Radiography Program

Student Handbook

Asheville-Buncombe Technical Community College

2020

PART 1 General

Introduction

This Radiography Student Handbook is only part of the information necessary for you to successfully complete the program. You will receive RAD course outlines and the A-B Tech Catalog is available online. You will also be given the opportunity to receive a copy of the A-B Tech Student Handbook and Calendar before fall semester classes begin. It is your responsibility to read these documents and be familiar with all college, program, and course policies and requirements.

The radiographers you will be working with during the next 21 months have all pledged themselves to excellence in patient care and we welcome you as a student member of our profession. Every student who meets the admission requirements of the program has the ability to succeed and do exceptionally well. The program only wants to graduate the best. The healthcare work environment will allow no less.

This program is serious business--it's about patient care, it's about professional standards, and it's about quality education. The program faculty has been hired by the college to deliver a program in compliance with accreditation standards and curriculum requirements that is based on sound educational principles. We want you to reach higher, to try harder, and to learn far more than you ever thought possible. We have structured everything to set you up to succeed. All you have to do is do your part.

Your radiography instructors at the college are all professionals in this field with many years of experience as clinicians and educators. Do all they expect of you and you will meet with a success you only dreamed of when you began the program.

Success is a journey, not a destination…enjoy your journey over the coming months!!!

Welcome to the Radiography Program at A-B Tech! The responsibilities of the program and the profession may appear great at times, but the rewards outnumber all challenges you may encounter by tenfold.

The A-B Tech Radiography Faculty

Program History

Asheville-Buncombe Technical Community College (A-B Tech) has served as the community's premier technical educator since 1959. A-B Tech is proud of its successful history, especially of the success of the college's allied health programs. The radiography program traces it's beginning to the School of X-Ray Technology sponsored by Memorial Mission Hospital that was started in 1960 by Iva McGrady Wall, R.T.(R)(ARRT). With increasing programmatic accreditation standards and emphasis on academic education, all parties involved believed the training for radiographers in our area would be better provided through an institution of higher learning. The Asheville-Buncombe Technical Institute Radiologic Technology Program enrolled its first class in the fall of 1971 with Henry B. Dawkins, B.S., R.T.(R)(ARRT) serving as the first program director. Several other allied health programs, including nursing and medical laboratory technology, were also transferred to A-B Tech during this time. In the beginning of 2016, the Allied Health Division relocated to the Ferguson Allied Health and Workforce Development Building (AHWD) at 10 Genevieve Circle, Asheville, NC.

The program classroom and faculty offices are located on the second floor of the AHWD building on the A-B Tech campus.

The A-B Tech Radiography Program has served as the main source of entry-level radiographers in the area ever since the program graduated its first class in 1973. Graduates of the program have been successful in obtaining employment in a wide variety of settings including area hospitals, doctor's offices, emergency care centers, imaging centers, and clinics. A significant number of graduates have pursued advanced education in the field of medical imaging or advanced degrees in the health sciences. Many program graduates have become successful educators, department managers, hospital administrators, or practitioners in other areas of health care.

Section 1: Radiography Program Mission and Accreditation

Program Mission

The mission of the A-B Tech Radiography Program is to prepare competent entry-level radiographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the health care industry located in Western North Carolina.

College Accreditation

A-B Tech is accredited by the Southern Association of Colleges and Schools and is approved by the North Carolina Board of Education.

Program Accreditation

The program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT) and was awarded full eight-year reaccreditation without recommendations or suggestions in the spring of 2016. This process required the writing of a self-study report and site visit by other educators from around the country. More information about the process is available upon request from the program faculty.

JRCERT Program Effectiveness Data, Goals, and Student Learning Outcomes

Program Effectiveness Data

- Graduates will pass the ARRT exam on the first attempt.
- Students will complete the program.
- Graduates will obtain employment.
- Employers will be satisfied with the program.
- Graduates will be satisfied with the program.

Program Goals and Outcomes

Goal 1

Students will utilize effective communication and interpersonal skills.

Student Learning Outcome 1: Students will demonstrate effective communication and interpersonal skills during clinical assignments.

Student Learning Outcome 2: Students will use proper written and oral communication skills during didactic assignments.

Goal 2

Students will demonstrate problem-solving and critical thinking skills in the performance of radiographic procedures.

Student Learning Outcome 1: Students will demonstrate critical thinking and problem solving skills in the clinical setting.

Student Learning Outcome 2:Students will demonstrate critical thinking and problem solving skills in the didactic setting.

Goal 3

Students will demonstrate professional growth and development by practicing the professional code of ethics and complying with the profession's scope of practice.
Student Learning Outcome1: Students will understand the importance of professional development.
Student Learning Outcome 2: Students will demonstrate professional behaviors.

Goal 4. Students will demonstrate clinical competence by performing a full range of radiologic procedures on all patient populations.
Student Learning Outcome1: Students will provide appropriate patient care.
Student Learning Outcome 2: Students will position the patient and imaging equipment.
Student Learning Outcome 3: Students will practice appropriate radiation safety principles.

For more information about program goals and effectiveness, please visit our website at:

Medical-Imaging/Radiography Overview

JRCERT Standards for Programs in Radiography

The A-B Tech Radiography Program has chosen programmatic accreditation by the Joint Review Committee for Education in Radiologic Technology (JRCERT). The JRCERT Standards must be complied with by the program and are a way to insure minimum standards for the development and self-assessment of programs in Radiography. An abbreviated copy of the current standards is available in this handbook. A full copy is available upon request in the office of the department chairperson. Students are encouraged to discuss any matters of concern regarding program compliance with the JRCERT Standards with the program faculty. If the concern is not resolved at this level, the student/complaining party will be advised to confer with the Dean of Allied Health and Public Service Education. If the Dean is not able to resolve the problem, the student/complaining party will be advised to confer with the Vice- President of Instructional Services. If the matter is still not resolved or if the student/complaining party believe the concerns were not properly addressed, the student/complaining party will be advised to submit, anonymously or otherwise, allegations of non-compliance with the standard directly to the JRCERT at:

Joint Review Committee on Education in Radiologic Technology
20 N Wacker Drive, Suite 2850
Chicago, IL 60606-3182
312.704.5300 • (Fax) 312.704.5304
www. jrcert.org

Standards:

Effective: January 1, 2014
Adopted by:
The Joint Review Committee on Education in Radiologic Technology - October 2013

The Joint Review Committee on Education in Radiologic Technology (JRCERT) is dedicated to excellence in education and to the quality and safety of patient care through the accreditation of educational programs in the radiologic sciences.
The JRCERT is the only agency recognized by the United States Department of Education (USDE) and the Council on Higher Education Accreditation (CHEA) for the accreditation of traditional and distance delivery educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. The JRCERT awards accreditation to programs demonstrating substantial compliance with these STANDARDS.

JRCERT Introductory Statement

The Joint Review Committee on Education in Radiologic Technology (JRCERT) Standards for an Accredited Educational Program in Radiography are designed to promote academic excellence, patient safety, and quality healthcare. The STANDARDS require a program to articulate its purposes; to demonstrate that it has adequate human, physical, and financial resources effectively organized for the accomplishment of its purposes; to document its effectiveness in accomplishing these purposes; and to provide assurance that it can continue to meet accreditation standards.

The JRCERT accreditation process offers a means of providing assurance to the public that a program meets specific quality standards. The process helps to maintain program quality and stimulates program improvement through program assessment.

There are six (6) standards. Each standard is titled and includes a narrative statement supported by specific objectives. Each objective includes the following clarifying elements:

- Explanation - provides clarification on the intent and key details of the objective.
- Required Program Response- requires the program to provide a brief narrative and/or documentation that demonstrates compliance with the objective.
- Possible Site Visitor Evaluation Methods - identifies additional materials that may be examined and personnel who may be interviewed by the site visitors at the time of the on-site evaluation to help determine if the program has met the particular objective. Review of additional materials and/or interviews with listed personnel is at the discretion of the site visit team.
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Following each standard, the program must provide a Summary that includes the following:

- Major strengths related to the standard
- Major concerns related to the standard
- The program's plan for addressing each concern identified
- Describe any progress already achieved in addressing each concern
- Describe any constraints in implementing improvements

The submitted narrative response and/or documentation, together with the results of the on-site evaluation conducted by the site visit team, will be used by the JRCERT Board of Directors in determining the program's compliance with the STANDARDS.

Standard One: Integrity

Standard One: The program demonstrates integrity in the following:

- Representations to communities of interest and the public,
- Pursuit of fair and equitable academic practices, and
- Treatment of, and respect for, students, faculty, and staff.

Objectives:
In support of Standard One, the program:

1.1 Adheres to high ethical standards in relation to students, faculty, and staff.
1.2 Provides equitable learning opportunities for all students.
1.3 Provides timely, appropriate, and educationally valid clinical experiences for each admitted student.
1.4 Limits required clinical assignments for students to not more than 10 hours per day and the total didactic and clinical involvement to not more than 40 hours per week.
1.5 Assures the security and confidentiality of student records, instructional materials, and other appropriate program materials.
1.6 Has a grievance procedure that is readily accessible, fair, and equitably applied.
1.7 Assures that students are made aware of the JRCERT Standards for an Accredited Educational Program in Radiography and the avenue to pursue allegations of non-compliance with the STANDARDS.
1.8 Has publications that accurately reflect the program's policies, procedures, and offerings.
1.9 Makes available to students, faculty, and the general public accurate information about admission policies, tuition and fees, refund policies, academic calendars, clinical obligations, grading system, graduation requirements, and the criteria for transfer credit.
1.10 Makes the program's mission statement, goals, and student learning outcomes readily available to students, faculty, administrators, and the general public.
1.11 Documents that the program engages the communities of interest for the purpose of continuous program improvement.
1.12 Has student recruitment and admission practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
1.13 Has student recruitment and admission practices that are consistent with published policies of the sponsoring institution and the program.
1.14 Has program faculty recruitment and employment practices that are non-discriminatory with respect to any legally protected status such as race, color, religion, gender, age, disability, national origin, and any other protected class.
1.15 Has procedures for maintaining the integrity of distance education courses.

Standard Two: Resources

Standard Two: The program has sufficient resources to support the quality and effectiveness of the educational process.

Objectives:
In support of Standard Two, the program:

Administrative Structure

2.1 Has an appropriate organizational structure and sufficient administrative support to achieve the program's mission.

2.2 Provides an adequate number of faculty to meet all educational, program, administrative, and accreditation requirements.

2.3 Provides faculty with opportunities for continued professional development.

2.4 Provides clerical support services, as needed, to meet all educational, program, and administrative requirements.

Learning Resources/Services

2.5 Assures JRCERT recognition of all clinical settings.

2.6 Provides classrooms, laboratories, and administrative and faculty offices to facilitate the achievement of the program's mission.

2.7 Reviews and maintains program learning resources to assure the achievement of student learning.

2.8 Provides access to student services in support of student learning. Fiscal Support

2.9 Has sufficient ongoing financial resources to support the program's mission.

2.10 For those institutions and programs for which the JRCERT serves as a gatekeeper for Title IV financial aid, maintains compliance with United States Department of Education (USDE) policies and procedures.

2.1 Has an appropriate organizational structure and sufficient administrative support to achieve the program's mission.

Standard Three: Curriculum and Academic Practices

Standard Three: The program's curriculum and academic practices prepare students for professional practice.

Objectives:

In support of Standard Three, the program:

3.1 Has a program mission statement that defines its purpose and scope and is periodically reevaluated.

3.2 Provides a well-structured, competency-based curriculum that prepares students to practice in the professional discipline.

3.3 Provides learning opportunities in current and developing imaging and/or therapeutic technologies.

3.4 Assures an appropriate relationship between program length and the subject matter taught for the terminal award offered.

3.5 Measures the length of all didactic and clinical courses in clock hours or credit hours.

3.6 Maintains a master plan of education.

3.7 Provides timely and supportive academic, behavioral, and clinical advisement to students enrolled in the program.

3.8 Documents that the responsibilities of faculty and clinical staff are delineated and performed.

3.9 Evaluates program faculty and clinical instructor performance and shares evaluation results regularly

to assure instructional responsibilities are performed.

Standard Four: Health and Safety

Standard Four: The program's policies and procedures promote the health, safety, and optimal use of radiation for students, patients, and the general public.

Objectives:
In support of Standard Four, the program:

4.1 Assures the radiation safety of students through the implementation of published policies and procedures that are in compliance with Nuclear Regulatory Commission regulations and state laws as applicable.
4.2 Has a published pregnancy policy that is consistent with applicable federal regulations and state laws, made known to accepted and enrolled female students, and contains the following elements:
- Written notice of voluntary declaration,
- Option for student continuance in the program without modification, and
- Option for written withdrawal of declaration.

4.3 Assures that students employ proper radiation safety practices.
4.4 Assures that medical imaging procedures are performed under the direct supervision of a qualified radiographer until a student achieves competency.
4.5 Assures that medical imaging procedures are performed under the indirect supervision of a qualified radiographer after a student achieves competency.
4.6 Assures that students are directly supervised by a qualified radiographer when repeating unsatisfactory images.
4.7 Assures sponsoring institution's policies safeguard the health and safety of students.
4.8 Assures that students are oriented to clinical setting policies and procedures in regard to health and safety.

Standard Five: Assessment

Standard Five: The program develops and implements a system of planning and evaluation of student learning and program effectiveness outcomes in support of its mission.

Objectives:
In support of Standard Five, the program:

Student Learning
5.1 Develops an assessment plan that, at a minimum, measures the program's student learning outcomes in relation to the following goals: clinical competence, critical thinking, professionalism, and communication skills.

Program Effectiveness
5.2 Documents the following program effectiveness data:
- Five-year average credentialing examination pass rate of not less than 75 percent at first attempt within six months of graduation,
- Five-year average job placement rate of not less than 75 percent within twelve months of graduation,

- Program completion rate,
- Graduate satisfaction, and
- Employer satisfaction.

5.3 Makes available to the general public program effectiveness data (credentialing examination pass rate, job placement rate, and program completion rate) on an annual basis.

Analysis and Actions

5.4 Analyzes and shares student learning outcome data and program effectiveness data to foster continuous program improvement.

5.5 Periodically evaluates its assessment plan to assure continuous program improvement.

Standard Six: Institutional/Programmatic Data

Standard Six: The program complies with JRCERT policies, procedures, and STANDARDS to achieve and maintain specialized accreditation.

Objectives:
In support of Standard Six, the program:

Sponsoring Institution

6.1 Documents the continuing institutional accreditation of the sponsoring institution.

6.2 Documents that the program's energized laboratories are in compliance with applicable state and/or federal radiation safety laws.

Personnel

6.3 Documents that all faculty and staff possess academic and professional qualifications appropriate for their assignments.

Clinical Settings

6.4 Establishes and maintains affiliation agreements with clinical settings.

6.5 Documents that clinical settings are in compliance with applicable state and/or federal radiation safety laws.

Program Sponsorship, Substantive Changes, and Notification of Program Officials

6.6 Complies with requirements to achieve and maintain JRCERT accreditation.

ASRT Code of Ethics:

asrt
American Society of Radiologic Technologists

Code of Ethics

1 The radiologic technologist conducts herself or himself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.

2 The radiologic technologist acts to advance the principal objective of the profession to provide services to humanity with full respect for the dignity of mankind.

3 The radiologic technologist delivers patient care and service unrestricted by concerns of personal attributes or the nature of the disease or illness, and without discrimination on the basis of sex, race, creed, religion or socio-economic status.

4 The radiologic technologist practices technology founded upon theoretical knowledge and concepts, uses equipment and accessories consistent with the 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 of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.

7 The radiologic technologist uses equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice and demonstrates expertise in minimizing radiation exposure to the patient, self and other members of the health care team.

8 The radiologic technologist practices ethical conduct appropriate to the profession and protects the patient's right to quality radiologic technology care.

9 The radiologic technologist respects confidences entrusted in the course of professional practice, respects the patient's right to privacy and reveals confidential information only as required by law or to protect the welfare of the individual or the community.

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.

Revised and adopted by the American Society of Radiologic Technologists and the American Registry of Radiologic Technologists, February 2003

Section 2: A-B Tech Policies

A-B Tech Code of Student Conduct

To protect the students and employees of the College from the irresponsible actions of others, the College has also adopted basic rules of student conduct. Each student should review the current A-B Tech Code of Student Conduct found in the current A-B Tech Catalog and Student Handbook and Calendar. Students who have been charged with a violation of these rules will be assigned consequences based upon the seriousness of the offense.

A-B Tech Code of Classroom Conduct

Civility is behaving in a polite way. We have high expectations of each member of the class regarding their behavior toward each other and the instructor. Classroom etiquette is basically good manners and the expectations regarding such behavior should not unduly burden anyone. All students are expected to conduct themselves as mature adults. Each student should review the A-B Tech Code of Classroom Conduct that is found in the current A-B Tech Catalog and Student Handbook and Calendar. The program faculty will expect appropriate behavior in the classroom and will use this code of conduct as a guide.

Destruction of Property

Destruction of school property will not be tolerated. Violations will result in student being dismissed from all allied health programs.

Drug-Free Workplace Policy

It is the policy of A-B Tech that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance or illicit use of alcohol on the college campus or as a part of any of its activities or business is prohibited. Any student violating this policy will be subject to disciplinary action up to and including suspension or expulsion.

Student Course Drop/Withdrawal

Students are encouraged to consult with program faculty when considering withdrawal and before completing the required forms. Current college publications should be consulted for further information.

Financial Assistance

The program currently has one or more scholarships available for second year students who meet the requirements, including the Iva M. Wall Memorial Scholarship and the Richard Arnold Scholarships. More information will be provided during the summer semester of the program. The NCSRT (www.ncsrt.org) and ASRT (www.asrt.org) also have scholarships available. More information can be found at their websites. The college has additional opportunities for scholarships, please consult college catalog for further information.

Student Responsibilities

All students are responsible for the proper completion of their academic program, for the familiarity with all requirements of the A-B Tech catalog under which they intend to graduate, for maintaining the grade point average required, for knowing their academic standing, and for meeting all other degree requirements.

Program faculty, advisors and counselors are available to assist all students, but FINAL RESPONSIBILITY FOR MEETING PROGRAM AND GRADUATION REQUIREMENTS REMAINS WITH THE STUDENT.

Job Placement Assistance

No reputable college can guarantee jobs for graduates. However, the college will assist students and alumni in every possible way in obtaining suitable employment. The program faculty will also post any job vacancies they are aware of as they arrive in the mail or are phoned in.

Student Counseling

A-B Tech offers counseling and other services to students. For a complete list, please visit the student services page at the college website here- student-services.

Section 3: Program Policies and Procedures

Students enrolled in the A-B Tech Radiography Program will be responsible for observing college rules and regulations as stated in the current college catalog, student calendar, and program handbook. Failure to comply with the policies and procedures will affect classroom and clinical grades and/or student evaluations and will result in counseling of the student on an individual basis with consequences based on the seriousness of the offense. All disciplinary actions will comply with college rules/policies, the Division of Allied Health, and specific Radiography Program Polices including verbal and/or written warnings, disciplinary probations/suspensions, and/or referral to Division Dean or the Vice-President for Student Services and/or dismissal from the program. If clinical privileges are revoked for any reason, the student must withdraw from the allied health division. The student's successful completion of clinical rotations is required for program completion.

Each student will sign a statement of agreement confirming that the program handbook and the policies set forth, will be followed during the duration of the program. The intention is that this handbook provides an accurate representation of program policies and procedures. If necessary, the radiography program faculty may alter, amend or otherwise change program policies or procedures. The student will be given a copy of the revised policy/procedure after adequate notification of the change.

Grievances Policy

The Radiography Program has an established grievance policy. It addresses any violation, misinterpretation, or inequitable application of any existing policy, procedure, or regulation. The program defines a grievance as a feeling of having been treated unfairly; for example a grade appeals.

The program recommends the student follows the procedure listed below.

- The faculty member or other employee who has been responsible for the act which you consider unfair will attempt, in good faith, to resolve the dispute.
- The program recommends any student having a complaint or grievance should initially discuss the problem with the individual involved within three (3) school days of the incident in an effort to resolve

the issue informally.

- If at the time of the discussion the problem is not resolved to the mutual satisfaction of both parties, the student should discuss the matter with the program chairperson. This should occur within ten (10) school days of the incident.
- The student will receive a reply to each step of the informal complaint or grievance process within three (3) working days. If the student remains dissatisfied with the decision at this informal level, he/she would be encouraged to refer to the Student and Grade Appeals Policy outlined in the A-B-Tech Catalog. This more formal process is administered through the office of the Vice-President for Student Services.

Dissatisfaction Policy

The dissatisfaction policy addresses the same issues as a complaint defined by the JRCERT. The college uses complaint and grievance interchangeably; therefore the program chose to use "dissatisfaction" to eliminate any confusion.

The faculty member or other employee who has been responsible for the act which you consider unfair will attempt, in good faith, to resolve the dispute. The program recommends any student having a complaint or grievance should initially discuss the problem with the individual involved within three (3) school days of the incident in an effort to resolve the issue informally. If at the time of the discussion the problem is not resolved to the mutual satisfaction of both parties, the student should discuss the matter with the program chairperson.

Inclement Weather Policy

Please refer to A-B Tech College Student Handbook and Calendar

In the event that students are not able to verify a school closing prior to the time they must leave for clinic or class, they are encouraged to use their judgment in determining whether or not to drive in the existing conditions. If a student decides not to attempt to meet a class or clinical rotation time, he or she must notify the appropriate instructor according to the published attendance policies.

Tardies due to inclement weather when proper notification is made will not count toward the three tardy policy or equivalent of one full day's absence. **If it is a clinic day, no penalty will result if the student reports to clinic by 12 noon (notification to clinic site must be made before 9 A.M.) However, time missed will have to be made up at the discretion of faculty.** The points on the daily worksheet will not be reduced for these tardies. Each case will be considered on an individual basis by the program faculty.

Teaching/Learning Strategies

The objectives of the program are accomplished through the utilization and administration of the following teaching/learning strategies:

1. Lectures covering knowledge-based objectives.

2. Web-assisted courses (Moodle)
3. Laboratory exercises integrated with specific knowledge-based required applications.
4. Clinical rotations and experiences which allow students to gain competence and confidence.
5. Didactic and clinical testing for competency and proficiency.
6. Group and problem-based learning to foster team-building skills.
7. Encouraged participation in student, local, state or other professional activities.

Smoke-Free Campus

A-B Tech is a smoke-free campus as of August, 2007. Most of the clinical settings are also smoke-free. Students must observe smoke-free policies of the college and each clinical site. Students who smoke are NOT entitled to additional break periods during clinical hours to satisfy their smoking needs. If such breaks are taken, the student will be subject to having the time away from clinical assignments counted as a tardy. The smoking student should also be aware that most patients find a smoke-saturated uniform offensive, and in some cases, a health hazard. Students will be sent home with time deducted from the clinical day if they are sent home to change uniforms for this reason.

Students who are reported to be smoking, to include e-cigarettes, and/or vaporizing device, in violation of the campus and clinical site policies will be referred to the Vice-President of Instructional Services for disciplinary action.

Academic Advising

Each first-year student will be assigned to a program faculty member who acts as the student's advisor for academic or other purposes throughout the two-year course.

- Faculty advisor will enter education plans into self-service before the start of registration.
- Faculty advisor is not required to meet with students who are progressing according to their program track.
- Student is expected to seek assistance and counseling at the first sign of any problem, academic or otherwise, that may jeopardize success in the program. Students may also be referred to the A-B Tech Counseling Center as needed depending on the circumstances.
- During advising for the students' final semester, the student must bring their application for completion and the printed program evaluation. This is located in self-service or webadvisor.
- The application for graduation can be obtained from the Bailey building
- A degree will only be awarded after submission of this application.

Degree Awarded and Certification Eligibility

All program graduates are eligible for the Associate in Applied Science degree in Radiography and upon meeting all other requirements, are eligible to sit for the certification examination in Radiography administered by the American Registry of Radiologic Technologists (ARRT). One who passes this national exam and meets all of the other requirements will become a Registered Technologist in Radiography and can use initials R.T.(R)(ARRT) after their name.

Grading System

The Radiography program is based on a 7 point grading scale.

Prolonged Illness

Students must notify the appropriate classroom or clinical instructor each day of an absence until it is established exactly how long the student will be out. Any student who misses more than three consecutive school days of class and/or clinic must obtain proper documentation for the missed time before they will be allowed to return to classes or clinic.

Holidays and Vacations

Radiography students are committed to twenty-one (21) months of full-time study. Within this time, students are eligible for holidays recognized by the College and vacation time during semester breaks. The student should consult the academic calendar that is published in the college catalog and student calendar for the dates of recognized holidays and semester breaks. The student is reminded that up to three inclement weather days may be made up at the end of the fall semester, spring semester and/or during semester breaks (i.e.: spring break) and should be planned for accordingly.

Appointments

Medical, dental, and other appointments should not be scheduled during didactic and clinical times. Appointments scheduled during these times will create tardiness or unexcused absences unless extenuating circumstances prevail.

Change in Personal Information

Please notify the program faculty AND fill out the Change in Vital Data form from Student Services if you have a change in your address, name, or phone numbers of record that you have previously provided. It is critical that we keep this information as up-to-date as possible to make sure you don't miss out on important information.

Communication

Students are required to check their "@student.abtech.edu" email on a **daily basis**. Faculty use this as the means to communicate important information to students outside of the classroom.

Approximate Student Expenses

(As of March 2019 subject to change and some will definitely be increased in the coming year.)

Per Semester	In-state Tuition (16 or more credit hours)	$1,216.00 Fall 2018
	In-state Tuition (per credit hour per semester – Fall and Spring)	$76.00 Fall 2018
	Student Fees (including accident insurance)	$34.00
	Summer Semester Tuition/Fees	$95.00 per credit hr (2018)
	Technology Fee	$48.00
Other Expenses	First Semester Books (books may be purchased on-line)	Approximately $600.00 (RAD Only) $850.00 (with BIO and ENG)
	Books (after 1st Semester)	Approximately $250/per semester
	Physical Exam (after acceptance)	Approx. $125.00
	CAPS Fee-Parking and Security	$10.00
	CPR Course	$85.00
	Immunizations (as needed – must include current influenza vaccinations)	Health Department Buncombe County (March 2019) MMR x 2 ($92.00 per shot) Varicella x 2 ($144.00 per shot) Hepatitis B x 3 ($76.00 per shot) PPD ($29.00) Influenza combo ($40.00) Tdap ($61.00)
	Background Check/Drug Screening Including Medical Manager (after acceptance)	$250.00
	Uniform Shoes	$75.00
	Uniforms (for three sets)	$250.00
	NCSRT Dues – yearly	$25.00 + $5.00 fee
	Student Picture ID	Free
	Holder for Student Picture ID	$10.00
	Markers (2 pairs)	$40.00
Consumable	Consumable learning materials	$330.00
Graduation Expenses	ARRT Exam Application Fee	$200.00
	Graduation Fees	Approx. $50.00

Section 4: A-B Tech Radiography Program Matriculation Sheet

2020 Entering Class

Student Name:

ID #:

Preadmission Requirements

Fall Semester	Date Completed	Transfer	Comments/Grade
RAD 110 RAD Intro & Patient Care			
RAD 111 RAD Procedures I			
RAD 151 RAD Clinical Ed I			
RAD 113 RAD Lab Elective			
ENG 111 Expository Writing			
Spring Semester	Date Completed	Transfer	Comments/Grade
RAD 112 RAD Procedures II			
RAD 121 RAD Image Production I			
RAD 161 RAD Clinical Ed II			
MAT 143 Quantitative Literacy			
COM 120 Intro to Interpersonal Com			
Summer Semester	Date Completed	Transfer	Comments/Grade
RAD 122 RAD Image Production II			
RAD 141 Radiation Safety			
RAD 171 RAD Clinical Ed III			
RAD 281 RAD Clinical Elective			
Fall Semester	Date Completed	Transfer	Comments/Grade
RAD 211 RAD Procedures III			
RAD 231 RAD Image Production III			
RAD 251 RAD Clinical Ed IV			
SOC 225 Social Diversity			
Spring Semester	Date Completed	Transfer	Comments/Grade
RAD 261 RAD Clinical Ed V			
RAD 271 Radiography Capstone			
HUM 115 Critical Thinking			

Date Graduated:

Section 5: Graduation Requirements

In order to graduate from the Radiography Program (RAD) at A-B Tech, the student must:

1. Earn at least a grade of a "C" in each course in the major.

2. Maintain a minimum average of 2.0 (C) quality points on course work presented for graduation.

3. Make at least a 77 on all final exams in the RAD curriculum. One retake per exam will be given with the lower of the two scores being used to average the grade. If the student does not make the minimum score on the retest, a 0 will be used for that section test or exam in the calculation of the final grade.

4. Make at least a 77 on all sections of the RAD 271-Radiography Capstone course and the final exam. One retake per section test and/or exam will be given with the lower of the two scores being used to average the grade. If the student does not make the minimum score on the retest, a 0 will be used for that section test or exam in the calculation of the final grade for RAD 271.

5. Completion of all required clinical competencies.

6. Meet the other college requirements for graduation listed in the current A-B Tech Catalog, including the submission of an application for graduation to the Student Records and Registration Office. The college holds one graduation ceremony in May. Students who do not attend the graduation ceremony must submit a written request to be excused to the President at least two weeks prior to graduation. Students who do not attend graduation must still pay the graduation fee to receive their diploma.

Section 6: A-B Technical Community College Technical Standards for Radiography Students

Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990 provide that individuals with disabilities be allowed "reasonable modifications to policy, practice or procedure" in order to meet the qualifications of the Allied Health and Public Services Division. The intent of the Allied Health and Public Service Division is to educate competent practitioners to work in a variety of Allied Health or Public Service areas. Enrolled students are expected to complete all academic, laboratory, and clinical requirements of their selected program. The purpose of this document is to identify the physical requirements, clinical and lab work environments, as well as workplace interactions deemed essential to the completion of the selected program of study and to perform as a competent student.

If a student cannot demonstrate the appropriate skills and abilities required in their selected program, it is the responsibility of the student to request an appropriate accommodation. The College will provide reasonable accommodation as long as it does not fundamentally alter the nature of the program offered

and does not impose an undue hardship, difficulty, and is not unduly disruptive to the educational process.

Accommodations which are not considered to be reasonable include:

1. making the accommodation or allowing participation poses a direct threat to the health or safety of one's self or others.
2. making the accommodation means making a substantial change in an essential element of the curriculum (educational viewpoint).
3. making the accommodation means a substantial alteration in the manner in which services are provided.
4. making the accommodation poses an undue financial or administrative burden.

Asheville-Buncombe Technical Community College is invested in full ADA compliance. The Disability Services Office is part of the K Ray Bailey Student Services Center. For detailed information contact the Disability Support Services Office at supportservices@abtech.edu or (828) 398-7581. An appointment with the Disability Services Coordinator is recommended in order to discuss any special concerns.

Individuals with disabilities as defined in the Americans with Disabilities Act wishing to make a request for reasonable accommodation, auxiliary communication aids or services, or materials in alternate accessible formats should contact the college ADA Coordinator at the address listed below:

ADA Coordinator, Azalea Building
Asheville-Buncombe Technical Community College
340 Victoria Road
Asheville, NC 28801

Telephone (828) 254-1921
TDD: (828) 254-1921 Ext. 444

ASHEVILLE BUNCOMBE TECHNICAL COMMUNITY COLLEGE
ALLIED HEALTH DIVISION FUNCTIONAL ABILITIES
RADIOGRAPHY

A prospective radiography candidate must demonstrate the physical and psychological ability to provide safe, competent patient care. Every prospective student must assess his or her ability prior to choosing radiography as a career. To understand the physical and psychological qualifications needed for successful radiographers, the functional abilities have been listed below.

In the case of a qualified individual with a documented disability, appropriate and reasonable accommodations will be made unless to do so would fundamentally alter the essential training elements, cause undue hardship, or produce a direct threat to the safety of the patient or student.

Students must certify the ability to meet the functional abilities of the profession by a signed statement in the beginning of the program.

ISSUE	STANDARD	EXAMPLES (RAD PROGRAM)
CRITICAL THINKING	Ability sufficient for clinical judgment.	Utilize radiographic concepts as a basis for determining patient acuity and/or cognitive ability in order to achieve the best possible images. Apply positioning and technical factors taught in the classroom to the clinical setting.
INTERPERSONAL SKILLS	Abilities sufficient to interact with individuals, families and groups from a variety of social, emotional, cultural and intellectual backgrounds.	Establish rapport with patients, instructors and colleagues. Conduct oneself in a composed, respectful manner in all situations and with all persons. Demonstrate skills to remain calm and professional in an emergency/stressful situation. Adapt rapidly to changing environment/stress.
COMMUNICATION	Abilities sufficient for interaction with others in verbal and written form.	Give verbal directions to or follows verbal directions from other members of the healthcare team and participate in health care team discussions of patient care. Elicit and record information about health history and current health state from patients or family members. Recognize and report critical patient information to other caregivers.

ISSUE	STANDARD	EXAMPLES (RAD PROGRAM)
MOBILITY	Physical abilities sufficient to move in one's environment with ease and without restriction.	Possess physical abilities sufficient to move from room to room and maneuver in small spaces; full range of motion to twist/bend, stoop/squat, and reach forward/reach overhead; and stand and walk for extensive periods of time. Possess physical abilities to lift 75 lbs. while performing the following activities frequently – carrying, pushing and pulling from cart height, pushing and pulling from shoulder height. Possess physical abilities to lift 75 lbs. while occasionally lifting from static knuckle height, bench height, ankle height and shoulder height. Possess the physical abilities to wear a leaded apron.
MOTOR SKILLS	Gross and fine motor abilities sufficient to provide safe and effective xxx skills.	Assist in turning and lifting patients. Possess gross and fine motor skills sufficient to provide safe and effective care, position patients, and manipulate equipment. Possess the physical abilities to move fingers and manipulate objects rapidly and quickly.
HEARING	Auditory abilities sufficient to monitor and assess health needs.	Hear normal speaking level sounds Hear auscultator sounds. Hear auditory alarms (monitors, fire alarms, call bells).
VISUAL	Visual ability sufficient for observation and assessment necessary in xxx	Possess the ability to observe patient status, behaviors, and change in skin color. Possess the ability to read digital medical records and equipment settings. Possess the ability to see close up and far away. Possess the ability to differentiate shades of grey. Possess the ability to work in dimly lit rooms.
TACTILE	Tactile ability sufficient for physical assessment.	Performs palpation of anatomical landmarks during patient positioning, as well as vessels for contrast injections. Utilizes touch-screens and computer keyboards for data input.
ENVIRONMENTAL	Possess the ability to tolerate environmental stressors.	Adapts to a variety of clinical settings and equipment. Works in small areas that may be crowded and/or noisy. Practices Standard Precautions and sterile techniques. May be exposed to communicable diseases, body fluids, toxic substances, and/or medicinal preparations. Adjusts to working in extreme temperatures, dependent on procedure or patient condition.

ISSUE	STANDARD	EXAMPLES (RAD PROGRAM)
EMOTIONAL	Possess emotional stability sufficient to maintain composure in stressful situations and assume responsibility/ accountability for actions.	Follow rules of professional conduct set forth in handbook. Demonstrate an intellectual curiosity, enthusiasm, and initiative. Perform exams with accuracy and maintain organization under stressful circumstances, such as increased workload, difficult patient, instrument malfunction, emergency situation, etc. Demonstrate emotional intelligence to remain calm and professional in an emergent and stressful atmosphere. Deliver adequate patient care regardless of patient' race, ethnicity, age, gender, religion, sexual orientation or diagnosis. Demonstrate a positive, respectful attitude toward all patients, peers, and other healthcare workers regardless of appearance, condition, or beliefs. Appreciate constructive feedback. Present self in a composed, respectful manner in all situations and with all persons. Adapt to changes in work environment. Demonstrate ethical behaviors as set forth by the ARRT. Take responsibility for ones actions.

Clinical and Lab Activity Information Table

Job Title: Student

Department: Radiography

Job Requirements	Occasional	Frequent	Constant
Activity: 30 lbs			
Lifting			
Static Knuckle Height	x		
Bench Height	x		
Ankle Height	x		
Dynamic Bench Height			
To the Left	x		
From the Center	x		
To the Right	x		
Carrying		x	
Cart Height			
Pushing		x	
Pulling		x	
Shoulder Height			
Pushing		x	
Pulling		x	
List Frequency Only:			
Sitting	x		
Standing/Walking			x
Climbing Stairs	x		

Job Requirements	Occasional	Frequent	Constant
Ladder	x		
Balance	x		
Stooping	x		
Kneeling	x		
Crouching	x		
Crawling	x		
Reaching Forward		x	
Reaching Overhead		x	
Bended Reach		x	
Other:			
Handling		x	
Fingering (ability to move fingers and manipulate small objects rapidly and quickly		x	
Feeling		x	
Talking			x
Hearing (type: low and high sounds with instrumentation)			x
Seeing Near		x	
(corrected to 20/20)		x	
Distant (color)		x	
Reading			x
Calculating		x	
Compiling		x	

Lifting Frequencies: Other Activities:

Occasional: 1 lift every 30 minutes — Occasional: 0 – 33% (0-20 min/hour)

Frequent: 1 lift every 2 minutes — Frequent: 34 - 64% (21-40 min/hour)

Constant: 1 lift every 15 seconds — Constant: 67-100% (41-60 min/hour)

Clinical and Lab Work Environment Information Table

Job Title: Student

Department: Radiography

	Never	Occasional	Frequent	Constant
Indoors				x
Outdoors				
Temperature:				
Hot		x		
Moderate				x
Constant			x	
Humid/Damp		x		
Dust		x		
Hazardous Chemicals			x	
Steps, Ramps, Stairs		x		

	Never	Occasional	Frequent	Constant
Slippery or Uneven Walked Surfaces		x		
Irregular Work Hours			x	
Departmental Mobility Barriers			x	
Hazardous Working Conditions			x	

Clinical and Lab Work Place Interactions Information Table

Job Title: Student

Department: Radiography

	Never	Occasional	Frequent	Constant
Communicating				x
Interpreting			x	
Investigating			x	
Explaining			x	
Planning			x	
Supervising		x		
Teamwork				x
Work controlled by Supervisor				x
No day-to-day Supervision	x			

**Student will sign acknowledge form for policy.

Section 7: Program Readmission/Course Repetition Policy

The following readmission policy applies to students who receive an unsuccessful grade in the radiography program, or who have voluntarily withdrawn from the program. Unsuccessful grades are defined as any grade earned below a "C".

1. If you receive an unsuccessful grade in a RAD course, you may not proceed to any subsequent course which has the course in question as a prerequisite. You must repeat the course in question before proceeding to the next higher course in the program.
2. All RAD courses are offered only once annually.
3. Since a new class of students is admitted to the program annually, and because of the competitive nature of the program, it will be necessary for students who have received an unsuccessful grade in a RAD course, or those who choose to withdrawal, during their first semester to reapply for readmission to the program for the following Fall. Students who do not pass ALL RAD courses during the first semester must repeat ALL RAD courses, due to the ever evolving nature of healthcare.

4. Readmission of students who have progressed beyond the first semester, but who have been unsuccessful in a subsequent semester is dependent on space availability in the class, demonstration of proficiency in a variety of clinical procedures, and other issues pertinent to each re-entering student.
   a. Audit the clinical course prior to semester of re-entrance. The student is expected to uphold all requirements set forth by the course syllabus of the audited class (provided space is available).

   OR

   b. Perform a set number of proficiencies, to be determined by the program faculty, before attempting any additional competencies. These proficiencies will be in addition to any course required proficiencies.
5. The student will be unable to continue with the program any time a grade of "D" or below is received in a major area course. All failing grades in required courses must be repeated successfully before graduation.
6. You are allowed two attempts to pass a RAD class. If you make a grade of "D" twice for the same course, you will not be allowed to repeat the course and you will be dropped from the Radiography program.
7. If it has been more than three years since the student has been in the program, the student must apply for re-entry into the program. In addition, any RAD class must be repeat if completed prior to 18 months.
8. Students who have been dismissed from the program for disciplinary reasons will not be considered for re-admission.
9. Each returning student must provide documentation of current CPR certification and complete a current medical form to include TB testing and vaccination update. Each returning student must also complete the background check and drug screening process required by the clinical affiliates, at students' expense.
10. A student re-entering the program will be responsible for following the program handbook policies and procedures for their expected graduating class.

Section 8: Transfer Credit/Proficiency Testing

Students who wish to transfer from another JRCERT approved program that is also SACS or equivalently accredited must:

1. Meet the general requirements for credit transfer and advanced standing established by A-B Tech as described in the current college catalog.
2. Meet the same academic and technical requirements as those who enter the A-B Tech radiography program.
3. If any doubt exists with the department chairperson as to the transferability of the course for which credit is being sought, the applicant may request proficiency testing. This testing may be written and/or practical and may be administered by the chairperson or faculty member designated by the chairperson. A grade of 77% on such examinations is required to demonstrate mastery and the appropriateness of transfer. This policy covers didactic courses only, as clinical courses are not transferable.
4. If transfer or proficiency testing is being sought, a clinical vacancy must exist in the appropriate class, either first or second year.
5. No credit will be transferred for courses completed at a program not approved by the JRCERT and/or not accredited by SACS or an equivalent agency.
6. Evidence of successful completion of courses from a JRCERT and SACS (or equivalent) accredited RAD program must be within the last 18 months.
7. All transfer students are responsible for meeting all radiography program requirements such as purchasing the required uniforms or obtaining a physical examination, immunizations, background check, drug screening, etc. and will be held accountable under the same policies and procedures.
8. Student must provide a letter of recommendation from their previous program director.
9. All course content must overlap with course content of A-B Tech's RAD courses

The American Registry of Radiologic Technologist (ARRT) states in the didactic and clinical competency requirement 4.1.3 Elements of Competence:

> Demonstration of clinical competence requires that the program director or the program director's designee has observed the candidate preforming the procedure independently, consistently, and effectively during the course of the candidate's formal education program.

As a result of the ARRT requirements we will not allow the following clinical courses, in which clinical competencies are performed, to be transferred into our program:

- RAD 151
- RAD 182
- RAD 161
- RAD 171
- RAD 251
- RAD 261

The following will be allowed to be transferred into our program if didactic and lab competencies associated with each course are proven to the satisfaction of the program director or the program director's designee.

- RAD 110
- RAD 111
- RAD 112
- RAD 121
- RAD 122
- RAD 131
- RAD 211
- RAD 231
- RAD 241
- RAD 245
- RAD 271

All general education courses will be allowed to be transferred into the RAD program pending respective department approval.

Section 9: Advanced Placement

Advanced placement into an educational program is intended to provide a pathway to ARRT certification and registration eligibility for individuals who have previously completed an educational program not accredited by a mechanism recognized by the ARRT, or who have completed an accredited program but who are no longer eligible for certification and registration due to unsuccessful examination attempts or expiration of their eligibility time period.

Advanced placement recognizes that these individuals differ from individuals who have never completed an educational program and may be admitted to a program at a point other than entry level. Advanced placement requires assessment of the individual's current didactic knowledge and clinical skills in order to determine the advanced placement point of entry into the educational program.

1. Assess the individual's current didactic knowledge using the same competency evaluation methods employed for non-advanced placement students during the accredited educational program. Didactic competency evaluation generally involves the administration of written examinations to determine whether an individual understands the subject matter;
2. Evaluate the individual's current clinical knowledge and skills using the same competency evaluation methods employed for non-advanced placement students during the accredited educational program. Clinical competency evaluation must include actual performance of radiologic technology procedures. An individual must be physically on site at the program's clinical facility for some period of time to facilitate completion of the acclimation requirement.
3. Document the initial assessment of the advanced placement student's compliance with ARRT's didactic and clinical competency requirements;

4. Document the advanced placement student's completion of the remaining didactic and clinical ARRT competency requirements;
5. Submit a copy of the initial didactic and clinical competency evaluation documentation and the documented completion of the individual's completed didactic and clinical competencies (identified in #3 and #4 above) with the student's *ARRT Application for Certification*.

Candidates completing an advanced placement program, must have earned an Associates (or more advanced) degree from an institution accredited by an agency recognized by the ARRT.

Section 10: Pregnancy Policy

Purpose

The Radiography program has a policy of educating students about the hazards of radiation and importance of proper radiation protection methods prior to their rotations at the clinical affiliates. This action is taken to minimize the radiation exposure of all students and to comply with the ALARA (AS LOW AS REASONABLY ACHIEVABLE) concept. The following pregnancy policy has been established in compliance with this concept. Because a fetus is particularly sensitive to radiation, especially during the first trimester of pregnancy, certain information should be given to each female student and specific policies will be followed in the event of a possible pregnancy.

Rationale

Available literature suggests that the harmful effects of radiation to a fetus are possible at all stages of pregnancy, but are most severe during the first three months. According to Medical Radiation Biology by Pizzarello and Witcofski as well as many other recognized texts: "Exposure of the developing embryo to ionizing radiation may produce growth retardation, death and/or congenital malformation."

Policy

1. ALL students will follow proper radiation safety procedures. The A-B Tech Radiation Protection Guidelines will be reviewed with each student during the first semester of the program and they will sign a statement that they have been read and understood.
2. The student will be considered a declared pregnant worker (student), after she notifies the program director **voluntarily** in writing. This written declaration requires that the embryo/fetus dose be limited to 0.5 rem during the entire pregnancy. The ordinary annual A-B Tech student dose is well below this limit. A student may also "undeclare" their pregnancy in writing with no reason given. This will remove the fetal dose limit of 0.5 rem during the pregnancy.
3. After giving her written declaration of pregnancy, the student will be informed of the above rationale and potential for harm to the fetus. The student will also be given a copy of NRC Regulatory Guide 8.13- "Instruction Concerning Prenatal Radiation Exposure" to read and discuss with the department chairperson. The student will then be given the option of leaving the program and re-entering the following year (if space is available, per our accreditation regulations) or remaining in the program and strictly adhering to the following guidelines:

a. The pregnant student must faithfully wear an additional radiation monitor at waist level to monitor fetal radiation dose. This monitor will be provided by the program at no cost to the student.
b. In accordance with the NCRP Report #116, during the entire gestational period, the effective dose equivalent to the fetus from occupational exposure of the expectant mother should not exceed 0.05 rem a month. Federal regulations also state that the dose to an embryo/fetus should not exceed 0.5 rem for the entire pregnancy. A pregnant student who reaches or exceeds this limit must be completely withdrawn from clinical rotations and will be required to make up the missed time after delivery.
c. Pregnant students are expected to actively participate in all program classes, clinical rotations, and activities up until the day of delivery in accordance with current program attendance policies. The student will participate in regular clinical assignments/rotations, including fluoro and portables, since the normal exposure level does not exceed 0.5 rem per year. The student will not be able to attend clinic if physical restrictions prevent her from performing routine clinical duties such as lifting, wearing lead aprons, etc.
d. The student is expected to return to classes as soon as she is physically able. A written doctor's note must be submitted for absences extending beyond a two-week period. The student is responsible for all class work covered during her absence and for obtaining necessary material and assignments from instructors or fellow classmates.
e. The student is expected to return to clinical rotations as soon as she is physically able. The time should not exceed six (6) weeks post-partum, unless advised otherwise by her physician. A student must submit a written statement from her physician releasing her to perform clinical duties prior to returning to scheduled rotations.
f. No student will be allowed to graduate until all required clinical competencies are complete. Missed clinical time must be made up according to a schedule created by the program faculty.

4. Neither the College, its personnel, the clinical affiliates, nor staff will be held responsible for any injury to mother or child due to radiation exposure nor continuing with the program should the student make the decision to remain in the program during pregnancy.

Section 11: Code for Professional Conduct-Radiography Program

Examples of professional behavior are given below, but not limited to these examples.

Students will refrain from **lying**, (deliberately make an untrue written or oral statement or deliberately create a false impression through words or actions), **cheating**, (intentionally mislead or defraud, or to endeavor to mislead or defraud another. To use unauthorized assistance to submitted work or examinations designed to represent one's own effort), **stealing**, or **intentionally misleading or deceiving** anyone as to the known facts, **plagiarism**, (to steal and present the ideas or words of another as one's own without crediting the source) and **intent**, (to have in mind as a purpose or goal. An assessment of intent is essential to consideration of the ethical violations previously defined. However, denial of intent does not provide exoneration from the charge,

since the intent can be inferred from the circumstances in which an unethical act was performed). This is seen as an unethical behavior. The profession has no tolerance for unethical behavior per the ARRT. Any student found to be participating in lying, cheating, stealing, or intentionally misleading or deceiving, plagiarism, or intent, will automatically receive an F in the course.

In addition, the following behaviors will also result in the student receiving an F in the course.

1. The program faculty support and will uphold the college and division codes of student conduct. In addition, the student will be responsible for observing the American Society of Radiologic Technologists Code of Ethics. Any violation of the code of conduct will result in dismissal from the radiography program.
2. Radiography students shall make every effort to protect all patients from exposure to unnecessary radiation
3. Radiography students shall provide services with consideration of human dignity and the uniqueness of the patient, unrestricted by consideration of age, sex, race, creed, social or economic status, handicap, personal attributes, or the nature of the health problem.
4. Radiography students shall judiciously protect the patient's right to privacy and shall maintain all patient information in the strictest confidence. Current federal regulations apply to the security of patient health information and certain violations will result in fines or prison sentences.
5. Radiography students shall not diagnose, but in recognition of their responsibility to the patient, they shall provide the physician with all information they have relative to the patient that can lead to proper radiologic diagnosis.
6. Radiography students shall be responsible for reporting unethical conduct and illegal professional activities.
7. Provide services without regard to race, creed, national origin, sex, age, handicap, disease entity, social status, financial status, or religious affiliation.
8. Protect the confidential nature of information gained from educational, practice, and investigation activities unless sharing such information could be deemed necessary to protect the well-being of the person served.
9. Radiography student shall only utilize their personalized marker, or assigned generic markers, in the clinical and lab setting.

Any violations of the following behaviors will result in a range of actions, from warnings and/or being sent home (with attendance and point deductions), to dismissal from the program.

1. Radiography students shall conduct themselves in a manner compatible with the dignity of their profession. Respect must be shown for clinical and didactic instructors as well as supervising technologists. Constructive feedback should be accepted in a positive manner. Insubordination in any manner will not be tolerated. Insubordination may include, but is not limited to the following examples: failure to follow the requests of the faculty, clinical instructors, or clinical staff; refusing to adhere to dress code or other policies, etc.

2. Abide by the regulations and policies of the program and training sites.
3. Exhibit an attitude of respect, concern and cooperation toward peers, faculty, and staff.
4. Practice personal grooming and hygiene.
5. Accept responsibility for one's own work and results; demonstrate willingness to accept suggestions for improvement.
6. Recognize and respect the role and competencies of other professionals and cooperate with them for the benefit of the person served.
7. Demonstrate sound judgment commensurate with his or her level of training and experience.
8. Maintain physical, mental, and emotional composure in difficult situations.

Section 12: Radiography Organizations

Professional Organizations

Radiography students are encouraged to join the following organizations. Student annual dues for the ASRT and the NCSRT are at a much reduced rate to facilitate membership and participation.

North Carolina Society of Radiologic Technologists (NCSRT)

This is the state organization that keeps us informed specifically about state and regional concerns relating to the profession. Publications include the “Tarheel Technology Highlights”. The NCSRT sponsors one annual meeting and a series of one-day seminars throughout the year. Membership is encouraged, but voluntary, for all A-B Tech Radiography students.

American Society of Radiologic Technologists (ASRT)

This is the national organization that helps provide the guidelines for professional education and keeps us updated with the latest information available on the profession. Publications include "Radiologic Technology" and the "Scanner". The ASRT also maintains an extensive website with lots of useful information for radiography students at www.asrt.org. Membership is encouraged, but voluntary. The following is the ASRT Code of Ethics adopted for practicing radiographers.

A-B Tech Radiology Club

This is the first opportunity for involvement at the College-level with your fellow students. Activities include fund-raising and participation in A-B Tech sponsored SGA activities. Each A-B Tech club must participate in SGA meetings on a regular basis to obtain funding to assist with SGA-funded activities. Up to $1500.00 may be given each year based on each club's own fund-raising activities. Each class will elect three officers (President, Vice-President, and Treasurer) to serve as student government representatives. They will coordinate class activities and serve as class representatives to the faculty as well as the A-B Tech Student Government Association. Clubs approved to operate on campus must have their charters renewed each fall.

The officers will stay in office the remaining semesters of the program. They may schedule to meet with the entire radiography group of students or faculty on an as needed basis. Scheduling is done through the

assigned SGA faculty advisor. All radiology students are expected to participate in Radiology Club activities and in class meetings.

ARRT Certification

The American Registry of Radiologic Technologists (ARRT) is the nationally recognized certifying body for the profession. Upon completion of the curriculum, the student will be eligible to sit for the Registry examination in Radiography. The exam is administered by computer-based testing and will be set up at a specified testing center with the testing time, site, and date arranged after the application is received by the ARRT. A-B Tech graduates will be eligible to take the examination immediately following their spring completion of program requirements. The Department Chairperson will supply the ARRT application forms at the beginning of the fifth semester.

PART 2 Class Policies

Section 1: Electronics

- **The use of a camera from any electronic device is strictly prohibited.**
- **The use of electronic devices for personal reasons during class time is strictly prohibited.**
- **Any recording device must be approved by the instructor prior to the beginning of each class. This must be addressed at each class meeting.**

Any violations to this policy, unless special arrangements are made with faculty prior to the start of class, will result in the student receiving a warning for the first infraction, the second infraction the student will be required to meet with division Dean, and the third infraction will result in the student being dismissed from the course.

Section 2: Class Dress Code

All Radiography students are required to adhere to the proper dress code whenever attending the clinical portion of their training. The student should refer to the clinical portion of this handbook for exact requirements. Classroom attire should be neat and conservative, and should not distract from the learning process. Shoes must be worn at all times.

Section 3: Total Number of Contact Hours

The average total time per week that a student is actually in contact with instructors is approximately 30-40 hours per week. This includes classroom, lab, and clinical hours. The average week of involvement in some aspect of the program is Monday through Friday from 8:00 AM - 4:00 PM. One rotation during the program, students will be required to participate in a night-clinical rotation. (Monday and Tuesday, 3:30PM – 12:00 midnight, and Wednesday, 4:00PM – 9:30PM). Also, one weekend rotation is required (Monday, Saturday, and Sunday, 10:00AM – 5:30PM). On rare occasions, the student may also be scheduled for late afternoon or early evening labs. At no time will the student exceed 40 hours of combined clinic, classroom, or lab involvement.

Section 4: Class Attendance

Regular and punctual attendance is expected of all students for them to achieve their potential in the radiography program and to develop desirable personal traits necessary to obtain employment in any allied health profession. For these reasons, full-time attendance is mandatory to all didactic classes, laboratories, and clinical rotations.

Students who are absent more than 12 weeks, for whatever reason, cannot receive credit for the course.

Attendance Policy—Classroom and Lab

1. The student is responsible for contacting the program faculty prior to the scheduled class time to report an absence or expected tardy. Communication can be in the form of an email, text, or a phone call to the appropriate instructor. The extension numbers are listed in the course syllabus. Messages **must not** be sent through another student, unless extenuating circumstances prevail.
2. Failure to properly report an absence will result in an unexcused class absence and the student will receive a "0" on any test, quiz, or graded assignment given on that day.
3. Students are responsible for all material covered in scheduled classes whether or not they were in attendance. They assume the task of obtaining the material they need from classmates or the instructor. A grade of "0" will be recorded for any graded assignment, other than a test, that is missed due to an absence, including but not limited to childcare issues, transportation issues, hospitalization, and/or family emergencies.
4. If the student missed a test and proper call-in procedure was followed, he/she should be prepared to take it on their first day back to classes or clinic. The student will be given a make-up test which could be short answer or essay type questions depending on the nature of the material. The student should check their email on the day of the missed test to check for the scheduled re-test. The scheduled re-test may even be at 8 A.M. the following morning.
5. To receive course credit, a student should attend a minimum of 90 percent of the contact hours of the class. Upon accumulating absences exceeding 10 percent of the course contact hours, the student will be dropped from the class. If the student doesn't follows the official withdrawal procedure, they will receive a grade of "F". See the current A-B Tech College Catalog for further information. The 10% number of hours will be included in each course syllabus and will be discussed at the beginning of each semester.
6. Safety is our highest priority. Classroom doors will be closed and locked at the beginning of each class. Classrooms will not be open until break. Students not on time will have to wait until the next scheduled break to enter. The student will accrue the entire time spent outside the classroom as an absence.
7. If a student must leave the classroom during the scheduled class, the student cannot reenter the classroom until the next break.
8. A tardy is defined as arriving late for class (any minutes), leaving early (any minutes,) or being away from class without permission during class hours. It is departmental and college policy that three tardies is the equivalent of one full day's absence from class. For every third tardy, the student will have one full day's absence counted for the course. These accumulated absences due to tardiness, regardless of tardy time (i.e.: 1 min, 7 min, 15 min, etc.) will count toward the 10% mark for that course.
9. In the event that an instructor is not in class and arrangements have not been made, the class is dismissed after ten minutes. A roll must be signed by the students before leaving. In the event that the instructor is not present for the second hour, the students may again sign the roll and leave for the remainder of the class. **Students are encouraged to check faculty offices on the second floor of the AHWD building before signing the roll and leaving.**
10. The student is also responsible for adhering to the A-B Tech Code of Classroom Conduct. See the most current version of the A-B Tech Student Handbook and Calendar and College Catalog.

Part 3 Clinical Policies

Section 1: Admission to Clinic

A required component of the allied health division is the student's participation in the clinical placement at area hospitals, clinics, and offices. Successful completion of clinical rotations is necessary to meet program graduation requirements. Allied Health students will not be conferred a degree, diploma or certificate unless they can successfully complete the clinical placement and all other aspects of the program.

Clinical affiliates hold patient care at a high level of responsibility. They must insure there is no risk to their patients before allowing an individual to participate in providing healthcare. Accordingly, clinical affiliates have their own standards in determining who may participate in a clinical program at their location. The College does not play any role in determining whether a student satisfies the standards set by the clinical affiliate.

Admission to the Allied Health Division

Admission into an allied health program is a two phase process. A student is not admitted into the Allied Health program until each phase is completed.

1. The prospective student must be admitted conditionally to the program.
2. The prospective student must be accepted into the clinical placement. Individual clinical placements have their own acceptance requirements separate from the college (e.g. drug testing, criminal background, etc.) If a prospective student is denied acceptance for clinical training privileges at any healthcare institution, for any reason, that student is ineligible to proceed with the course of study in the allied health division.
    a. Once a student is conditionally admitted, a background check and drug screening will be conducted by a third-party entity chosen by the College. Prospective student shall deal directly with the third-party entity and will be responsible for all financial costs.

    b. The third-party entity will report all results directly to the clinical affiliate. Prospective student may also obtain a copy of the report for their personal review. The healthcare institution will then inform the College whether the prospective student's clinical privileges are approved or denied. If denied, the student will not be admitted into the program.

Loss of Clinical Placement While in an Allied Health Program

At any time after acceptance into an allied health program, if clinical privileges are revoked for any reason, the student must withdraw from radiography program and will not be allowed to apply to any other programs within the allied health division.

Clinical Onboarding Process

The clinical affiliates have an onboarding or orientation process for students. The clinical orientation is unique to each facility and must be completed in a certain timeframe before the student rotates to that site. The onboarding process can include completing documentation, watching videos, quizzes, and/or additional background and drug screening. The student must complete the required orientation for each facility before rotating and within the established timeframe. For example, a clinical affiliate may require orientation to be completed 30 days before a student starts. If the student does not complete the orientation on time, the student will not be allowed to rotate at the assigned clinical site, **and no other clinical arrangements will be**

made. 15 points will be deducted from the clinical participation portion of the grade for each day missed until the assigned clinical site orientation is completed. The days missed will count toward the 10% point for the clinical course.

Legal Liability Insurance

Due to the nature of the direct patient contact each student will have while on Clinical Assignments, A-B Tech provides each student with coverage for malpractice insurance while on Clinical Assignment. This coverage is not in effect when the student is working for a Clinical Affiliate for pay outside of scheduled Clinical Assignments.

Section 2: Program Clinical Overview

Each semester the student will be enrolled in clinical education courses during which they will be graded on the completion of clinical competencies, proficiencies, evaluations, and clinical daily worksheets. Grading information on each specific clinical course will be provided in the clinical outline for the course. Students enrolled in the A-B Tech Radiography Program will be scheduled and rotated through the Clinical Affiliates by the Program Faculty in consultation and agreement with the Clinical Instructors and Clinical Site Instructors.

Code of Conduct for Clinical Participation

Clinical sites can revoke your clinical training privileges at any time they feel you are a danger to patient care or you have demonstrated noncompliance to their policies or procedures. If clinical privileges are revoked for any reason, the student must withdraw from the allied health division. The student's successful completion of clinical rotations is required for program completion.

The following guidelines are published to aid the student in determining proper professional conduct while performing clinical rotations. Unless otherwise noted, any violations of these behaviors will result in a range of actions, from warnings and/or being sent home (with attendance and point deductions), to dismissal from the program.

1. Report to the clinical assignment in an alert condition adhering to proper sign-in/sign-out procedures with the proper person
2. Be in assigned area at the designated time wearing the proper complete uniform
3. Obtain permission before leaving clinical assignments for breaks and/or meals
4. Any time spent in unassigned areas will result in attendance and point deduction
5. Refrain from the use or possession of drugs or alcoholic beverages before or during clinical assignments or while on campus. Any odor resembling alcohol on a student's breath will not be tolerated while on clinical assignment, even residual odors from previous use. This is a representation of poor patient care practice and the student will be immediately referred to the college for disciplinary action, including dismissal from the program. The student will not be allowed to remain at the clinical site smelling of alcohol. In addition,

no points for attendance will be given for the day. Additional drug screening may be done in any situation in which student's behavior gives cause to believe illegal drug use may be involved.

6. The use of a camera from any electronic device is strictly prohibited.
7. NOT sleep on clinical assignments. If student falls asleep, they will be asked to leave the clinic site immediately and time and point deductions will accrue accordingly
8. NOT engage in theft of any articles from the clinical affiliate.
9. NOT engage in immoral conduct.
10. Adhere to appropriate guidelines as published by the college for initiation of grievances concerning any aspect of clinical coursework
11. Maintain a professional attitude when in the presence of other students, staff technologists, program faculty, physicians, and patients at all times
12. Observe smoking policies for each clinical affiliate.
13. Smoke breaks are NOT permitted during clinical rotations and a smoke saturated uniform is considered as offensive and will result in the student being sent home to change with time and points deducted.
14. Student is required to properly wear personal radiation monitor. Student WILL NOT be permitted in the clinical setting without personal radiation monitor. Attendance and point deduction will apply.
15. Student is required to wear designated ID badge from A-B Tech as well as any site required badge.
16. NOT chew gum while on clinical assignment but mints may be appropriate.
17. Eat only in areas designated for that purpose.
18. Lunch breaks will be assigned by the clinical instructor. Due to the nature of the x-ray department it is often impossible to predict a schedule of meals and breaks in advance.
19. Lunch breaks will not take place in x-ray lounges
20. Use of cell phones or ANY other electronic device is NOT permitted during clinical hours. A five point deduction per occurrence without warning will be taken from the daily clinical worksheet.
21. Use of institution phones is prohibited
22. In case of emergency student may provide the clinical coordinator as a contact. The phone number is 828-620-3649.
23. No computer use for personal reasons is allowed, for example, using clinical site computers, smartphones, or other electronic devices to access the internet or to access personal email. A five point deduction per occurrence without warning will be taken from the daily clinical worksheet.
24. NOT loiter in the department of the clinical affiliate at times not specified for clinical assignment.
25. Students will be expected to accept assignments by the clinical instructor commensurate with the student's capabilities, or to take direction from an individual designated by the clinical instructor.
26. Students are expected to always follow proper channels to address problems they may experience in the clinical setting or classroom. Social networking (Facebook, Twitter, etc.) during clinical hours and/or referencing clinical agencies or their employees at any time on a social network is unprofessional and is not an acceptable avenue to address these concerns. Any violation is grounds for disciplinary action, including dismissal from the program. You are encouraged to follow the proper channels to discuss clinical or didactic situations that you feel need to be addressed by talking to the clinical instructor, supervisor, or A-B Tech faculty.

- Social Networking opportunities (Facebook, Twitter, LinkedIn, etc.) can create positive avenues for communication and sharing of professional activities and information. Please keep these suggestions in mind should you decide to use social media on your "off time" to discuss your experience as a medical imaging student: Be professional, use good judgment, and be accurate and honest in your communications. Errors, omissions, or unprofessional language or behavior reflect poorly on you, the College, and/or your clinical site, and may result in liability for you, the college, and/or your clinical site. Be respectful and professional to fellow students, faculty, clinical staff and patients. You should also remember that many employers are "googling" prospective employees or may be a participant in the same network.

27. NOT have visitors, including family and children, visit you during clinical hours or “hang out” waiting for you to get off.
28. Park in designated parking areas for assigned clinical rotations.
29. NOT engage in technologists personal communication
30. Follow supervision policies
31. Call labs, comps, and proficiencies BEFORE procedure is started

Section 3: Confidential Information

All hospital and patient records are confidential in nature. Requests for information concerning a patient should be referred to the department supervisor or designate. Students are expected to maintain the confidentiality of all hospital records in a professional manner in accordance with clinical and federal standards. If a student is found guilty of willfully violating patient confidentiality, he or she will receive an F for that course and may also face legal implications by the clinical institution and/or the patient. The student will be required to sign a confidentiality statement at the end of this handbook which will be kept on file. Training on HIPAA confidentiality issues will also be required by the program and each clinical affiliate.

Section 4: Student-Patient Relationship

Any violations of these behaviors will result in a range of actions, from warnings and/or being sent home (with attendance and point deductions), to dismissal from the program.

1. Student is required to introduce themselves to the patient (and the Radiologist, when appropriate).
2. Patients should never be left alone on the radiographic table.
3. Students should never discuss positioning, etc., in front of patients. If there are questions, the student should call the technologists aside or wait until the patient has left the room.
4. The student shall NEVER take practice images on any patient or other personnel.
5. The personal life of the student or his/her peers should never be discussed in front of or within earshot of a patient and/or family members.
6. Student is not allowed to remove personal articles (such as jewelry) from patient.
7. Every effort should be made to make the patient as comfortable as possible at all times.
8. Patient privacy should be provided for the duration of the examination.

9. The student-patient relationship should remain professional at all times.
10. Proper facility procedures should always be followed when physical restraints must be used on a patient.
11. NOT "flirt" or behave in an inappropriate manner with patients
12. NOT leave patients unattended while undergoing diagnostic procedures.
13. NOT accept any type of gratuity or "tip" from a patient or a patient's family.

Section 5: Image Identification Markers

Students will use initialed right and left markers in order to properly identify the radiographic procedures they perform. The student notify the program faculty within 24 hours if either marker is lost or destroyed so an extra set of markers may be ordered at the current market price at the student's expense. A point will be deducted per day for every day the student is without personal markers. The student is reminded that another technologist's markers should never be used in place of his or her own. An intentional misuse of markers will result in the student receiving an F in the course.

Section 6: Equable Learning Policy (Exams)

All students, male and female, will be offered the opportunity to participate in clinical mammography rotations/Hysterosalpingogram procedures. The program will make every effort to place a male student in a clinical mammography rotation/Hysterosalpingogram procedure if requested; however, the program is not in a position to override clinical setting policies that restrict clinical experiences in mammography/Hysterosalpingogram procedures to female students. Male students are advised that placement in a mammography rotation/Hysterosalpingogram procedures is not guaranteed and is subject to the availability of a clinical setting that allows males to participate in mammographic imaging/Hysterosalpingogram procedures. The program will not deny female students the opportunity to participate in mammography rotations/Hysterosalpingogram procedures if clinical settings are not available to provide the same opportunity to male students.

Section 7: Clinic Attendance Policy

A-B Tech Radiography students will attend all Clinical Assignments as scheduled by the Program Faculty. Appropriate methods will be used by the Clinical Instructors to keep an accurate record of the clinical attendance for each student. Each student is expected to abide by the sign-in and sign-out policies enforced at each facility. Due to the parking situations at the clinical affiliates, it is recommended that the student arrive 15-20 minutes early in order to be able to sign-in without being tardy.

The student is reminded it is his or her responsibility to follow the correct sign-in and sign-out procedure. IF A STUDENT IS FOUND TO BE VIOLATING THIS PROCEDURE, ALL PARTIES CONCERNED WILL BE DISMISSED FROM THE PROGRAM.

Clinical Tardiness--As a result of feedback from various Radiography department managers and supervisors, we have developed an attendance policy to correlate with expectations of a radiographer in the workplace.

1. Students will complete Daily Worksheets every scheduled clinical day. A maximum of 15 points will be added to the participation portion of the clinical grade for every day the worksheet is completed. The total points accumulated for the semester will be used in determining the overall clinical grade. A range of points will be provided every semester as part of the clinical course outline to be used to determine the participation portion of the grade. The student will receive "0" points for every day of absence or when the worksheet is not completed or turned in. **An additional five (5) points will be deducted for each day the student does not call in by 9 AM to notify the appropriate person of their absence.**
2. Anytime a student misses more than three consecutive days of class and/or clinic due to illness, the student must obtain proper medical documentation indicating they are physically able to return to class/clinic.
3. Make-up clinical time will not be scheduled or considered.
4. Faculty will discuss possible make-up in the event of extenuating circumstances. Such circumstances would include absences resulting from hospitalization, weather related absences, or other extreme situations. **Unapproved, unscheduled make-up time will not be accepted.** Students may not be able to perform any portion of a clinical competency or proficiency exam when doing make-up clinical time.
5. In the event of a missed absence that is excused (i.e. with a doctor's note). The student is required to make arrangements with faculty within 24 hours of missed day. **Failure to do so will result in absence being unexcused.**
6. Approved activities such as registry review seminars or professional society meetings will not be deducted from the participation portion of the clinical grade pending prior approval of the department chairperson and presentation of follow-up documentation upon request. The program faculty will make attendance requirements for these activities.
7. The College's 10% rule for Allied Health programs is also in effect for clinical absences. The number of hours will vary with the semester. All time missed, whether tardy or absent, accrues toward the 10% mark for that course. Once 10% of the time for that course is missed, the student will be dropped from the course. Please note a student must have completed all pre-requisites and co-requisites for each course before being allowed to proceed in the program.
8. No student will be in clinic during observed holidays of the College or clinic site.
9. Meals and Breaks--Coffee breaks, lunch, and dinner schedules will be assigned at the discretion of the Clinical Instructor at each Clinical Affiliate. The student is reminded that with the nature of the professional responsibilities of Radiography it is often impossible to predict a schedule of meals and breaks in advance. The student is responsible for observing the meal/break schedules of their assigned clinic site. The intent here is that the students should not expect to take longer meal or break times than what the staff techs get at that clinical site. The student will be expected to remain busy in their assigned area. If the workload is finished for that area for the day or there is a long delay expected before the next patient, the student may be reassigned.

- The students are provided the equivalent of a 30 minute break during the day. Other breaks are at the discretion of the clinical instructors and may or may not be given dependent on the workflow or work pattern of the clinical site.
- The student must have their assigned staff tech sign them in and out at meal times. This will be done on the daily worksheet. Failure to do so will result in point deductions for that day.
- If the workload is low in the morning or afternoon, the student should not ask to take a break as soon as the workload picks up. There will be days when the student will not be able to take a break in addition to the mealtime. This is the nature of the profession. Everything usually equals out eventually and the next clinic day may have a very low workload.
- In the event the workload is low and extra time is available for the student to use to their advantage, they are encouraged to perform labs, review anatomy for patient comps/labs and/or otherwise use their time productively.
- Students are not allowed to take lunch or breaks in department lounge. If their assigned technologist is in the lounge, the student should remain in the department after letting the technologist know where they will be.
- The student will be allowed to bring textbooks and other program materials to bring out for study during slow times, **but are expected to return to their duties as soon as patients arrive in their assigned area.** Novels, magazines, or any other kind of non-program related literature is not allowed. Time spent with unapproved literature will result in attendance and point deduction.
- If a student comes back from a break smelling of smoke, he/she may be asked to leave at the discretion of the clinical instructor. Any time missed will result in a tardy and will count towards 10% and points will be deducted from the daily worksheet.

Proper Clinical Call-In Procedure

The student is responsible for contacting the clinical site and clinical instructor at least 15 minutes before the expected time for the clinical rotation to begin. The call should include your name, reason for absence and expected date of return to class or clinic. When the student calls the clinical site it is suggested he/she speak with a clinical instructor, if available, or speak with the department supervisor in charge. It remains the student's responsibility to notify the appropriate person as soon as possible. **The student must notify the appropriate person by 9 AM on the day they are absent from clinical or an ADDITIONAL five (5) points will be deducted for each day they do not call in.**

Section 8: Point System

Clinical Tardiness--As a result of feedback from various Radiography department managers and supervisors, we have developed an attendance policy to correlate with expectations of a radiographer in the workplace.

1. Habitual tardiness to clinical assignments will not be tolerated. All time missed due to tardiness will be documented on the daily clinical worksheet and will affect the number of points given for the day. A responsible student will arrive to clinic in plenty of time to assure they are in their assigned areas ready to

begin at the assigned time. Long travel time, traffic, or missing the shuttle will not be considered as adequate reasons for tardiness.

2. A tardy is defined as arriving late (any minutes), leaving early (any minutes), being late coming back from a meal/break (any minutes), or being away from assigned clinical duties without permission. Ten (10) points will be deducted from the Daily Worksheet portion of the clinical grade for each tardy up to half a day. Students who arrive half a day or more late, or leave half a day or more early, will have 15 points deducted. Exception: See Inclement Weather Policy.

   Example:

   --***Student Sally*** decided to visit the hospital gift shop during her lunch break. She lost track of time and was signed back in 10 mins late……Tardy.
   --***Student Ken*** turned off his alarm clock by mistake and as a result was 1 hour late to clinic…….Tardy. (In addition, 5 pt. deduction if Ken did not call before 9 a.m.)
   --***Student Stewart*** was in his first semester. He wanted to catch the first showing of the newest superhero movie coming out so he left clinic at 10:30 a.m…….Absent.

   1st Semester Clinic 8am-2:30pm……half a day = 3 hrs
   2nd Semester Clinic 8am-4:00pm……..half a day = 3 hrs 30 mins
   3rd Semester Clinic 8am-4:30pm……half a day = 4 hrs
   4th and 5th Semester Clinic 8am-3:30pm……..half a day = 3 hrs 30 mins

3. Daily Worksheet Infraction--may be given without warning at the discretion of the onsite Clinical Instructor. Possible Daily Worksheet Infractions include but are not limited to:

   Tardiness……..-10pt
   Use of Personal Electronic Devices……..-5pt
   Improper Use of Clinical Site Computers……..-5pt
   Repeated Violation of any Clinical Guideline……..-5pt
   Failure to Complete Repeat Log……-5pt
   Failure to Complete Back of Daily Worksheet…….-4pt

Section 9: Clinical Dress Code

The personal appearance and demeanor of the Radiography students at A-B Tech reflects both the College and Program standards and are indicative of the student's interest and pride in the profession. There is no place for fashion trends in radiography, especially with the fairly conservative area our patient population will come from. Appearance of the radiographer is the first impression of your skills that your patients will have. Use it to your advantage. Each student is expected to follow these general guidelines:

1. Male and female students will purchase a program-approved uniform. Specific details about the colors and styles available for purchase will be provided at orientation.

2. Uniforms should be clean, properly fitted and have the appearance of being pressed. If not, student will not be allowed to stay at clinic.
3. Shoes must be clean and polished at all times. Low-top, athletic shoe-type, all-black, all-leather (even tongue) uniform shoes are allowed. They must not display stripes or prominent brand-name labels. Clogs, open-toed, or sandal-type shoes without a back are not allowed for safety reasons.
4. A liked colored, embroidered, warm up scrub jacket may be worn with the uniform when necessary.
5. Surgery or scrub-style uniforms will be worn only during the performance of the surgery assignment. If student is assigned an OR rotation he/she should arrive at clinic site in plenty of time to dress out and be ready to go at the beginning of the shift.
6. Black mid-calf length socks or black hose must be worn with the uniform. Sports socks or footies will not be permitted for reasons of practicality and professional appearance.
7. Grooming
    - Hair will be neat, clean, and dry at all times. Long hair must be kept tied back and out of the face.
    - Mustaches and/or beards must be kept neatly trimmed.
    - Scarves and other hair ornaments are unacceptable, except for discreet clasps or barrettes.
    - Make-up should be discrete and well applied.
    - Perfumes, scented (perfumed) lotions, scented (perfumed) powders, or after-shaves are not allowed.
    - Hair coloring and styling should be of a conservative nature.
    - Students must exhibit proper hygiene and be free of body odor.
    - Rings should be limited to one per hand. No necklaces, bracelets, or medallions (other than Medic-Alert) are allowed for reasons of personal safety.
    - One pair of small, stud-type earrings that do not extend below the earlobe may be worn. If worn, earrings must be worn in the earlobe only (gauges must be solid centered and flesh tone). No other visible type of body piercing, including tongue piercing, is acceptable.
    - All visible tattoos must be concealed while performing clinical rotations.
    - Fingernails must be kept short, clean, and neat for reasons of proper hand washing and patient safety. Fingernails must not extend beyond the tip of the finger. Colored nail polish is not acceptable. Acrylic or Gel nails are not allowed due to the possibility of transmission of bacterial and fungal infection.
    - Gum chewing is NOT allowed during clinical rotations, however mints may be acceptable.

8. Identification
    - Students are NOT allowed at clinic without A-B Tech student ID badge. Attendance and point deduction will apply.
    - Students are required to wear a Mission or VAMC ID badge at all times during their clinical rotation at these sites.
    - Students should keep the ID badge free from obstruction by the placement of markers, stickers, etc.
    - The student's name should be visible at all times.
    - Each student must have required to have tops and lab coats embroidered with the A-B Tech Radiography Program emblem.

The program faculty will have a "zero" tolerance for dress code infractions. Any student reporting to the Clinical Affiliate in improper uniform or attire will be sent home by the program faculty or clinical instructor. This will be documented in accordance with published attendance/tardy policies and procedures. The clinical instructors and program faculty have the final authority for decisions made concerning questionable attire. Dress code infractions will be documented and will be reflected in the participation portion of the final clinical grade. Repeated infractions of the same policy are an example of insubordination and will result in counseling in accordance with program procedures.

Section 10: Clinical Course Goals

Throughout the two years in the Radiography Program at A-B Tech, the student will participate in the clinical education portion of the curriculum in order to:

a. Acquire competency and proficiency in a wide variety of diagnostic radiographic procedures through application of classroom theory and laboratory skills to the actual practice of technical skills in a clinical setting.
b. Develop and practice professional work habits and appropriate interpersonal relationships with patients and other members of the health care team.

The main purpose of the clinical education course in any Radiography Program is to develop a transfer of knowledge from theory learned in the classroom to the actual performance of skills in the clinical setting with the ultimate goal of the student obtaining a level of job-entry competency by the time of graduation.

This transfer of knowledge is accomplished by a series of clinical assignments in all aspects of diagnostic radiographic procedures along with the correlation of classroom and laboratory experiences.

In order to measure the student's ability to perform at satisfactory levels of competency, a method of competency evaluation has been established to meet the particular needs of this program. In brief, the student will be evaluated by clinical staff and A-B Tech instructors in their performance of specific radiographic procedures as well as on their performance during the complete clinical rotation. As stated before, the ultimate goal is to graduate competent radiographers who can perform at a level expected by prospective employers.

The student must realize the production of a finished radiograph and the clinical staff observation of the student during the performance of that particular radiographic procedure are by no means the only aspects of clinical education that must be evaluated. In addition, the following affective skills play an important role in the overall performance of a student in clinical education courses: organization skills, initiative, cooperation, self-confidence, composure, enthusiasm, and overall attitude.

These characteristics are evaluated with a Clinical Attitude and Ability Evaluation Form that will be completed at the end of each room rotation.

Sequence of expectations in Clinical Courses

- During the first two semesters, the student will engage in laboratory sessions during the Radiographic Procedures courses that will allow the student the opportunity to demonstrate correct radiographic procedures by the use of simulation on classmates and actual radiography of phantoms (under the direct supervision of a college instructor). After demonstrating competency in the laboratory setting, the student will then be permitted to perform the radiographic exam for competency at the clinical affiliates. This does not mean that the student cannot assist the technologist in the performance of radiographic procedures not covered in the classroom or lab. In fact, the student will be expected to actively participate in every exam completed in their assigned area.
- These policies will be discussed in depth at the beginning of each procedures course.
- The student is reminded that the majority of time spent in the first phase of clinical experience will consist of a transition from an observational or passive role, to an active participatory one of assisting the radiographer in radiographic examinations. The student's rate of progress will depend on the ability they possess to understand and perform the various assigned tasks.
- After gaining experience in various procedures, the student will gradually move into a performance state in which he or she will actually be performing the procedures under the direct and indirect supervision of a radiographer.
- The student is reminded that the satisfactory performance of an exam for competency is only the beginning of gaining true proficiency. The student will also be responsible for maintaining their level of competency for each exam at each clinical affiliate. Details of the required numbers and types of competency and proficiency exams will be found in the course syllabus.

Section 11: Lab and Competency Procedures

Lab Procedures

When a student feels they are ready to perform an exam unassisted they will perform a Patient Lab.

Student Responsibilities:

- MUST “CALL” THE EXAM FOR A LAB BEFORE THEY EVEN GET THE PATIENT!!
- Student must bring patient into room
- Verify patient information
- Perform entire exam ***unassisted*** including technique
- Let patient go
- Clean room

- Student has supervising technologist fill out top portion of Lab sheet
- Student takes Lab sheet to supervising technologist and/or clinical instructor to go over anatomy of exam

Technologist Responsibilities:

- ***Observe*** procedure
- Technologist can intervene at ***any time*** they deem necessary for whatever reason but this will result in the student not being able to count the exam for a Lab
- Approve all images obtained
- Perform all paperwork/computer-work associated with the exam

Once a student has satisfactory completed a Lab and satisfactory reviewed the anatomy with a supervising technologist and/or clinical instructor they are allowed to perform a competency on the exam. When a student feels ready to perform a competency on an examination, **the student will give a Competency Evaluation to the designated qualified radiographer** with which the student will demonstrate their skill and competency on a radiographic examination previously covered and practiced in a classroom course and laboratory setting and also performed for a satisfactory Lab.

Competency Procedure

Student Responsibilities:

- MUST "CALL" THE EXAM FOR A COMPENTENCY BEFORE THEY EVEN GET THE PATIENT!!
- Competency form must be given to the supervising technologist before beginning exam
- Student must bring patient into room
- Verify patient information
- Perform entire exam ***unassisted*** including technique
- Let patient go
- Clean room

Technologist Responsibilities:

- ***Observe*** procedure
- Technologist can intervene at ***any time*** they deem necessary for whatever reason but this will result in the student not being able to count the exam for a Competency
- Approve all images obtained
- Perform all paperwork/computer-work associated with the exam
- Complete Competency form and place in designated space or give to the designated clinical instructor

The exam must have been declared as a competency exam and the form must have been given to the supervising technologist before the exam begins in order for it to be counted.

Section 12: Grades for Clinic

Comp Grades

If a student receives a “0” on any portion of a competency, it will be considered a failed attempt and an automatic grade of “0” will be assigned. The student will be required to repeat the exam, and the “0” will still be averaged in.

If a student receives any grade below a “95” for the total score of the competency it is considered a failed attempt and a “0” will be assigned. The student will have an additional “0” averaged in for each failed attempt.

In order to be considered competent the student must perform the exam and receive a “95” or higher on the grade. There is no set limit to the number of times the student may repeat the exam for competency; however, remediation will be given for each failed attempt. Students are urged to be confident of their ability to perform a competency examination before they request to be evaluated so that they are able to complete the task at an acceptable level the first time. The student is reminded that any student-caused errors or repeat radiographs demonstrate lack of competency and will result in a failed attempt.

The student is responsible for notifying the supervising technologist and/or clinical instructor when a successful competency has been performed in order to go over and be graded for the evaluation section. If the student is not successful in the evaluation part of the competency this will also result in a failed competency. **It is the responsibility of the student to make sure the clinical instructor has all failed competency attempts paperwork. This is an ethical issue. If student is found not reporting a “0” competency, a 15 point deduction will be applied per incident.**

The final grade must equal at least 95% in order for the competency to be considered completed. There is no set limit to the number of times the student may repeat the exam for competency; however, they should recognize the need for remediation if more than two attempts are needed. Students are urged to be confident of their ability to perform a competency examination before they request to be evaluated so that they are able to complete the task at an acceptable level the first time. The student is reminded that any student-caused errors or repeat radiographs demonstrate lack of competency and will result in a need for a repeat. In evaluating the competency, the student is expected to perform all aspects of the examination **entirely unassisted (including technique)** and must perform the exam with at least 95% competency in order to pass. The student is responsible for maintaining specific competency records by having the supervising technologist and/or clinical instructor complete the form for each exam AS SOON as the competency is completed. The student is then responsible for turning each completed competency into the Radiography office. Daily worksheet tallies will be monitored to ensure each student has an adequate number and selection of procedures performed at their facility to achieve competency. An "incomplete” may be given in situations where the clinical instructors/program faculty has determined an inadequate number or selection of exams

for comps; otherwise, the competency portion of the student clinical grade will be calculated using the scale provided in the clinical course outline for that semester.

The student is responsible for completing the total required number of competencies (mandatory and elective) before the end of the last clinical rotation. A grade of "I" will be given if the required numbers of competencies in each category are not achieved. The student must then return the next semester on a schedule created by the program faculty until the required number of clinical competencies is finished. A maximum of 6 weeks will be given for the completion of the comps. The incomplete grade automatically changes to an "F" after that date. A grade of "I" will mean that graduation will be delayed as well as the eligibility date for the ARRT exam.

Continued Proficiency

After a student has successfully completed a competency evaluation, they will be expected to perform the same examination at a later date and on other patients to ensure continued proficiency. These continued proficiency exams will contribute to the overall clinical grade after the first semester. The number and types of proficiency exams required to achieve the clinical grade will be included in the outline for each clinical course. If it is noticed a student frequently produces sub-optimal images of an exam previously comped on, the clinical instructor has the authority to pull the original competency.

Continued proficiency exams must be completed with the original level of competency (95%) in order to be considered complete. The student must "declare" when they are about to perform an exam for proficiency. Otherwise, a proficiency cannot be given later after an exam has been performed unless the declaration has been made. The student is responsible for keeping a log of their proficiency exams for the semester. The clinical instructor or program faculty should be the evaluator of proficiency exams whenever possible. Proficiency exams may be repeated, however, the clinical instructor or program faculty has the option of removing the original competency for any exam if the student demonstrates difficulty in demonstrating continued proficiency. The student will then be responsible for repeating the original competency exam that was removed in addition to the other semester competency requirements. Repeated exams are documented on daily worksheet. Clinical Instructors will discuss all repeats with students and perform remediation as needed.

A proficiency exam must be completed using the routine for the clinical site at which it is attempted. For example, if the routine calls for 4 view knee, the student can only use the exam for ONE proficiency.
A proficiency exam cannot be counted if any of the images had to be repeated for student-caused errors including inaccurate technique, positioning errors, etc.

Terminal Competencies

The purpose of performing final or terminal competency evaluation is to assure at least a minimum level of competency on a variety of commonly performed routine radiographic examinations. This helps to verify that

the final semester curriculum student has maintained continued proficiency in exams that have been previously "comped" or “checked off”. Each student will be required to perform seven terminal competency exams with image evaluation during the last semester of clinical experience.

Student Performance Evaluations

(Competency/Clinical Attitude and Ability)

Student Performance Evaluations are based upon specified levels of technical and professional competency and provide an opportunity for guidance and assistance when student improvement is necessary. All Clinical Attitude and Ability Evaluations and competency evaluations will be signed by the student and discussed with them by the Clinical Instructor and/or Program Faculty.

During the course of the radiography program, the student will be expected to show progression and development in the required technical and affective skills. The student performance evaluations will be used to help identify potential problem areas for the student as evidenced by scores marked in columns 1 or 2. The counseling received by the student will be progressive when low evaluation scores are received. The first time a low mark is received in a specific section will result in verbal counseling, the second time a low mark is received in the same section, it will result in the completion of a written counseling form to be placed in the student file, **the third time in the same section will result in a grade of 0 recorded for the evaluation portion of the clinical course.**

Any student who feels they have received an unfair evaluation from a technologist is encouraged to speak with the clinical instructor about their concerns. If the problem is not resolved, the student should discuss the evaluation with the faculty clinical coordinator and then if necessary, the department chairperson.

Section 13: Clinical Affiliates

A-B Technical Community College has articulation agreement with and use the following facilities for directed clinical experience. Students will rotate through the clinical affiliates for four-to-eight week rotations. Some of these clinical sites may require an hour drive from campus. All hospital clinical affiliates participate voluntarily in hospital accreditation programs such as The Joint Commission (TJC), formerly known as the Joint Commission of Accreditation of Healthcare Organizations (JCAHO), or their equivalent. Clinical site rotations are decided by faculty without bias. Additional sites may be added during students’ progression through program.

1. Memorial Mission Hospital -Asheville, NC
2. Saint Joseph's Hospital-Asheville, NC
3. Charles George Veterans Administration Medical Center-Oteen, NC

4. Margaret R. Pardee Medical-Hendersonville, NC
5. Mission Imaging Services-Asheville, NC
6. The McDowell Hospital-Marion, NC
7. AdventHealth (former Park Ridge Hospital)-Fletcher, NC
8. Transylvania Regional Hospital-Brevard, NC
9. Blue Ridge Regional Hospital-Spruce Pine, NC
10. Reuters Children's Hospital-Asheville, NC
11. Mission Ortho-Trauma-Asheville, NC
12. Mission Pardee Health Campus-Fletcher, NC
13. Mission Imaging Services-Clyde, NC
14. Mercy Urgent Care West-Asheville, NC
15. Mercy Urgent Care South-Asheville, NC

Directions to Clinical Affiliates

Mission/St. Joseph - Asheville, NC
Students are expected to park in the designated parking areas provided by Mission/ St. Joseph. You need to arrive in the designated A-B Tech parking lot by 7:30 am to allow plenty of time to get to the correct clinical site or in case you have to look for parking.

Mission Imaging Services - Asheville, NC
534 Biltmore Avenue
Located right across the street from the Biltmore Avenue Parking Deck for Memorial Mission Hospital. Park in the uppermost parking area.

Charles George VA Hospital - Oteen, NC
1100 Tunnel Road
Travel l-40 East to exit 55 (Oteen). Turn left at the end of the exit ramp. At the stop light, turn left onto US-70 West-Tunnel Road. At the third stop light, turn right, go through the metal gates. Follow this road to the back parking lot of the VA Medical Center.

Margaret R. Pardee Memorial Hospital - Hendersonville, NC
Travel south on l-26, Take exit 44 (Fletcher/Mountain Home). Turn right at the end of the ramp. Travel about 15 minutes and you will start to go into Hendersonville. When you get to the intersection where you see the

drug store, turn right and make a quick left onto Justice Street. This road leads in front of the Out-patient center and behind the hospital.

AdventHealth (formerly known as Park Ridge Hospital) - Fletcher, NC Naples Rd.
Travel south on l-26, Take exit 44 (Fletcher/Mountain Home). Take a right at the top of the ramp. Turn left at the Shell station (stop light). Travel approximately 1 ½ miles, the hospital is on the right.

The McDowell Hospital - Marion, NC
100 Rankin Drive
Take I-40 East to exit 81(Sugar Hill Road). Turn left onto Sugar Hill Road at the stop light at the end of the exit ramp. Turn left at the 4th stop light. Follow the signs indicating employee parking toward the left and rear of the hospital. Follow this road to the parking area.

Transylvania Regional Hospital - Brevard, NC
Take I-26 South to the airport exit. Turn right onto NC 280 West. Stay on this road until you go into Brevard. Watch for the hospital sign which will be at the second intersection after you reach Brevard. Take a left at the stoplight onto Hospital Drive. Park in the back of the parking lot across from the hospital entrance.

Blue Ridge Regional Hospital-Spruce Pine, NC
Take I-26 North to the Burnsville exit. Turn right onto US 19. Turn right onto Altapass Hwy. Turn left onto Hospital Drive.

Reuters Children's Hospital-Asheville, NC
Travel South on Hendersonville Road. Turn right onto Vanderbilt Park Drive. Follow through the roundabout. Reuters is towards the back of the complex.

Mission Ortho-Trauma-Asheville, NC
1 Doctors Drive

Mission Pardee Health Campus-Fletcher, NC
2695 Hendersonville Rd
Arden, NC 28704
Travel South on Hendersonville Road. Turn right into parking lot between YMCA and Urgent Care.

Mission Imaging Services-Clyde, NC
360 Hospital Drive, Suite 104
Clyde, NC 28721

Mercy Urgent Care West—Asheville, NC
1201 Patton Ave
Asheville, NC 28806

Mercy Urgent Care South—Asheville, NC
1833 Hendersonville Rd
Asheville, NC 28803

Clinical Affiliate Parking

Each student is responsible for following the parking requirements of each clinical affiliate and for realizing the consequences of their actions if proper procedures are not followed. Parking is at a premium at most of our affiliates and it is rightfully expected that priority should be given to patients and visitors. Referral to the Vice-President for Student Services for disciplinary action will be given for those who continue to violate parking policies. You will be giving specific instructions before your rotation begins**.**

If student is found not parking in A-B Tech designated sites, a 15 point deduction will be applied per incident

Section 14: Clinic Supervision Policies

The student is responsible for the following policies. Any intentional disregards will result in an initial verbal warning. The second infraction, a written warning will be given which will be filed in the student's folder. The third infraction will result in referral to the Vice-President for Student Services.

Direct Supervision

Until a student achieves and documents competency in any given procedure, all clinical assignments shall be carried out under the direct supervision of qualified radiographers. A qualified radiographer is defined as being an individual certified by the American Registry of Radiologic Technologists, or a suitable equivalent. The parameters of direct supervision are:

a. A qualified radiographer reviews the request for examination in relation to the student's achievement.
b. A qualified radiographer evaluates the condition of the patient in relation to the student's knowledge.
c. A qualified radiographer is present during the conduct of the examination.
d. A qualified radiographer reviews and approves the radiographs.

Indirect Supervision

After demonstrating competency, students may perform procedures with indirect supervision. Indirect supervision is defined as that supervision provided by a qualified radiographer immediately available to assist the student regardless of the level of student achievement. This is further defined as the presence of a

qualified radiographer adjacent to the room or location where a radiographic procedure is being performed. This availability applies to all areas where ionizing radiation equipment is in use. This includes portable and operating room procedures.

Approval of Radiographs

It is the responsibility of the supervising technologist to approve all student films, supervise a repeat exam, and dismiss a patient after completing an examination. The student may perform these duties ONLY after being instructed to do so by their supervising technologist.

Repeat Radiographs

In support of professional responsibility for the provision of quality patient care and radiation protection, unsatisfactory radiographs shall be repeated only under the direct supervision of a qualified radiographer, regardless of the student's level of competency.

Each student is responsible for abiding by the above supervision and repeat radiograph policies. In a situation where the student feels he or she is placed in a situation that is in direct violation of these policies, the student should report it to the clinical instructor.

Section 15: Exposure Safety

Accidents/Exposure to Communicable Diseases

Any accident or incident that occurs while a student is on Clinical assignment, which results in patient, hospital personnel, or student injury, and/or damage to equipment, must be reported immediately to the Clinical Instructor and later to the Program Director. The student must cooperate with and abide by the regulations of the Clinical Affiliate and the College in dealing with any type of accident/incident. To diminish the possibility of an accident occurring, students will be instructed in the safest methods of performing routine radiographic procedures and duties to include proper handling of patient with regard to blood borne pathogens or other disease. Clinical coordinator will discuss specifics at the beginning of the first semester and review material again during third semester. Material will be posted on Moodle site for every clinical course.

****Student will sign acknowledge form for policy.**

Section 16: Radiation Safety

Radiation Safety Overview

The instructions are provided to you so that we can comply with the state rules for radiation control as enforced by the North Carolina Division of Radiation Protection. These state rules require that our radiation

producing equipment meet specific requirements and also require that certain procedures be followed and records kept. A copy of the entire manual of regulations called "The North Carolina Regulations for Protection Against Radiation (NCRFPAR)" is always available for you to read and review. It is located in the radiography faculty office pod, Room 215 of the AHWD building.

The intent of these guidelines is to establish procedures to minimize radiation exposure of radiography students and patients in the energized laboratory setting. You are required to know the procedures outlined and be able to demonstrate their application. This handout also provides guidelines for the use of the equipment in the energized lab and information about personnel monitoring. You will be asked to sign and date a statement that you have been informed and understand these guidelines. This signed statement will be kept in your file in faculty offices. You are also responsible for learning proper radiation safety procedures for your clinical rotations. Several General Radiation Safety Guidelines are provided in this handout, however, other specific information for the clinical settings is provided in your program handbook and in the Radiography Introduction course. You will also have an entire course in Radiation Protection in the Fall Semester of the second year of the program.

The rules also require that our x-ray facility be registered with the state. This notification is on file in radiography faculty office pod, Room 215 of the AHWD building.

All operators of x-ray machines are responsible for following the radiation safety procedures outlined below. Rene Brooks is the Program Radiation Safety Officer and has the responsibility and authority for overseeing matters relating to radiation protection. The RSO also confirms all training and serves as the contact person with the state agency. Employees or students should submit all radiation questions or concerns about radiation safety to the RSO.

Guidelines for the Operation of Energized Lab Equipment

Energized laboratory equipment shall be operated with the authorization of department faculty only.

1. Radiographs will be obtained of provided phantoms or laboratory equipment only based on assignments made by the program faculty. NO RADIOGRAPHS OF HUMANS WILL BE OBTAINED. FACULTY SUPERVISION IS REQUIRED WHEN RADIOGRAPHIC EXPOSURES ARE MADE.
2. Always close the door before making an exposure after making sure everyone is out of the lab room.
3. When making an exposure, <u>always depress the rotor part of the switch first</u>. Then you may depress the exposure part of the switch until you hear the exposure indicator. Do not release the exposure switch until you make sure the beeping sound has stopped. Be careful when making long exposures and do not let up on the switch too soon.
4. Always warm-up the x-ray unit properly before making any exposures. The proper warm-up technique is as follows:

   200 mA <u>Large Focal Spot</u>, 70 kVp, 1 second exposure

Make one exposure, wait 5 seconds, then make another exposure, wait 5 seconds and make one more exposure for a total of three exposures.

5. All equipment found in the lab is expensive, some of it costing hundreds of thousands of dollars. All students will be expected to handle it in a careful and considerate manner. Always return the equipment used to its proper location.
6. If at any time a student is not treating the equipment properly with the upmost care or if the equipment is damaged due to negligence or horseplay he/she will be sent to the Dean for disciplinary action.
7. The x-ray machine is equipped with devices to limit radiation exposure. These devices include filters that reduce unnecessary low-energy radiation from the primary beam and collimators that restrict the size of the x-ray beam. Do not alter, remove tamper with, or defeat these devices, or in any way cause needless radiation exposure.
8. The x-ray equipment is checked regularly and is in compliance with the regulations set by the NC Department of Human Resources-Department of Radiation Safety.
9. All students are required to wear personal radiation monitors while in lab. Student is required to properly wear personal radiation monitor. Student WILL NOT be permitted in the lab without personal radiation monitor. Attendance deduction will apply.

Any violations of these behaviors will result in a range of actions, from warnings and/or being sent home (with attendance and point deductions), to dismissal from the program.

Radiation Safety at Clinic

1. Always wear the personnel monitoring device provided to you by the program faculty. Never wear anyone else's monitor. Wear the monitor on your collar and keep it outside a lead apron if one is worn. When not in use, store you monitor in a radiation-free area.
2. Student is required to properly wear personal radiation monitor. Student WILL NOT be permitted in the clinical setting without personal radiation monitor. Attendance and point deduction will apply.
3. If you suspect there has been an excessive exposure or radiation incident immediately contact your supervising technologist or clinical instructor. This individual should immediately contact the RSO for facility.
4. Always try to keep your radiation exposure as low as you can. Always be aware of where you are standing and how long you stay in a radiation area. Do not enter or remain in a radiation area unless it is necessary.
5. Under ordinary circumstances, no one should be allowed in the room with the patient during an x-ray examination. If other persons are needed for the examinations, they must be wearing monitors and/or protective devices. They must follow safe radiation procedures and shall keep out of the direct beam. Whenever possible, use mechanical or other safe holding devices when a patient or image receptor

must be held during an exposure. If a person must be selected to hold, select a person who is not pregnant or potentially pregnant, is over the age of 18, and has seldom held a person during x-ray examinations. Students must not hold image receptors during any radiographic procedure.

6. **Students should NOT hold patients during an exposure**. **Student MUST not hold image receptors during exposure.** This is in accordance with JRCERT standards.
7. Stay in the control booth or other designated "safe" area during each exposure.
8. Always maintain visual and aural contact with the patient.
9. Restrict the x-ray beam to the area of clinical interest. The beam size must not be larger than the image receptor.
10. Use a centimeter-measuring (caliper) device for each patient to determine the thickness of the body area to be x-rayed. Using these measurements, check the technique chart or manual at the control panel of the machine to determine the proper settings for mAs and kVp. Don't depend on memory for the proper technique. The technique chart must be updated as needed.
11. Do not perform fluoroscopy without the immediate supervision of a physician properly trained in fluoroscopic procedures.
12. All students in a room during fluoroscopy shall wear a lead apron.
13. Whenever a student is assigned to do a portable exam, he or she shall take along a lead apron to be worn during the exposure.
14. The doors to all radiographic rooms must be closed before an exposure is made.
15. ALL PERSONS, especially children or adults in the child-bearing age, MUST BE GONADALLY SHIELDED unless it interferes with the study being performed.

Any violations of these behaviors will result in a range of actions, from warnings and/or being sent home (with attendance and point deductions), to dismissal from the program.

Section 17: Student Dosimetry

Students are expected to always wear the radiation monitor provided by the program while on clinical assignments. The monitor should not be left in an area where it is exposed to excessive conditions such as heat or moisture. The student is responsible for bringing their monitor with them as directed to the clinical site or campus in order to exchange them for new monitors. Student is required to properly wear personal radiation monitor. Student WILL NOT be permitted in the clinical setting without personal radiation monitor. Attendance and point deduction will apply.

Current monitor reports will be available to the student within (30) school days following receipt of the data. The monitor must be turned in to the program faculty in order to be able to sit for the final exam in the last semester. The monitor should always be worn at the neck level and outside of the lead apron if one is worn. Accumulated dose reports are maintained permanently on all students.

The student is reminded that the intentional exposure of any monitoring device is punishable by state and federal laws. Any student found guilty of making such exposures will be referred to the Vice- President for Student Services for disciplinary action. In such a case, the program faculty will recommend that the student be dismissed from the program. Further information will provided in the A-B Tech Lab and Radiation Protection Guidelines provided to each student in the fall semester.

Personnel Monitoring

As required by State Regulation 15A NCAC 11, Rule .1614, each individual who enters a restricted area under such circumstances that he or she receives, or is likely to receive, a radiation dose of 10% of the limits documented in State Rule .1604(a) (5 rem/yearly) will be provided an appropriate monitoring device. Each individual under 18 years of age shall be allowed an annual occupational dose of 500 millirem/yearly.

OSL monitors shall be provided Landauer. The monitor will be changed quarterly. Records of exposure shall be maintained by the RSO. All personnel occupational radiation reading shall be made available for participant review within 30 days of their receipt and review by the RSO. The provided monitors are for use for clinical rotations only.

In accordance with ALARA procedures, the personnel monitoring "action" Level One for one quarter is 100 millirem as reported on the quarterly report from Landaurer. If an individual exceeds these limits, they shall be informed on radiation policies to restrict and prevent re-occurrence. All notifications will be documented by memo from the program faculty (see sample below). A Level Two notification will be given if the quarterly report shows an exposure of 250 millirem or greater. A more thorough review of work habits is performed at this notification level (see sample below).

Never wear your monitor when undergoing any type of medical or dental radiographic procedure as a patient. Monitors are intended to measure occupational exposure only. In the event you lose your monitor, notify the program director immediately to arrange for a replacement. Your clinical rotations will be restricted (with possible deduction of clinical grade) until you receive the replacement.

Remember that the monitor does not act as a warning device or a radiation prevention device. Their sole function is to document whatever exposure an individual may receive as part of their work with radiation sources.

Records of the quarterly and yearly cumulative exposure received by faculty and students are kept on file in faculty offices. A permanent copy of the total cumulative exposure report will kept on file for all program graduates. This information may be requested by future employers. The program will release this information after receiving a signed release form from the graduate.

**Student will sign acknowledge form for policy.

Memorandum

TO:

FROM: A-B Tech Radiography Program Faculty

SUBJECT: Level One Radiation Exposure

The intent of an ALARA (as low as reasonably achievable) program is to maintain exposure to radiation at levels that are as low as feasible. Our radiation safety program is based on the premise that radiation exposure is not risk free and therefore, exposure should be kept to levels that are permitted by the State, the Nuclear Regulatory Commission and other regulatory agencies. ALARA is critical to current radiation protection philosophy.

You are being sent this memo because you have received at least 100 millirems on your last quarterly radiation monitoring report from Global Dosimetry for the period of:

Your actual exposure was:

Your dose is relatively low and below regulatory limits, but indicates a need to review work procedures for possible reduction of exposure. Remember to apply the basic rules of time, distance, and shielding to keep your exposure as low as possible.

Please keep this report for your records. A copy will also be kept in your program file.

Memorandum

TO:

FROM: A-B Tech Radiography Program Faculty

SUBJECT: Level Two Radiation Exposure

The intent of an ALARA (as low as reasonably achievable) program is to maintain exposure to radiation at levels that are as low as feasible. Our radiation safety program is based on the premise that radiation exposure is not risk free and therefore, exposure should be kept to levels that are permitted by the State, the Nuclear Regulatory Commission and other regulatory agencies. ALARA is critical to current radiation protection philosophy.

You are being sent this memo because you have received at least 250 millirems on your last quarterly radiation monitoring report from Global Dosimetry for the period of:

Your actual exposure was:

Your dose is above our Level Two limit and indicates a need to review work procedures for possible reduction of exposure. Please reply to the following questions and return the form as soon as possible so we may evaluate any factors affecting your exposure. Always remember the principles of time, distance, and shielding to help reduce your exposure!!!!

1. Was the monitor placed or stored near radiation?

2. Did you accidentally expose yourself to a beam of radiation?

3. Did you hold a patient during a radiation exposure?

4. Were you involved in procedures requiring unusually high exposure to radiation?

5. Please describe any unusual incident or provide any additional information that will help explain this exposure:

Please keep this report for your records. A copy will also be kept in your program file.

Part 4: Program Faculty Information

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