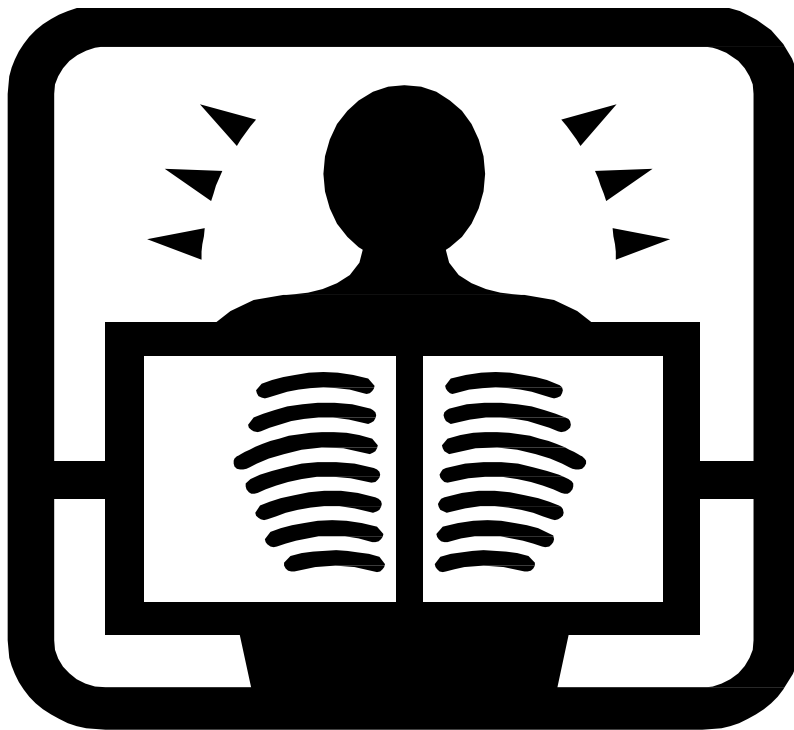


RADIOLOGY TECHNOLOGY (RT) PROGRAM



HANDBOOK VOLUME IV

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Florida National University Radiologic Technology Program

General Information

This handbook has been compiled by the Faculty of the Radiologic Technology Program to explain to the students about the policies and procedures followed by Florida National University (FNU) Allied Health Division and its Radiologic technologic program. All students enrolled in FNU's Radiologic technologic program are responsible for observing all policies and procedures stated in this handbook, as well as any rules and/or regulations contained in FNU's University catalog. The Faculty will periodically review the policies, procedures, curriculum and any other information contained in this handbook as necessary. The students will be informed of any modification.

Students enrolled in Radiologic Technology program is expected to comply and to proceed with the pre establish standards of medical ethics and with the policies and procedures of the health care provider facilities during the period of attendance in the clinical centers.

Philosophy

The philosophy of FNU's Radiologic technology program is based in the nature of the profession. The Radiologic Technology profession's goal is the production of images used as diagnostic mean used by physicians a diagnostic tool for diseases, also, a Radiology technologist needs to interact with other members of the Health Care Work Force.

FNU's Radiologic Technologic program integrates didactic, laboratory and clinical activities. We consider that this will provide the students the knowledge and skills necessary to fulfill the demands of and entry level position in the Radiology field as Radiologic tech.

FNU considers that the learning environment requires cooperation, commitment and constant assessment of all program's faculty members and students.

FNU's Radiologic Technology program along the curriculum, integrates activities directed to develop appropriate communication and critical thinking skills, since we consider that these are crucial to be component Radiology technologist.

Program Goals

Goal #1: Students will develop knowledge and skills necessary to meet the needs of the community and to enter the field of diagnostic medical imaging as competent, entry-level radiographers.

Goal 2: Students will develop effective verbal, non verbal and written communication skills.

Goal #3: Students will demonstrate professional practices and evaluate the importance of professional growth and life-long learning.

Goal #4: Students will demonstrate critical thinking and problem solving skills.

Goal # 5: Students will demonstrate professional development and growth and set goals for life-long learning.

Program Entrance Requirements

The FNU's Radiologic Technology, AS program is a collegiate degree, which include 23 General education courses and 57 core requirement courses. This course will provide the students with the knowledge and skills necessary to fulfill the entrance level position as a competent Radiology Technologist. After completing this program the students will be eligible to take the American Registry of Radiologic Technology (ARRT) Certification Test.

In order to be admitted, candidate must:

- Have a high school diploma, GED, or equivalent.
- Complete an interview with an FNU admissions representative.
- Submit a completed and signed Enrollment Application.
- Make a commitment to abide by the directives and regulations as established by the University Board of Governors.
- International students on an I-20 Visa will demonstrate fluency in an English Entrance Exam. Otherwise, the student will have to acquire an adequate level of proficiency.
- Take a diagnostic test as University entrance requirement.
- FNU uses the Test of Essential Academic Skills (TEAS) as program entrance requirement. In order to be admitted in the program, the candidate must achieve a score of 50 % or more.

The rigorous nature of the program, make it is strongly recommended that applicants plan ahead financially for their 26-months in the program. The number of academic hours alongside with required study hours and clinical practicum hours make it difficult for a student to work while enrolled in the Radiologic Technology program. Transportation is necessary for travel to and from the hospitals for clinical experience. Attendance at all scheduled classes, laboratories and clinical rotations are enforced; each one of those meetings holds an essential component of your progress in the program. All applicants admitted into this program will be required to complete a physical examination and provide a complete immunization record. In addition, a complete

FDLE LII and Local Background Screening in conjunction with Drug Testing will be required by clinical facilities. Positive results could impact a student's chances of attending their hospital rotations, completing the program requirements, or gaining a license to practice upon graduation. The cost of required physical examinations, immunizations, background check and drug test will be paid by the student. Students accepted into the program will be provided with specific details. In addition, you will be required to take a sequential list of courses: BLS-CPR, OSHA and HIV to get prepared for each of your clinical rotations.

TECHNICAL STANDARDS

There is specific health, physical and technical requirements for advancement into all portions of the Radiologic Technology program more specifically into the clinical practicum. The Radiologic Technology Program at Florida National University complies with the American with Disabilities Act (ADA), and consistent with the ADA, the attached Essential Functions/Core Performance Standards Worksheet provides the framework to relate functional ability categories and representative activities/attributes to any limitations/deficits in functional abilities. These standards shall be used by the Radiologic Technology Program in combination with the professional scope of practice, job analysis, and expert consultation to make decisions related to the ability of the Radiologic Technology student to perform the essential functions in the Radiology field as a radiographer.

- Lift, move and transport patients (in excess of 50 pounds) to and from various ambulatory devices, (wheelchair, stretcher, hospital bed, and radiographic table) without causing undue pain or discomfort to patient or oneself.
- The ability to spend prolonged periods of time walking, standing, sitting, bending, reaching, pushing, and pulling.
- Position patients for various radiologic examinations. This requires physical touch.
- Manipulate x-ray equipment into proper positions, including fixed and mobile units. This requires upper and lower body dexterity.
- Recognize audio sounds and (bells, buzzers, etc...) and visually distinguish colors.
- Respond immediately to emergency situations that may otherwise jeopardize a patient's physical state if speedy care is not administered.
- Evaluate written requisitions for radiographic procedures.
- Communicate (verbal and written) the explanation of procedures and give effective instructions to a patient.
- Obtain medical histories of patients and communicate this information to appropriate members of the health care team.
- Visually evaluate radiographic images.

Program Description

The program prepares the student, upon successful completion of the Certifying Examination, for a position as a member of a health care team in a hospital, clinic or physician's office. The degree can also be used in industry; in the manufacture and supply of medical equipment or management. This program is designed to prepare the student for the National Certifying Examination by the American Registry of Radiologic Technologists, as well as for the State of Florida Dept. of Health and Rehabilitative Service General License Examination. The program also includes a fifteen-credit-hour component of general education/liberal arts courses. FNU awards an Associate of Science Degree upon graduation.

GRADUATION REQUIREMENTS (A MINIMUM OF 80 CREDITS) REQUIRED COURSES

Credits Hours

General Education Requirements

COMMUNICATIONS (6 CREDITS)

ENC 1101	English Composition I **	3
SPC 1017	Fundamentals of Oral Communication	3

HUMANITIES (3 CREDITS)

3
3

BEHAVIORAL / SOCIAL SCIENCE (3 CREDITS)

MATHEMATICS (3 CREDITS)

MAC 1105	University Algebra I **	3
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NATURAL SCIENCES (4 CREDITS)

BSC 1020C	Human Biology	4
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COMPUTERS (4 CREDITS)

CGS 1030	Introduction to Information Technology	4
SLS 1501	University Study Skills	0

CORE REQUIREMENTS (63 CREDITS)

HSC 1000C	Introduction to Health Care	3
HSC 1531C	Medical Terminology	3
BSC 1085C	Anatomy & Physiology I	4

BSC 1086C	Anatomy & Physiology II	4
HSC 1230L	Patient Care Procedures	2
RTE 2385C	Radiation Protection and Radiobiology	6
RTE 2418C	Image Production and Evaluation	7
RTE 2458C	Equip. Op., Radiographic Related Physics & Quality Assurance	3
RTE 1503C	Radio. Proc., Radiographic Positioning & Related Anatomy I	6
RTE 1513C	Radio. Proc., Radiographic Positioning & Related Anatomy II	4
RTE 2523C	Radio. Proc., Radiographic Positioning & Related Anatomy III	4
RTE 2782C	Radiographic Pathology	3
RTE 2804C	Radiographic Clinic I	4
RTE 2814C	Radiographic Clinic II	4

Radiologic Technology Course description

RTE - 1503C Radiographic Procedures, Radiographic Positioning and Related Anatomy I (6 credits)

The first of three courses, consist in an introductory course to the general radiographic terminology. This course includes the positioning and related anatomy of the chest, abdomen, upper and lower extremities, shoulder girdle, and hip.

RTE - 1513C Radiographic Procedures, Radiographic Positioning And Related Anatomy II (4 Credits)

The second of three courses in which the students will learn the procedures, positioning and the related anatomy of the pelvis, bony thorax, spinal column, skull, and facial bones.

RTE - 2385C Radiation Protections And Radiobiology (6 credits)

A study of the biological effect of the different ionizing radiations on living matter. Especially the effects of x-ray radiation, focusing in the reduction of secondary radiation and the understanding of the ALARA as a basic principle of radiation protection.

RTE - 2418C Image Production And Evaluation (7 credits)

This course is a deep study of radiographic imaging technical exposure factors, image receptor processing equipments, and film storage in convention and specialized x-ray equipments including conventional x-ray, fluoroscopy, tomography, mammography, and digital radiology equipments operation and their radiation protection measures. The students will also learn the analysis, evaluation and film critique of the radiographs.

RTE - 2458C Equipment Operation, Radiographic Related Physics And Quality Assurance (3 credits)

A study of the radiographic related physics principles and the operation of the radiographic equipments including: conventional, fluoroscopic, mammographic, linear tomographic, and digital radiological equipments. Identification of the basic control devices in the radiographic control panel. Fundamental concepts of electricity, magnetism and electromagnetism and the structure and function of the different circuits of the x-ray and the processing equipments. This course also will provide the students with the quality assurance tests commonly done on diagnostic radiographic equipment and the quality assurance program applied to the radiology field.

RTE - 2523 C Radiographic Procedures, Radiographic Positioning And Related Anatomy III (4 credits)

The third of three courses where the students will learn the radiographic procedures that utilizes contrast media, sterile techniques, and specialized equipment and accessories; this course includes the phlebotomy techniques, the radiographic positioning and related anatomy of the digestive and urinary systems. Special attention will be given to the study of the characteristic of the contrast media substances and their adverse reactions.

**RTE - 2782 C Radiographic Pathology
(3 credits)**

The students will learn the basic diseases processes, nature and causes of disease and injury, and their related radiographic images. They will learn also how to apply the specific radiographic techniques for the different diseases.

**RTE - 2804 C Radiographic Clinic I
(4 credits)**

The first of two clinical courses. Under the direct supervision of faculty and the x-ray Laboratory staff. The students perform basic diagnostic radiograph procedures for skull, spinal column, upper and lower extremities, chest, and abdomino-pelvic cavities. The students must observe the principles of radiation protection and the ethical and legal issues in diagnostic radiographic procedures.

**RTE - 2814 C Radiographic Clinic II
(4 credits)**

The second of two clinical courses that is a continuation of the radiographic clinic I and includes advanced radiographic techniques such as digestive and urinary systems contrast media studies. the students will learn the professional performances in an x-ray Laboratory and how to handle the most common duties. The study of the adverse reactions to contrast media substances and its management will be objects of special attention.

PROGRESSION REQUIREMENTS

The curriculum is dependent upon proper sequencing of courses. The pre-requisite courses (non radiologic courses) must be completed prior to begin with the radiologic courses. The general education courses which are program requirements and not prerequisite requirements, may be completed prior to the radiologic courses or (if accepted) at any time during the program, but must be completed before the end of the program. Radiologic courses have a pre-established sequence in order to ensure and facilitate a gradual and organized learning process. This means that radiologic courses a specific sequence, if a student does not satisfactorily meet the course learning outcomes, he/she will be unable to progress in the curriculum. The student must stop-out until the course is offered again if the student is allowed to continue in the program. If the student request a “leave”, the student must return when the course if offered again.

Radiologic courses sequence.

Module 1 RTE2385C	Radiation Protection and Radiobiology
Module 2 RTE 2418C	Image Production and Evaluation
Module 3 RTE 2458C RTE 2782C	Equip. Op., Radiographic Related Physics &Quality Assurance Radiographic Pathology
Module 4 RTE 1503C	Radio. Proc., Radiographic Positioning & Related Anatomy I
Module 5 RTE 1513C	Radio. Proc., Radiographic Positioning & Related Anatomy II
Module 6 RTE 2523C RTE 2804C	Radio. Proc., Radiographic Positioning & Related Anatomy III Radiographic Clinic I
Module 7 RTE 2814C	Radiographic Clinic II

TECHNICAL STANDARDS

Students must be physically capable of successfully performing the following standards related to the occupation in a safe, accurate, and expeditious manner. Please read the following standards carefully, make an assessment of your physical capabilities, and determine if you have any physical limitations that may restrict or interfere with your satisfactory performance of any of the standards listed below.

- Lift, move and transport patients (in excess of 50 pounds) to and from various ambulatory devices, (wheelchair, stretcher, hospital bed, and radiographic table) without causing undue pain or discomfort to patient or oneself.
- The ability to spend prolonged periods of time walking, standing, sitting, bending, reaching, pushing, and pulling.
- Position patients for various radiologic examinations. This requires physical touch.
- Manipulate x-ray equipment into proper positions, including fixed and mobile units. This requires upper and lower body dexterity.
- Recognize audio sounds and (bells, buzzers, etc...) and visually distinguish colors.
- Respond immediately to emergency situations that may otherwise jeopardize a patient's physical state if speedy care is not administered.
- Evaluate written requisitions for radiographic procedures.
- Communicate (verbal and written) the explanation of procedures and give effective instructions to a patient.
- Obtain medical histories of patients and communicate this information to appropriate members of the health care team.
- Visually evaluate radiographic images.

I acknowledge that I have read and understand the above statement regarding the required technical standards.

Student Name (print) _____ Date _____

Student Signature _____

HOSPITAL ROTATION

There are some mandatory requirements needed for any student in order to be scheduled for hospital rotations. They are as follows:

1. HIV course completion
2. OSHA course completion
3. CPR Seminar
4. Proof of Health Screening Evaluation
5. Student ID and University patch on the uniform and lab coat
6. Immunization Record
7. Purify Protein Derivative (Tuberculin Test)
8. Personal Medical Insurance
9. Optimal Florida Basic X-Ray License (depends on rotation)
10. For Female Students-Pregnancy form
11. Good Moral and Character form
12. Annual student Liability Insurance contract copy
13. Annual dosimeter (Monitoring Badge)
14. Introduction to Hospital Policies Seminars-
15. Light Blue Uniform
16. White Lab coat
17. White shoes

CODE OF ETHICS

1. The Radiology Technologist conducts himself/herself in a professional manner, responds to patient needs and supports colleagues and associates in providing quality patient care.
2. The Radiology 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 Radiology Technologist delivers patient care and service unrestricted by concerns of personal attributes or the nature of the disease or illness, and without discrimination regardless of sex, race, creed, religion or socioeconomic status.
4. The Radiology Technologist practices technology founded upon the theoretical knowledge and concepts, utilizes equipment and accessories consistent with the purpose for which they have been designed, and employs procedures and techniques appropriately.
5. The Radiology Technologist assesses situations, exercises care, discretion and judgment assumes responsibility for professional decisions, and acts in the best interest of the patient.
6. The Radiology Technologist acts as an agent through observation and communication to obtain pertinent information for the physician to aid in the diagnosis and treatment management of the patient and recognizes that interpretation and diagnosis are outside the scope of practice for the profession.
7. The Radiology Technologist utilizes equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice, and demonstrates expertise in limiting the radiation exposure to the patient, self and other members of the health care team.
8. The Radiology Technologist practices ethical conduct appropriate to the profession, and protects the patient's right to quality radiology technology care.
9. The Radiology Technologist respects confidences entrusted in the course of professional practice, protects 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 Radiology Technologist continually strives to improve knowledge and skills by participating in educational and professional activities, sharing knowledge with colleagues and investigating new and innovative aspects of professional practice. One means available to improve knowledge and skills is through professional continuing education.

Adopted by: The American Society of Radiology Technologists and The American Registry of Radiology Technologists

Dress Code in the University and In the Clinical Site

The dress code was mutually agreed by The Allied Health Division.

Student Uniform

1. Khaki scrub with the FNU logo (the scrub must be comfortable loose fitting, and ironed.)
2. FNU Student ID and hospital ID if is required.
3. Radiation Monitor (Dosimeter)
4. Preferably White Sneakers
5. Small Earrings in ear lobe
6. No body piercing
7. All body arts (Tattoos) must be covered
8. Hair must be neat and clean and most be worn above the collar.
9. All hair below the collar must be secured above the collar and pulled back from the face.
10. Do not use strong smelling perfumes or after shave lotions
11. Nails should be short and well manicured and only clear nail polish is permitted.
12. No acrylic nails are allowed to be used at the hospital or diagnostic center.

Personal Hygiene

Daily bathing

Least possible makeup

Clean teeth

Smokers spray mouth/use a breath mint and wash hands before returning to close patient contact.

Teeth should be brushed, and mouth wash after lunch or dinner.

Gum chewing is unprofessional and not permitted during patient contact or in patient areas.

Attendance

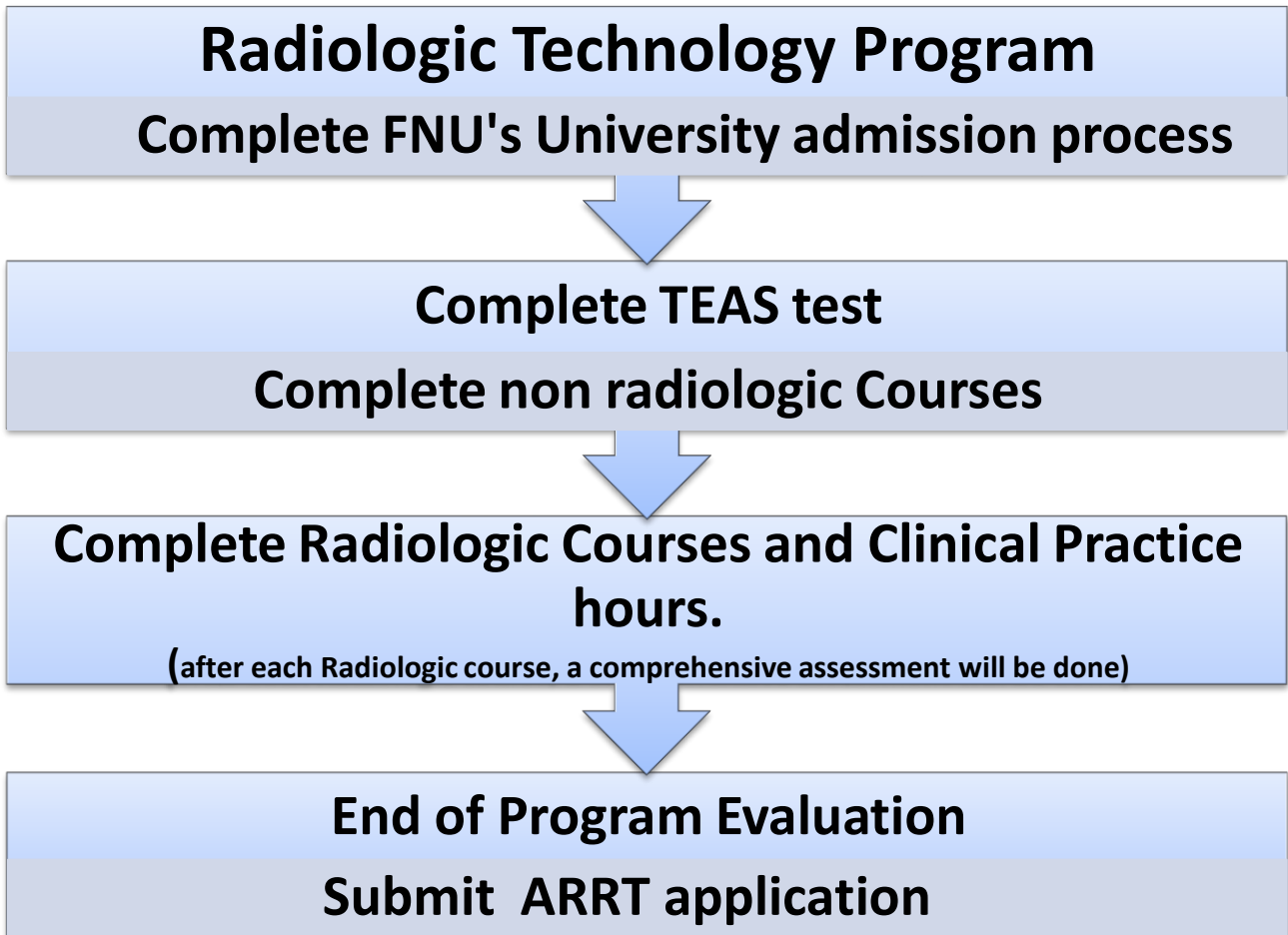
Students will receive attendance sheets at the beginning of the clinical rotation hours. This sheet must be signed and timed by the supervisor at the clinical site to report in and out. Clinical days and times are not negotiable. Schedule will be assigned according to student time availability.

Any student who will be absent from the Hospital or Diagnostic Center must notify the clinical coordinator and /or program staff and the supervisor of the clinical site.

If your fail to report an absent it will result in five points reduction in the final grade. Three non reported absences will generate a written warning. Two written warnings will force FNU to remove you from the clinical site for the current period. The student is responsible for any

financial implication or extension of graduation date. If the student is absent for more than two days, proper documentation that justifies the absent must be to the clinical coordinator.

Each student is responsible for his/her own transportation to the hospital or diagnostic center. The student understands that he/she is fully responsible to be in compliance with the schedule, the clinical hours, and the procedures required by Florida National University in order to complete the program.



RESPONSIBILITY OF STUDENTS HEALTH MAINTENANCE

Florida National University's **Radiologic Technology Program** recognizes that health maintenance is the primary responsibility of the individual student.

Students are therefore required to carry their own health insurance for clinical rotations.

If the student is involved in an incident or accident while in the clinical area, the student will be required to follow the established hospital / clinical facility protocol, complete the incident report form, and to report to the Emergency Department for treatment.

All students must obtain specific immunizations and health screening tests before entering the clinical areas.

A proof of immunization for MMR (two doses), Varicella (2 doses), Hepatitis B (3 doses), and H1N1 must be provided to the school. In the event that the student had the diseases, a blood titer for each disease must be submitted. The result of the annual Tuberculin skin test (PPD) must also be submitted.

Students have the right to decline to receive the Hepatitis B immunization series and H1N1 vaccine. However a refusal to receive the Hepatitis B immunization series and H1N1 vaccine form must be signed by the student before entering the clinical areas.

Immunization records will be submitted to the affiliating hospitals prior to the student's arrival at the health care facility for clinical practicum. Failure to comply with this, the student will not be allowed to participate in clinical rotations.

The requirements are subject to change, depending upon current knowledge and practices relating to health care.

Radiology Clinical Rotation Documents

Date: _____

Name: _____

E-mail: _____

SS # _____ / _____ / _____

Phone #: _____

- ✓ CPR/OSHA/HIV Seminar \$50 FNU/ Bursar Office
- ✓ Liability Insurance \$25.50 FNU/Bursar Office
- ✓ Dosimeter \$95.00 FNU/Bursar Office
- ✓ Phlebotomy Seminar
- ✓ Pregnancy Form
- ✓ Good Moral Character
- ✓ Physical Exam
- ✓ Immunization Record
- ✓ Hepatitis
- ✓ Tetanus
- ✓ Rubella
- ✓ MMR
- ✓ Varicella
- ✓ PPD (tuberculosis no more than six months)
- ✓ HIPAA Seminar & Assessment
- ✓ Fingers Prints FDLE \$43 FNU/Bursar office
- ✓ Hospital Schedule
- ✓ Student Affiliation
- ✓ Statement of Responsibility A and B
- ✓ Tenet Release Form
- ✓ Vaccine Acknowledge
- ✓ Drug Test \$50 FNU/Bursar Office
- ✓ Copy FNU ID
- ✓ Hospital ID \$ 5 FNU/Bursar Office
- ✓ Tenet Test
- ✓ FDLE / VECHS Release