Volunteer State Community College
Radiologic Technology Program
Advisory Committee Handbook
2016 – 2017

Preparing Tomorrow’s Workforce Through Partnership with Business/Industry

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Section I Preface

President’s Welcome

Thank you for your interest in participating on our Advisory Committee. Our faculty and staff rely on seasoned input from a range of community professionals to ensure that Volunteer State Community College has the latest information on which to base our program decisions.

We depend on our advisory committee members to share with the College the latest trends in the area’s workforce. Advisory committee members are also active participants in preparing our students for internships, service experiences and other pre-employment activities. Occasionally we may also ask that you participate in program or college accreditation processes. Finally, and perhaps most importantly, advisory committee members help share with the community the compelling story of our high quality career/technical education programs.

This handbook was developed based on faculty, staff, and advisory committee input. The purpose of the handbook is to align the advisory committee process with our College vision. Your active participation will help us achieve that goal.

On behalf of the faculty, staff, and students of Volunteer State Community College, we thank you for your interest and involvement in this very important endeavor.

Jerry L. Faulkner, Ph.D.
President
Volunteer State Community College
Volunteer State Community College History

The establishment of a state community college at Gallatin involved the cooperative work of many civic leaders and citizens of Sumner County as well as State officials. A unified proposal for a college was presented by Robert L. Wendling, leading a Sumner County delegation, to the Tennessee Higher Education Commission in Nashville on September 11, 1967.

This local initiative anticipated future General Assembly action to authorize and appropriate funds. Upon the recommendation of State Education Commissioner J. H. Warf, Governor Buford Ellington presented the college legislation to the 1969 General Assembly, and it was adopted. Following this action, the Tennessee Higher Education Commission on June 2, 1969 authorized the State Board of Education to establish a community college in Sumner County.

Commissioner Warf and his staff members, T. Wesley Pickel and Hal R. Ramer, accompanied by THEC Chairman John R. Long, Jr., and THEC executive John Folger, visited Sumner County to inspect four prospective sites provided by the county. City and county civic leaders hosted the visit. On July 29, 1969, Commissioner Warf notified Sumner County Judge I. C. McMahan that a 100-acre tract bought the property from Louis Green, Sr., and deeded it to the State on December 4, 1969. In accordance with State Board of Education requirements, the County also provided $250,000 toward initial construction costs, the City of Gallatin agreed to extend utilities to the site, and the City and County agreed in perpetuity to protect surrounding land zoning and area environmental conditions compatible to a college, along with the provision of police and fire safety services.

On May 8, 1970, Dr. Hal Reed Ramer was elected by the State Board of Education as the founding president of the newly authorized college, effective July 1, 1970. For the preceding seven years, he had been assistant state commissioner for higher education. President Ramer proposed to the Board and Chairman Warf that the new college be named Volunteer State Community College, and this was approved by the board on July 2, 1970. Groundbreaking ceremonies for the first four buildings, Hardaway Construction Company, contractor, were held on November 5, 1970. Pending completion and occupancy of the initial campus facilities in early 1972, temporary operations were located in the Cordell Hull Hotel building in Gallatin. Utilizing the hotel and the educational facilities of several Gallatin churches, the College began instruction in the fall of 1971 with 581 students. In 1972, the General Assembly established the Tennessee Board of Regents as the governing board for the State University and Community College System, at which time the central control of the College transferred from the State Board of Education to the Regents System. On February 1, 2003, Dr. Warren R. Nichols became Volunteer State’s second President.

The College has experienced phenomenal growth in enrollment, curricula, staff, program, public service, facilities, and quality, into this, the thirty-fourth year of its operation. The main campus of Volunteer State is now comprised of sixteen buildings. Numerous off-campus
operations extend the College's instruction and public service roles throughout its multi-county area. Since its 1971 inception through the current academic year, more than one hundred thousand persons have attended the College.
Volunteer State Community College Statement of Mission

Volunteer State Community College is a public, comprehensive community college offering associate degrees and technical certificates. The institution is committed to excellence in serving the citizens of northern Middle Tennessee. Volunteer State provides quality innovative educational programs; strengthens community and workforce partnerships; addresses the needs of a global society; promotes cultural and economic development; inspires lifelong learning and prepares students for successful careers, university transfer, and meaningful civic participation through the use of exemplary faculty and staff.

The College offers Associate Degree career programs in business, early childhood education and health science, plus university parallel programs in over 50 major areas. Technical Certificate programs specifically designed for job-entry skill development and workforce skill enhancement are also offered.
Program Introduction

The program is five semesters of full-time study. It includes didactic classroom courses as well as extensive clinical laboratory experience in departments of radiology at participating clinical affiliates. Required class schedules are planned and implemented in a manner to assure required didactic and clinical requirements do not exceed 40 hours per week.

The program is designed to develop compassionate and competent professional radiographers. Didactic classes are taught on the Gallatin campus and clinical education is performed at one of the many clinical affiliate hospitals. The clinical experience is typically eight hours per day, two to three days per week throughout the entire program. Training and experience are provided in routine and special radiographic imaging procedures.

Students are required to submit documentation of the following clinical access requirements: (1) pass a Criminal Background Check, (2) pass a urine drug screen, and (3) complete and submit all pre-clinical requirements to be granted formal acceptance. The Background Check, drug screen and some medical screenings must be performed annually. Students must also submit proof of malpractice and health insurance. Additionally, students may be required to obtain additional vaccinations (H1N1 or flu, for example) as clinical affiliates adopt and implement new requirements. Any student who refuses to be immunized will have the option of following the alternative process allowed for affiliate employees, if available (for example: wearing a protective mask 100% of the time while at the clinical site during flu season). All pre-clinical requirements will be at the expense of the student. If required documentation is not submitted on time, the student will not be permitted to go to clinic and may be forced to withdraw from the program.

Students in the program are required to maintain an 80% average in each Radiologic Technology (RAD) course to continue in the program. Each radiology course must be taken in sequence.

To provide appropriate care to patients, all radiography students should be able to:

- Clearly communicate, both verbally and in writing with the patient, family, and co-workers to disseminate information relevant to patient care and work duties. Both speaking and hearing clearly are essential to quality patient care.
- Make appropriate judgment decisions and implement critical thinking skills in an emergency or when a situation is not clearly governed by specific guidelines.
- Reach, manipulate, and operate medical imaging equipment to include pushing heavy portable x-ray machines.
- Move, lift, transfer, manipulate, and observe a patient for imaging exams.
- Visually assess patients as needed for their comfort and safety.
- Demonstrate emotional stability on a routine basis and function independently in routine and/or stressful situations.

Academic honesty is an essential part of learning. Any infraction of this honesty policy is detrimental to the student’s education and to the integrity of the radiologic technology program.
Unprofessional and dishonest acts are strictly forbidden and include but are not limited to the following:

- Plagiarizing any assignment. “Plagiarism” means using someone else’s ideas or words without using quotation marks and/or giving credit by citation of sources(s).
- Copying/submitting another person’s work or submitting your work from a previous assignment.
- Unauthorized taking of someone else’s work.
- Using unauthorized data, notes, or equipment (including cell phones or programmable calculators) during an examination.
- Stealing a quiz or using a stolen quiz.
- Obtaining, using, viewing, or sharing a previously used quiz with another student.
- Allowing another student to have access to your work or accessing someone else’s work. Allowing someone else to log into your eLearn course or logging into someone else’s eLearn course.
- Having someone else take a quiz for you or taking a quiz for someone. This includes taking a quiz with another class member.
- Fabricating information such as data for a report.
- Falsifying a patient’s medical record or a student’s clinical record.

All forms of dishonesty will call for discipline. Any one or more of the following disciplinary measures may be enforced for a case of dishonesty:

- A zero for the assignment.
- An “F” for the course.
- Dropping the final course grade by one letter.
- Recommendation of dismissal from the program.

The “I” (Incomplete) indicates that the student has not completed the requirements for the course during the semester for extenuating and unavoidable circumstances. The student must contact the instructor before the course is complete to request the “I””. The “I”” will not be given unless the instructor is reasonably certain that it is possible for the student to complete the requirements for the course during the subsequent semester and receive a passing grade. All work must be completed by one week before the first day of final exams for the next semester or the “I” will be converted to the failing grade of “F”.

Poor attendance seriously impairs the student’s ability to succeed and often imposes a burden on other students. As indicated in the college catalog, the instructor has the right to request the Vice President of Academic Affairs withdraw any student demonstrating poor attendance. When attendance is poor, grade leniency should not be expected in borderline situations.

Attendance and participation are not the same thing. Attendance means a physical presence. Participation is an admittedly subjective assessment by the clinical coordinator, or technologist of the degree to which the student has contributed to clinical activities.
Equal Opportunity Statement: Volunteer State Community College, a Tennessee Board of Regents Institution, is an equal opportunity institution and ensures equal opportunity for all persons without regard to race, color, religion, sex, national origin, disability status, age, sexual orientation, or status as a qualified veteran with a disability or veteran of the Vietnam era.

Affirmative Action Educational Institution: No person shall be excluded from the participation in, be denied the benefit of or be subjected to discrimination under any program or activity of the College because of race, color, national origin, age or handicap.
Section II Advising and Governing Associations

Communities of Interest

The program solicits input from its communities of interest on a regular basis.

Advisory Board: The program’s advisory board serves as a steering committee for the program. The Board consists of, clinical affiliate department directors and managers, the program faculty, the division dean, and the student class presidents. College officials are invited to attend meetings as the need arises. The purpose of the Board is to review and make suggestions for improvement in the program. The Board provides a means of communication between students, the community, the clinical affiliates, and the college; which is essential to the success of the program.

Clinical Instructors Committee: The program’s clinical instructors committee serves as a steering committee for the student’s clinical experience. This committee consists of the affiliate clinical instructors, the program faculty, the division dean, and the student class presidents. The purpose of the committee is to provide a means of communication between the college and the clinical affiliates.

Employers: Employers of graduates are asked to complete a survey six months after graduation.

Graduates: Graduates of the program are asked to complete a program survey six months after graduation. Graduates are urged to complete and return the survey.

Students: Radiologic technology students are one of our most valuable interest groups. While in the program, students are given an opportunity to anonymously evaluate each course and instructor every semester. They also have the opportunity to evaluate each clinical site and clinical instructor every semester. The students complete an exit survey prior to graduation.
Overview of Career/Technical Education (CTE) Advisory Committees

The career/technical advisory committees’ primary purpose is to advise and serve as the link between the College and the area’s business and industry community. Volunteer State’s career/technical programs are designed to prepare completers for entry-level positions in a variety of fields in the workforce, as well as preparing individuals currently in the workforce seeking career-advancement and/or enhancement training.

The advisory committees are groups of business and industry experts selected by the College to serve in an advisory capacity to the College’s career/technical programs. Properly functioning advisory committees help the College administration, faculty and staff members in ensuring that programs reflect the changing needs and interests of areas citizens, the business and industrial workforce, and the communities they represent. The committees shall be advisory only, having no administrative authority, and is not created to take away any of the rights and/or privileges of the College administration and program staff members.

The administration of Volunteer State Community College actively supports the important role of advisory committees. The College values the consultative nature of advisory committees and recognizes the significance of the advice, insight and feedback to faculty, administration and staff regarding the alignment of college programs with the area’s workforce needs. Advisory committees are called upon to be active participants in the program evaluation and effectiveness processes and curriculum review. Committee members also play a major role in assisting the program staff in the identification and development of clinical and internship training sites, and provide a vital service to the College by identifying and soliciting external sources of funding and support for the development of new programs and expansion and enhancement of existing programs.
Vision for CTE Advisory Committees

1. assist in positioning the College as a leader in regional education, workforce training, and economic development programming
2. assist the College in developing mission-consistent educational and training solutions for area businesses and industries
3. assist the College in effectively responding to community input regarding the determination of educational programs and curriculum
4. assist the College in meeting the standards and expectations of the Tennessee Higher Education Commission (THEC), the Tennessee Board of Regents (TBR), the Commission on Colleges of the Southern Association of Colleges and Schools (SACS), and the respective program-specific accrediting, certifying, and approval agencies
CTE Advisory Committee Structure and General Guidelines

Committee membership represents a broad range of community leaders from business, industry, healthcare, government, and service agencies. The number of committee members varies with the specific program; however, every attempt is made to select a representative cross section for each program area. Many committees have a lay Chairperson who is elected by the committee members or appointed by the College. In addition to the appointed members of an advisory committee, the Division Dean and faculty responsible for the program, as well as the Vice President for Academic Affairs, attend committee meetings. On most committees, student representatives also serve as members.

Each advisory committee shall meet at least once a year. Special meetings may be called by the program staff or chairperson.

The majority of the duties and responsibilities of committee members are consistent from one committee to another. In some cases, however; external factors, such as variations in the levels of emphasis of a particular accreditation standard by an agency, may impact the actual duties and responsibilities of the members of that committee. A detailed listing of the primary duties and responsibilities related to the committee to which you have been appointed are outlined in Section 2 of this handbook.
Responsibilities and Activities of the Committee

Committee members assist the College in program development and enhancement, help to set both short and long-range program goals, and assist the College in better understanding and interpreting community and employer needs.

The primary areas of committee emphasis and associated activities are as follows:

Curriculum and Instruction
- review and suggest revisions to course content
- compare/contrast curriculum with the needs of the profession
- identify and explore use of new technologies
- advise on labor market needs and trends
- review, recommend, and assist in obtaining instructional materials

Program Review
- review and recommend program goals, objectives, and evaluative benchmarks
- participate in program evaluation
- compare student performance standards to business/industry standards
- assess, recommend, and/or provide equipment and facilities
- participate in annual and long-term program planning and development
- assist in identifying new clinical sites/intern sites/teaching locations
- assist in accreditation activities
- Recruitment and Job Placement
- assist in recruiting new staff and potential students
- notify program faculty of area job opportunities for graduates
- provide or assist in obtaining cooperative work experiences, internships/externships, or service-based learning opportunities for students
- assist students in developing resumes and interviewing skills
- assist with career/job fairs and related activities
- assist in employment of graduates/program completers
- assist in conducting placement follow-ups with graduates and employers

Student Activities and Organizations
- sponsor activities in support of RAD student organizations
- support/encourage participation in RAD student organizations
- assist students with career development opportunities
- organize/conduct workplace tours
Graduate and Faculty Professional Development
- support faculty participation in retraining and back to-industry technical skill building
- identify and support professional development opportunities for faculty and graduates

Community/Public Relations
- recommend the program to employers, community, and the media
- participate in student and faculty recognition activities
- promote special College and program events
- assist in developing and implementing program marketing plans

Resources
- participate in annual review of program’s resource needs
- identify external sources of program funding and other levels of needed support
- provide tours and field trips, job shadowing experiences, and speakers
- leverage community resources and broker community partnerships
- assist in identifying and addressing special program needs (i.e., scholarships, equipment, supplies, external funding support for program expansion, etc.)

Evaluations
- participate in the annual evaluation processes regarding both program and advisory committee effectiveness; assist in the identification and implementation of any corrective and/or enhancement action plans
- participate in an annual review of graduate placement data, employer satisfaction survey results, and graduate licensure/certification results
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<tr>
<th>Name</th>
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<tr>
<td>Elvis Brandon</td>
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<td>Jennifer Carroll</td>
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<td>Maureen Herbrandson</td>
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<td>Terry Seals</td>
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<tr>
<td>Amanda Bain</td>
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<td>Casey Moore</td>
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<td>Michelle Zellner</td>
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<td>Michael Radford</td>
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<td>Valarie Breedlove</td>
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<td>Kathy Miller</td>
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<td>Glenn Sparkman</td>
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<tr>
<td>Kristie Ealey</td>
<td>Tier 1 Orthopedics</td>
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<tr>
<td>Darren Parker</td>
<td>Vanderbilt Children's Hospital</td>
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<tr>
<td>Carol Duong</td>
<td>Vanderbilt University Medical Center</td>
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Section III Program Design

Program Faculty

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Radiologic Technology Program

Mission Statement: The Mission of the Radiologic Technology Program at Volunteer State Community College is to produce entry-level graduates that are competent technologists, registry eligible, and demonstrate a professional concern for their patients.

Goals:

1. **Students will demonstrate competency in the skills required of entry level radiologic technologists.**
   
   Student Learning Outcomes:
   
   a. Students will demonstrate proper patient positioning.
   
   b. Students will properly determine technical factors to be used for radiographic procedures.
   
   c. Students will apply knowledge of anatomy to accurately demonstrate desired anatomical structures on a patient diagnostic procedure.

2. **Students will demonstrate effective problem solving and critical thinking skills.**
   
   Student Learning Outcomes:
   
   a. Students will be able to evaluate radiographic images.
   
   b. Students will be able to exercise judgment in the technical performance of medical imaging procedures.
   
   c. Students will be able to adapt to changes in clinical situations.

3. **Students will exhibit professionalism for the patients by delivering high quality care with concern and compassion.**

   Student Learning Outcomes:
   
   a. Students will demonstrate professionalism in the classroom and clinical setting.
   
   b. Students will practice desirable customer service skills.
   
   c. Students will show compassion and concern towards the patient.

4. **Students will establish effective communication skills.**

   Student Learning Outcomes:
   
   a. Students will use acceptable verbal and non-verbal communication with patients and other professionals.
   
   b. Students will use effective oral and written communication.
**Credentialing: The American Registry of Radiologic Technologists (ARRT)**

The American Registry of Radiologic Technologists (ARRT) was founded in 1922 and is the world’s largest credentialing organization that seeks to ensure high quality patient care in radiologic technology. The ARRT Board of Trustees employs an executive director who hires and manages staff to conduct ARRT business. Graduates of the program are eligible apply for certification and registration with the American Registry of Radiologic Technologists (ARRT). A minimum score of 75 is required to pass the ARRT certification exam. As in any health related profession, it is advisable to be credentialed in your profession. Failure to become a Registered Radiologic Technologist will make it very difficult to become employed and may hinder career opportunities. The ARRT examinations are administered by Pearson VUE, the electronic testing business of Pearson Education. The ARRT is located at 1255 Northland Drive, St. Paul, Minnesota 55120-1155 and can be reached at 651.687.0048 or at [The ARRT Web Site](ARRT.org) (opens in a new window).

The ARRT Three (3) times, Three (3) year rule: Once a graduate becomes eligible for the examination in Radiography, the graduate will be allowed three attempts to pass the exam. The three attempts must be completed within a three-year period. Either when three unsuccessful attempts have been made or three years have expired, the graduate is no longer considered eligible to take the examination. A graduate not passing the examination within three attempts or within the three-year limit may only regain eligibility by repeating the professional education requirement.

**Accrediting: The Joint Review Committee on Education in Radiologic Technology (JRCERT)**

The Joint Review Committee on Education in Radiologic Technology (JRCERT) was established in 1969. The JRCERT accredits traditional and distance delivery education programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. The Volunteer State Community College radiologic technology program is fully accredited by the JRCERT.

**Accrediting: The Commission on Colleges of the Southern Association of Colleges and Schools (SACS)**

The Commission on Colleges of the Southern Association of Colleges and Schools (SACS) accredits Volunteer State Community College. SACS is located at 1866 Southern Lane, Decatur, Georgia 30033-4097 and can be reached at 404.679.4500 ext. 4504.
# Program Curriculum

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<td>Clinical Education I</td>
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<td>Positioning and Procedures I</td>
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<td>RAD 130</td>
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<td>RAD 240</td>
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<td>RAD 250</td>
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Course Descriptions

**RAD 110 Patient Care (2)** A study of the patient care pertinent to the Radiologic Technologist including medical asepsis, emergencies, and basic medical techniques. Special emphasis is given to effective communication with patients, including ethical and legal responsibilities.

**RAD 111C Clinical Education I (3)** A clinical orientation to acute hospital care in the medical imaging department. The student is expected to achieve limited proficiency in routine radiographic examinations of the chest, abdomen, and extremities, including portable studies of the chest and abdomen. A minimum of 240 hours of supervised clinical education is required.

**RAD 112C Clinical Education II (3)** The student is expected to achieve limited proficiency in routine radiographic examination of the spine, urinary system, and digestive system. A minimum of 360 hours of supervised clinical education is required.

**RAD 113C Clinical Education III (3)** The continued study of radiographic examination of the spine, extremities, urinary system, digestive system, chest, and abdomen including portable techniques. Each student is assigned to clinical rotations including the evening and weekend shifts. A minimum of 360 hours of supervised clinical education is required.

**RAD 120 Positioning & Procedures I (3)** This course is designed as an introduction to radiographic positioning. The proper methods of positioning patients for radiographic examination of the chest, abdomen, extremities (upper and lower), and fluoroscopy studies are presented.

**RAD 121 Positioning and Procedures II (3)** The continued study of the proper methods of positioning patients for radiographic examination including the spine, urinary system, digestive system, mammography, reproductive system and operative procedures are presented.

**RAD 122 Positioning and Procedures III (3)** The continued study of the proper methods of positioning patients for radiographic examination including that of the skull, sinuses, facial bones, pediatrics, and mobile radiography procedures. Introduction of special procedures and modalities. PREREQUISITES: RAD 113C*, RAD 200*. COREQUISITES: RAD 211C*, RAD 221*. Three lecture hours per week.

**RAD 130 Radiographic Anatomy I (1)** The study of human anatomy and physiology as it relates to radiographic imaging. Classes include detailed study of bones and joints, the respiratory system, digestive system, and urinary system.

**RAD 131 Radiographic Anatomy II (1)** Continued study of human anatomy and physiology as it relates to radiographic imaging. Completion of systems and introduction to arterial systems are covered.
**RAD 200 Radiographic Image Evaluation (3)** A comprehensive review of quality assurance and film critique. Various stages of processing and development are covered from the latent image to the manifest image. Pathology, anatomy, contrast, and density are evaluated.

**RAD 211C Clinical Education IV (3)** Clinical assignments in mobile imaging including general radiography and surgical procedures. Modality rotations include: Angiography/Arteriography, Cardiac Catheterization, CT, MRI, Nuclear Medicine, Pediatrics, Radiation Therapy, and Ultrasound. A minimum of 360 hours of supervised clinical education is required.

**RAD 212C Clinical Education V (3)** Continued general and specialized rotations. The student will become proficient in routine and specialized radiographic examinations of the head, spine, and extremities. Various special contrast studies will also be covered. A minimum of 360 hours of supervised clinical education is required.

**RAD 220 Radiologic Pathology (2)** A study of common pathologies and injuries with emphasis on the presentation of each pathology in relationship to the various exposure techniques within Medical Imaging.

**RAD 221 Radiographic Physics I (3)** An introductory study of the basic principles of atomic structure, radioactivity, magnetism, electricity, mechanics, and the fundamental aspects of radiation physics which are required to understand the nature and production of x-rays.

**RAD 222 Radiographic Physics II (3)** A study of the operation of x-ray machines and related radiographic equipment, radiation detection, x-ray interaction with matter and physics.

**RAD 231 Principles of Radiographic Exposure I (3)** A study of the technical aspects of radiographic film, screens, beam resistors, grids, film processing, radiographic quality, quality assurance, procedures, and retake analysis.

**RAD 232 Principles of Radiographic Exposure II (3)** A study of the technical aspects of image intensification, automatic exposure control, television, cine, body section radiography, mobile equipment, mammography equipment, equipment testing, and the mathematical relationships between exposure factors. Independent research projects are assigned.

**RAD 240 Registry Preparation (2)** A final comprehensive review of all radiographic coursework. "Mock Registries" are administered and discussions of continuing educational opportunities are included.

**RAD 250 Radiographic Protection and Biology (4)** An overview of ionizing radiation and its effects on the human body. Subject matter to include acute and long term effects of radiation exposure. Cellular/tissue damage along with radiation protection strategies for the Medical Imaging professional are covered.
Clinical Sites for 2016-2017

Cookeville Regional Medical Center
Crossroads Medical Clinic – Goodlettsville
Crossroads Medical Clinic – Portland
Crossroads Medical Clinic – White House
Hendersonville Medical Center
Livingston Regional Hospital
Murfreesboro Medical Clinic
NorthCrest Medical Center
Skyline Medical Center
St. Thomas Midtown Hospital
St. Thomas West Hospital
Summit Medical Center
Sumner Regional Medical Center
Tier 1 Orthopedics
Vanderbilt’s Monroe Carell Jr. Children’s Hospital
Vanderbilt University Medical Center