional week for advanced modality exploration.**

## **CLINICAL GRADING**

Clinical grading is discussed in each course syllabi.

All evaluations are maintained in the clinical coordinator's office and are available for student inspection. Any comments, suggestions, or concerns regarding procedure should be directed to the Clinical Coordinator. The program reserves the right to modify the evaluation system at any time during the year, as the need arises. Students will always be informed in advance of any changes that are pertinent to them.

## **CLINICAL ROTATION HOURS**

For the majority of the educational program, the student will be assigned clinical rotations during Monday through Friday from approximately 8:00 a.m. until 4:30 p.m. There will be one weekend clinical rotation during IMG 211 and IMG 221, and one second shift clinical rotation during IMG 211 and IMG 221. At no time will students be allowed to participate in clinical when the colleges are declared officially closed. Example: July 4<sup>th</sup>, Holiday.

No student at any time during the Radiography Program clinical experience will be required more than 40 hours participation per week or no more than 10 hours per day. Any additional participation will be strictly voluntary.

## **WEEKEND AND SECOND SHIFT ASSIGNMENTS**

In keeping with the educational philosophy of the program that is “to prepare the student to be able to assume the duties and responsibilities of a staff radiographer at entry level competency” the student will be assigned to weekend and second shift clinical experiences. The weekend and second shift hours allow the student to gain additional radiographic confidence while also allowing the student to have valuable emergency and operating room learning experiences. The variety of "non-routine" radiographic cases demands the student adjust to different positioning methods, radiographic techniques, patient care considerations, and interpersonal adjustments.

*The goal of weekend and second shift hours are to:*

1. Give the student radiographic experience they cannot obtain during day time clinical education.
2. Teach the student how to function with a reduced number of staff members in the department.
3. Make the student aware of weekend and second shift limitations of the Radiography Department.
4. Acquaint the student with clerical responsibilities the radiographer assumes during weekend and second shift hours.
5. Teach the student to work more independently in a new environment.
6. Teach the student to improvise and use non-traditional positioning methods to obtain quality radiographs when working with emergency and trauma patients.

7. Provide the student with a better opportunity to work with severe trauma, thus increasing their knowledge and skills with skull, facial bones, and spinal injuries.

### **CLINICAL ADVISING**

The Clinical Coordinator/Faculty will advise the student in regards to their progress and assist in solving any potential problems that the student may be having. The student will attend a conference each semester with the Radiography Faculty to discuss progress and problems as indicated.

### **STUDENT EVALUATION OF CLINICAL INSTRUCTION**

Student feedback about the nature of the clinical evaluation is considered vital to the viability of the process. Throughout the semester each student is given the opportunity to complete a **Clinical Instruction Evaluation Form** for any Clinical Instructor at his/her clinical education center. This form is designed to assess the clinical instructor's performance from the student's perspective. These evaluations are discussed between the Clinical Coordinator and the Clinical Instructor. This evaluation serves to:

1. Recognize the value of positive clinical instruction.
2. Focus on means of improving the student's clinical experience.
3. Identify any potential problems occurring with the evaluation system.

In addition, the student should feel free to voice any comments, suggestions, or concerns to the program faculty.

### **GOALS AND OBJECTIVES**

The goals of the clinical competency evaluation system are that under indirect supervision, the student can:

1. Perform any examination/procedure in Categories I - X.
2. Produce technically satisfactory radiographs with minimum radiation exposure and discomfort to the patient.

In order to successfully complete a competency evaluation given by a clinical instructor or faculty member, the student must meet the following objectives with a minimum composite score of 85%.

1. Interpret request accurately.
  - a. assess the requisition for correct and necessary information.
  - b. recognize conflicting clinical history and examination ordered.
  - c. identify the procedure(s) to be performed.
  - d. recall the patient's name and age.
  - e. identify the mode of transportation to the radiology department.
  - f. identify the type of patient to be radiographed (i.e., OP, ER)
  - g. document any variation from the requested procedure in the appropriate location.

2. Correlate patient identification.
  - a. accurately locate patient using information from requisition.
  - b. check for patient identification (wristband).
  - c. select the correct patient for the examination.
3. Obtain accurate history/assessment.
  - a. assess the patients chief complaint.
  - b. correlate chief complaint with examination ordered.
4. Ascertain probability of pregnancy.
  - a. check pregnancy status for females between the ages of 12 and 50.
  - b. check for last menstrual period date, if needed.
5. Assist patient appropriately (safety, privacy, etc.)
  - a. gown the patient in the manner indicated by the procedure.
  - b. assist the patient to and from the radiographic room in a safe and courteous manner.
  - c. employ proper body mechanics when moving or transporting the patient,
  - d. maintain the patient's respect and dignity throughout the procedure.
  - e. understand contrast media dosage, use and potential adverse reactions.
  - f. observe any isolation precautions in effect.
  - g. monitor the patient's condition throughout the procedure.
6. Set up room before bringing in patient.
  - a. provide a clean table and/or upright grid device for the patient.
  - b. maintain an orderly work area.
  - c. maintain a proper inventory of supplies.
  - d. dispense articles to the patient as needed (i.e., tissues, dentures cup, etc.)
  - e. ready the radiographic unit (tube, table, console)
  - f. provide appropriate size and type of cassettes for the exam requested.
  - g. locate syringes, needles, and other supplies, as needed.
  - h. prepare sterile trays and instruments to avoid contamination, as needed.
7. Remove extraneous items.
  - a. assess location of extraneous items.
  - b. ask and/or assist patient in removal of extraneous items (i.e., dentures, hair clips, jewelry, snaps, etc.)
8. Select appropriate grid/image receptor.
  - a. select the appropriate anatomical settings for a given examination.
  - b. select the proper size and type image receptor for each projection.
  - c. employ a grid when necessary.
9. Select suitable kVp.
  - a. interpret a technique chart to set the proper exposure factors.
  - b. adapt the kVp for changes in SID, image receptor, pathology, etc., as applicable.
10. Select suitable mA.
  - a. interpret a technique chart to set the proper exposure factors.
  - b. adapt the mA for changes in SID, image receptor, pathology, etc., as applicable.

11. Select suitable time/photocell.
  - a. establish exposure factors to prevent patient motion.
  - b. interpret a technique chart to set the proper exposure factors.
12. Select suitable accessory functions (i.e. back up timer, buckey vs. table top)
  - a. set the automatic exposure device in the proper manner.
13. Set technical factors before positioning.
14. Instruct patient properly (i.e. explanation, breathing, etc.)
  - a. converse with patient in an intelligent, professional manner.
  - b. communicate procedure instruction to the patient with clarity.
  - c. dispatch the patient to the proper destination after the examination.
15. Position patient correctly (i.e. supine, prone, lat., oblique, erect, etc.)
  - a. position the patient in the manner described in class.
  - b. perform comparison projections when required.
  - c. after the examination according to patient condition and cooperation.
16. Align tube, image receptor and area of interest accurately (i.e., CR, SID, etc.)
  - a. center the central ray correctly to the center of the imaging receptor.
  - b. maintain the proper source-to-image receptor distance (SID) for each projection.
17. Angulate CR correctly (i.e., degree, direction).
18. Utilize immobilization devices (i.e., sponges, clamps, etc.)
19. Utilize markers appropriately.
  - a. identify each radiograph with "R", or "L", and/or other appropriate markers in the correct location.
  - b. display patient information in the proper space.
  - c. place any "time" markers appropriately on the cassette/radiograph.
20. Perform procedure efficiently (i.e., speed, sequence, etc.)
  - a. completion of examination in an appropriate amount of time determined.
  - b. complete projections in such a manner as to cause the patient to move as little as possible.
21. Observe the patient while exposing.
22. Collimate beam properly.
  - a. collimate to area of interest.
23. Shield patient properly (i.e., reproductive and vital organs).
  - a. collimate to area of interest.
  - b. use gonadal shielding when appropriate.
  - c. employ proper technical factors and proper positioning methods to avoid repeat radiographs.
  - d. minimize the time spent in an area of radiation, when appropriate.
24. Practice operator protection (i.e., shielding, distance, time, etc.)
  - a. wear a lead apron and gloves in the presence of ionizing radiation.
  - b. maximize the distance between radiation and self.
  - c. minimize the time spent in an area of radiation, when appropriate.
  - d. close radiographic room door.
25. Process digital images correctly.
26. Identify protection/patient position correctly.

27. Identify pertinent-anatomy correctly.
28. Determine appropriateness of exposure factor/index exposure number.
29. Determine appropriateness of positioning.
30. Determine means to correct minor positioning and technical errors.
  - a. discuss means of improving the radiograph.
31. Identify obvious pathology.