PROGRAM INFORMATION

1. Clinical Education

Students are admitted in the fall, with a limited number of openings each year. The program is 24 consecutive months with the following schedule:

Clinical Rotation Hours:

•	Quarter 1-2: Monday, Wednesday	07:30-11:00
	Tuesday, Thursday	07:30 - 15:30
•	Quarter 3-4: Monday, Wednesday	07:30-11:30
	Tuesday, Thursday	07:30 - 15:30
•	Quarter 5-6: Monday, Wednesday, Friday	07:30-15:30
	Tuesday, Thursday	07:30 – 11:30
•	Quarter 7-8: Monday, Wednesday	07:30-15:30
	Tuesday, Thursday, Friday	07:30 – 11:30

Class hours:

•	Quarter 1-2: Monday, Wednesday	11:30 - 15:30
	Friday	07:30 - 13:00
•	Quarter 3-4: Monday, Wednesday	12:00 - 15:30
	Friday	07:30 - 11:30
•	Quarter 5-6: Tuesday, Thursday	12:00 - 15:30
•	Quarter 7-8: Tuesday, Thursday, Friday	12:00 - 15:30

Offsite Rotation Hours:

Hennepin County Medical Center rotation: Monday, Wednesday, Friday: 14:30-23:00

Tuesday, Thursday: 15:00-19:30

Minneapolis Children's Hospital rotation: Monday, Wednesday, Friday 07:30-15:30 Tuesday, Thursday: 07:30-11:00

Clinical Sites

Children's Hospital and Clinics of Minnesota 2525 Chicago Avenue S Minnesota, MN 55404

Hennepin Healthcare Medical Center (HCMC) 701 Park Avenue Minneapolis, MN 55415

^{*}Clinical hours may change due to the class schedule.

Maplewood VA Clinic 3100 Kennard St. Suite 100 Maplewood, MN 55109

Northwest Metro VA Clinic 7545 Veterans Drive Ramsey, MN 55303

VA Health Care System One Veterans Drive Minneapolis, MN 55417

University Affiliates

Briar Cliff University 3303 Rebecca St. Sioux City, IA 51104

Minot State University 500 University Ave W Minot, ND 58701

Mount Marty 1105 W 8th St. Yankton, SD, 57078

St. Cloud State University 720 4th Avenue South St. Cloud, MN 56301-4498

North Dakota State University 1340 Administration Avenue Fargo, ND 58102

University of Mary 7500 University Avenue Bismarck, ND 58504

Thirty minutes is allotted for a lunch break. When assigned to clinical affiliate sites, the student will honor the rules and departmental procedures of that facility. Class and clinical time will not exceed forty hours per week. The school week runs from Sunday through Saturday. Any deviation from this schedule must be discussed with program officials.

^{*}Program Officials reserve the right to adjust class schedules.

Students must produce proof of immunization for measles, influenza, and chicken pox prior to their rotation. Proof of COVID-19 vaccinations are required as of the date of this publication. Hepatitis B shots are required and are provided by the VAHCS Personnel Physician's Office. There is no charge for the series.

2. Radiologic Technologist (Definition)

Radiologic Technologists, also referred to as Radiographers and X-Ray Technologists, produce images (radiographs) of different parts of the human body for use in diagnostic medical care. They prepare patients for radiologic or fluoroscopic examinations by explaining the procedure, prepping the patient, and positioning the patient so that the parts of the body can be appropriately imaged. They practice radiation safety procedures concerning radiation exposure.

Experienced radiographers may perform more complex imaging procedures in modalities such as Computed Tomography (CT), Magnetic Resonance Imaging (MRI), Ultrasound (U/S), Nuclear Medicine (NM), Radiation Therapy (T), Interventional Imaging (IR), and Cardiac Catheterization.

For a complete description of various Radiologic Technologist (R.T.) positions, you may write to the American Society of Radiologic Technologists, 15000 Central Avenue SE, Albuquerque, New Mexico, 87123 (505-298-4500). Instructors at Minneapolis VA Healthcare System – Radiography School can also provide information about other Imaging Professions.

3. Employment and Salaries

VAHCS graduates are employed locally and in many states. Wages vary according to experience and employment situations. Employment varies by state and region. According to the May 2021 State Occupational Employment and Wage Estimates of Minnesota, part of the U.S. Department of Labor Bureau of Labor Statistics the mean annual earnings of Radiologic Technologists is \$66,490 and the average hourly wage is \$31.97.

4. Accreditation

The Joint Review Commission on Education in Radiologic Technology (JRCERT) accredits the VAHCS Program. Graduates are eligible to take the American Registry for Radiologic Technologists (ARRT) Examination. Upon successful completion of this exam, graduates become Registered Technologists in Radiography (RT(R)). This certification is the nationally accepted standard for the profession.

Questions or comments regarding compliance with the Joint Review Committee on Education in Radiologic Technology (JRCERT) Standards by the Minneapolis VA Healthcare Systems – Radiography School should be directed to:

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

20 North Wacker Drive, Suite 2850 Chicago, Illinois 606060-3128

Tel: 312-704-5300 Fax: 312-704-5304 mail@jrecert.org www.jrcert.org

5. Tuition and Fees

Tuition: No tuition. The Minneapolis VA Imaging Department

employs students as Healthcare Technicians. This employment is separate from the program. Paid working hours are outside of clinical and class hours (see Clinical

Education).

Background Check: \$44.00 one-time fee

State of MN Fingerprints: \$10.50 one-time fee

Books: \$1,500 - \$2,000.00 - approximate for entire program.

Uniforms: Uniforms are approximately \$50.00 per set. 3 uniforms are

recommended. Shoes must be appropriate for the medical profession. Students may purchase a lab coat that matches the uniform. Appropriate attire is the responsibility of the student. Any final decision will be left to the discretion of

Program Officials.

Conferences: Approximately \$300.00 conferences/student meeting

Miscellaneous: Approximately \$75.00 per year – including professional

memberships and clinical record books.

ARRT Board Exam: Students are responsible for the approximate cost of \$225

for the ARRT exam.

Refunds: There are no refunds given to students who do not complete

the program

6. Graduation Requirements

A Certificate of Completion in Radiography is awarded to students who:

- Fulfill all Radiography education and clinical requirements.
- 2. Earn a grade of eighty percent or higher in all required radiography courses.
- 3. Satisfactorily completes all clinical competency evaluation requirements.

- 4. Satisfactorily completes the clinical patient care competencies required by the American Registry of Radiologic Technologists (ARRT). The following are the competencies:
 - a. CPR
 - b. Vital Signs (blood pressure, pulse, respiration, temperature, pulse oximetry)
 - c. Sterile and aseptic technique
 - d. Venipuncture
 - e. Transfer of patient
 - f. Care of patient medical equipment (e.g., oxygen tank, IV tubing)
- 5. Complete all clinical competencies required by ARRT.

Students must complete all requirements for graduation to obtain eligibility to take the ARRT radiography examination. RAD CC 2022.pdf (kc-usercontent.com)

7. Radiation Safety

Radiologic Technology uses ionizing radiation to obtain images of the human body. There are risks associated with this profession. Regulations are in place to ensure that the risk to students is minimized during their clinical instruction. This includes, but is not limited to, monitoring dose, providing appropriate shielding, and mitigating exposure.

8. Pregnancy Policy

Since ionizing radiation has been determined to be harmful to the developing embryo/fetus, the following recommendations and issues of compliance are required to protect the health of the student and child.

The recommendations of the National Committee on Radiation Protection Report #39, is that a maximum permissible dose to the fetus from occupational exposure of the expectant mother, should not exceed 0.5 rem for the entire gestation period. Thus, the pregnant student shall voluntarily notify, in writing, Program Officials at the earliest possible date. The form *Voluntary Declaration of Pregnancy* is located in the policy handbook. Once the pregnancy is disclosed, the approximate rem dose exposure will be reviewed to determine if clinical course work can continue. This will assure that the student is within the framework of the limit set above, specifically in clinical rotations such as Fluoroscopy, Interventional Radiography, OR and Nuclear Medicine. A second radiation badge will be provided to be worn at waist level. In the absence of a written voluntary disclosure, the student is not considered pregnant.

When a student submits the *Voluntary Declaration of Pregnancy* document to Program Officials, the following options are discussed:

1. Continue the program without any modification or interruptions.

- 2. Continue the program with modifications. With the student's voluntary disclosure, clinical rotations may be adjusted. Upon return to the program, the student will make up all time in areas that they missed due to their pregnancy.
- 3. Maintain didactic studies and suspend clinical rotations. All missed clinical experiences will be completed when the student returns from pregnancy leave.
- 4. Take a leave of absence from the program.
- 5. The student has the right to withdraw their voluntary declaration of pregnancy at any time, in writing and will be asked to submit the *Withdrawal of Declaration of Pregnancy Form.*

The following are options for a student who takes a leave of absence due to pregnancy.

- 1. If the student chooses to maintain didactic studies, online coursework is available through the Learning Management System (LMS). Clinical time is completed after graduation.
- 2. If the student chooses a leave of absence from the program, the student will resume with their current class by making up time missed. In addition, with the assistance of the Program Officials, the returning student will be responsible for achieving any didactic and clinical graduation requirements missed. This can include but not be limited to, one-on-one tutoring with personnel, examinations and performing competencies.
- 3. If the student has an extended leave due to medical reasons, the student may return and join the next graduating class. The student may resume at the point of suspended education or start from Quarter 1 (Year 1) or Quarter 5 (Year 2), whichever is most appropriate.
- 4. The student's physician must approve their return to work with appropriate documentation.

9. Leave of Absence.

Leave of absence may be granted to students at the discretion of Program Officials in accordance with Minneapolis Veterans Affairs Health Care System (MVAHCS) policy.

Generally, each student may be granted up to twelve weeks leave per year for bona fide events including: short-term disability or sick leave, and family leave. Program Officials will determine what constitutes a bona fide leave and the length of leave on a case-by-case basis. All requests for leaves of absence will be made in writing to Program Officials at least thirty days in advance, or as soon as reasonably practicable. Personal

leave time and sick time must be taken as part of the leave of absence and counted against the twelve weeks leave.

Upon return, students will make up any didactic or clinical time missed in that twelveweek period. Make-up work must be completed within the following 90 days. Any work not completed may be cause for dismissal.

The student in conjunction with program officials will develop an independent study course of action to make up all didactic materials missed. Program officials, department officials or technologists may assist the student in making up the clinical portion.

For a leave of absence that extends beyond 12 weeks the student may join the next graduating class. The student may resume at the point of suspended education or start from Quarter 1 (Year 1) or Quarter 5 (Year 2), whichever is most appropriate.

10. Mission, Vision and Values

Minneapolis VAHCS Mission Statement:

Honor America's Veterans by providing exceptional health care that improves their health and well-being.

Minneapolis VAHCS Vision:

To be a patient-centered, integrated health care organization for veterans by providing excellent health care, research and education; an organization where people choose to work; an active partner and a back up for national emergencies.

Minneapolis VAHCS Values:

ICARE

- Integrity
- Commitment
- Advocacy
- Respect
- Excellence

Minneapolis VA Healthcare System – Radiography School Mission Statement:
It is the mission of the VAHCS School of Radiologic Technology to educate radiologic technologists who recognize patient needs, who hold the skills, knowledge and attitudes required for safe, diagnostic radiology; and who are registry eligible upon program completion.

Purpose

The purpose of the VAHCS School of Radiologic Technology is to prepare graduates with entry-level skills, knowledge, and attitudes of a staff technologist through successful completion of clinical and academic objectives.

11. Program Information

General Information

Radiologic Technology is the technical science that deals with the use of x-rays for diagnostic purposes in medicine. The term radiologic technologist refers to an individual qualified to use ionizing radiation to produce images of the body for

interpretation by a radiologist. As an important member of the health care team, the radiologic technologist is employed in hospitals, clinics, imaging centers, mobile services, commercial sales and industrial imaging. Registered technologists may specialize in areas such as radiation therapy, nuclear medicine, sonography, computerized tomography, neuroradiology, vascular radiology, echocardiography, positron emission imaging scanning, magnetic resonance imaging and mammography.

Program Information

The VAHCS Radiologic Technology program begins in September of each year and consists of a two-year (24 consecutive months) curriculum. Class hours are from 07:30 - 15:30 hours Monday through Friday. Classes and clinical times may vary from quarter to quarter. In addition to traditional classroom instruction, students participate in supervised clinical practice. Graduates of the VA program are awarded a certificate of completion and are eligible to take the national certification examination given by the American Registry of Radiologic Technologists. All course material is completed prior to the national certification examination.

Program Goals

Goal 1: Graduates will demonstrate clinical competence

- Outcome 1: Students will select appropriate technical factors.
- Outcome 2: Students will demonstrate accurate positioning skills.

Goal 2: Graduates will demonstrate critical thinking skills.

- Outcome 1: Students will demonstrate adjustment to individual circumstances in acquiring quality radiographic images.
- Outcome 2: Students will critique images for anatomic and radiographic quality.

Goal 3: Graduates will demonstrate effective communication skills.

- Outcome 1: Students will demonstrate effective written communication skills.
- Outcome 2: Students will demonstrate effective of verbal communication skills.

Admission Procedures

The Radiography Program at the Veterans Affairs Medical Center is an equal opportunity program. The student selection is non-discriminating with respect to race, color, creed, sex, age, handicap, or national origin.

The candidate's application materials, personal references and transcripts must be received by the closing date each year. The closing date for the 2025-2027 class is **December 20**, **2024 @16:00 hours**. A personal interview is conducted if the applicant meets admission criteria. The program director, clinical coordinator, staff technologist(s) and a student representative from the first- and second-year students will conduct interviews. The selection is based upon the interview process and the following criteria.

Criteria for Selection

• Grades: 20%

Letters of Recommendation: 10%

• Interview Process: 60% (Likert Scale from 1-5)

• Experience: 10%

The selected applicants are notified within two weeks of the interview and are requested to confirm the acceptance within three days. The remaining applicants are notified after the confirmation of the selected applicants. The program reserves the right to select less than the maximum number of ten applicants per year, for a total of 20 students for the program's length of a two-year period

Background Checks, Random Drug Testing

All applicants must submit to a federal background check for acceptance to the VA Program and a Minnesota State background check. Students may be subject to random drug testing obligations.

Financial Aid

The VAHCS School of Radiologic Technology has no scholarship/grant/loan programs. We do not participate in the federal financial aid funding.

Learning Resources

- 1. Students have access to the VA library 24/7.
- 2. Students have access to the computers in the VA library 24/7.
- 3. Tutoring and mentoring services are available and provided by program officials as needed.
- 4. A general radiography review class is provided in the student's senior year to refresh their general radiography knowledge before taking the national registry.
- 5. Student Organization Meetings are available for the student to attend on an annual basis.
- 6. The student knowledge bowl is available for the students to attend on an annual basis.

Student Services

- 1. Parking
- 2. Hepatitis Series
- 3. COVID 19 Vaccinations
- 4. Flu vaccinations
- 5. Tutoring

Students may not be assigned to clinical settings on holidays that are observed by the sponsoring institutions. Please see the following Holidays in the Academic Calendar.

Academic Calendar

Labor Day off: September 2, 2024 Start of School: September 3, 2024,

Program Orientation: 9/3/2023 – 9/6/2024

HR In-Processing: 9/9/2024

New Employee Orientation: 9/25/2024 First Quarter: 9/3/24 - 11/22/2024

Columbus Day/Indigenous People Day off: October 14, 2024

Veterans Day off: November 11, 2024 Thanksgiving off: November 28-29, 2024 Second Quarter: 12/2/2024 - 2/21/2025

Winter Break off: December 21st, 2024 – January 5th, 2025

Christmas off: December 25, 2024 New Year's Day off: January 1, 2025

Martin Luther King's Day off: January 20, 2025

Presidents Day off: February 17, 2025 Third Quarter: 3/3/2024 - 5/23/2025 Memorial Day off: May 26, 2025 Fourth Quarter: 6/2/24 - 8/22/2025 Juneteenth off: June 19, 2025 Independence Day off: July 4, 2025

Graduation: August 15, 2025 Labor Day off: September 1, 2025 Fifth Quarter: 9/1/2025 - 11/21/2025 Sixth Quarter: 12/1/2025 - 2/20/2026 Seventh Quarter: 3/2/2026 - 5/22/2026 Eighth Quarter: 6/1/2026 - 8/21/2026

Course Descriptions

Clinical Rotations – (Credit Hours Vary, see <u>Curriculum Sequence</u>)

This is the student's experience in performing as an actual part of the health care team. The clinical training plan will focus on patient care, protocol in the health care facility and imaging department, and on identification of diagnostic equipment and supplies. Students will also practice interpreting general radiographic considerations. Emphasis will be radiographic positioning and manipulation of radiographic equipment and accessories related to radiography.

The student will continue to acquire and build skills while performing radiographic procedures. The student will continue to increase skill in portable radiography.

Students are required to demonstrate competency in regular radiographic areas and procedures, also pediatrics and trauma. Competency is achieved in studies requiring the use of contrast agents, especially those of the digestive and urinary systems. In addition, the student is introduced to specialized studies of the vascular system, computed tomography, digital imaging, magnetic resonance, mammography, and ultrasound. This course emphasizes the development of independence, discretion and judgment by the student while performing radiographic procedures. The student is expected to correlate all clinical and didactic experience while demonstrating proficiency and efficiency.

Cross-Sectional Anatomy (3.0 Credits)

This class provides students with the tools for understanding anatomy in three dimensions. Students will be able to visualize the appearance and the relationships in planar sections following completion of this material. Students are introduced to common cross-sectional cranial, thoracic, abdominal, and pelvic structures. (Prerequisite: Radiographic Procedures IV)

Digital Imaging

This course is a class presently taught in Radiographic Exposure I & II, and Radiologic Physics I & II. It offers an overview of digital applications in medical imaging. Basic principles of digital radiographic imaging technology are discussed, including image acquisition fundamentals, processing, physical and technological aspects of digital modalities, and effective use of digital imaging technologies.

Medical Law and Ethics (3.0 Credits)

The fundamentals of bioethics, ethical codes, confidentiality, patient rights and humanistic health care are taught in this course. Legal terminology, legal judgment, legal documents, and litigation are also discussed. Students explore the legal, ethical, and moral dilemmas currently faced by healthcare professionals, and identify issues related to potential legal liability in the workplace.

Medical Terminology I (3.0 Credits)

In this course students learn to recognize and build medical terms after learning the meaning of word parts. The application of radiographic terms will be discussed. Emphasis is placed on building medical terms using prefixes, suffixes, and word roots. The course is based on a systems approach. Students will also learn how to interpret and use common medical abbreviations and symbols. Upon completion, students should be able to pronounce, spell, and define accepted medical terms.

Medical Terminology II (3.0 Credits)

This is a continuation of Medical Terminology I. Students continue to learn to recognize and build medical terms after learning the meaning of word parts. The application of radiographic terms will be discussed. The course is based on a systems approach. Students will also learn how to interpret and use common medical abbreviations and symbols.

(Prerequisite: Medical Terminology I)

Patient Care in Radiography (3.0 Credits)

The radiography technologist provides for the patient's physical and psychological needs. Along with communication skills, body mechanics, isolation and aseptic techniques, students learn the care of IV's and drainage tubes. There is also a focus on emergency protocols, as well as contrast reactions. Students' complete CPR certification and achieve competency in venipuncture. Students master the ARRT General Patient Care Procedures and achieve a simulation competency in venipuncture prior to the expectation of demonstrating competency during their clinical experience.

Radiation Biology and Radiation Protection (4.0 Credits)

This course is a study of the principles of cell radiation interaction. Students study factors affecting cell response to acute and chronic results of radiation. Principles of radiation protection and responsibility by the radiographer to patients, personnel and the public are presented. Regulatory policy is discussed. Basic principles of measurement, energy, atomic structure, electricity, magnetism, and their application to radiation production take place in this course. Students also study x-ray production and scatter radiation.

(Prerequisites: Radiologic Physics II)

Radiographic Exposure and Technique I (3.0 Credits)

This course covers an introduction to the scientific principles that govern radiographic technical factors. Topics include receptor exposure, contrast, spatial resolution, and distortion. Photographic and geometric properties of radiographs are

discussed. The course begins covering fluoroscopic imaging and the image intensifier. This course is designed to create a foundation of knowledge upon which an understanding of the principles that govern radiographic technique and quality can be built.

Radiographic Exposure and Technique II (3.0 Credits)

Emphasis is on radiographic image quality through presentation of prime technical factors and their effect on radiographic quality. Students will be involved in solving technical problems and making technical adjustments related to prime exposure factors. Further discussion on fluoroscopic imaging occurs.

(Prerequisites: Radiographic Exposure I)

Radiographic Procedures I (3.0 Credits)

This course will provide the student with the knowledge necessary to perform radiographic procedures relative to the thoracic and abdominal cavities, upper extremities including shoulder girdle, bony thorax, and mobile radiography. Emphasis will be on radiographic terms, positioning, manipulation of radiographic equipment and accessories and related patient care considerations. Surgical radiography will be introduced.

Radiographic Procedures I Laboratory (2.0 Credits)

Instructors demonstrate projections, which will best demonstrate the anatomy learned during didactic learning. Students also will demonstrate projection they have learned.

Radiographic Procedures II (3.0 Credits)

This course provides students with the knowledge necessary to perform radiographic procedures relative to the lower limb, vertebral column to include pelvis, surgical radiography, and trauma radiography. Emphasis will be on radiographic terms, positioning, manipulation of radiographic equipment and accessories, and related patient care considerations. Mobile radiography continues to be covered based upon learned projections. Students continue to develop the knowledge necessary to completely perform radiographic procedures relative to the bony thorax, upper extremities, shoulder girdle, and other procedures previously covered. (Prerequisites: Radiographic Procedures I, Radiographic Procedures I Lab)

Radiographic Procedures II Laboratory (2.0 Credits)

Instructors demonstrate projections which will best demonstrate the anatomy learned during didactic learning. Students also will demonstrate projection they have learned.

(Prerequisites: Radiographic Procedures I, Radiographic Procedures I Lab)

Radiographic Procedures III (3.0 Credits)

This course provides the student knowledge necessary to perform radiographic procedures relative to the gallbladder and biliary ducts, upper and lower gastrointestinal track, urinary system. Venipuncture will be reviewed. Emphasis will be on anatomy, radiographic terms, positioning, and patient considerations related to radiography. Students continue to develop the knowledge necessary to completely perform radiographic procedures relative to the bony thorax, spine, extremities, trauma exams, and other procedures previously covered.

(Prerequisites: Radiographic Procedures II, Radiographic Procedures II Lab)

Radiographic Procedures III Laboratory (2.0 Credits)

Instructors demonstrate projections, which will best demonstrate the anatomy learned during didactic learning. Students also will demonstrate projection they have learned.

(Prerequisites: Radiographic Procedures II, Radiographic Procedures II Lab)

Radiographic Procedures IV (3.0 Credits)

This course emphasizes the basic radiographic procedures and positioning related to paranasal sinuses, temporal bones, facial and cranial bones. Students continue to develop the knowledge necessary to completely perform radiographic procedures relative to the bony thoracic, abdomen, spine, extremities, trauma exams and other procedures previously covered.

(Prerequisites: Radiographic Procedures III, Radiographic Procedures III Lab)

Radiographic Procedures IV Laboratory (2.0 Credits)

Instructors demonstrate projections, which will best demonstrate the anatomy learned during didactic learning. Students will practice and demonstrate projections they have learned.

(Prerequisites: Radiographic Procedures III, Radiographic Procedures III Lab)

Radiographic Procedures V (4.0 Credits)

This course provides the student with an overview study of advanced and special imaging procedures. This course includes an introduction to the various modalities in the Imaging Department including but not limited to Mammography, Interventional Radiography, Cardiac, Oncology, Ultrasound, Forensic Radiography, and Bone Density. The following areas are also reviewed: Mobile, C-Arm, Surgical, and Trauma. Methods of learning include class lecture, self-study, presentation, guest lecturers and discussion.

(Prerequisites: Radiographic Procedures IV, Radiographic Procedures IV Lab)

Radiologic Pathology I (4.0 Credits)

This course will provide the student with the concepts of disease and its effects on the human body. Pathology and diseases as they relate to various radiographic procedures and radiographs will be discussed.

(Prerequisites: Clinical, Radiographic Procedures IV)

Radiologic Pathology II (4.0 Credits)

This class is a continuation of the Radiographic Pathology I, where the students continue to learn about the effect of diseases on the human body.

(Prerequisites: Radiologic Pathology I)

Radiologic Physics I (4.0 Credits)

This course covers the fundamentals of physics. Material covered includes specific concepts of radiation science through electromagnetism that occurs inside and outside the x-ray tube.

Radiologic Physics II (4.0 Credits)

This course will provide the student with knowledge of the equipment used routinely to produce diagnostic images. Imaging modalities, including fluoroscopy, automatic exposure devices and conventional tomography and various recording media techniques will be discussed.

(Prerequisites: Radiologic Physics I)

Registry Review I (3.0 Credits)

This course is a review of all information given during the students' time spent in the classroom. The review can consist of mock registry exams, worksheets for review, self-study, and student instruction with guidance of the instructors.

(Prerequisites: Radiologic Pathology II, Radiation Biology and Radiation Protection)

Registry Review II (4.0 Credits)

This course is a review of all information given during the students' time spent in the classroom. The review can consist of mock registry exams, worksheets for review, self-study, and student instruction with guidance of the instructors.

(Prerequisites: Registry Review II)

Topics in Radiology (4.0 Credits)

This course provides the student with the opportunity to investigate and participate in a radiologic technology facet of their choosing. Emphasis will be placed on areas of specialization and career options and mobility.

(Prerequisites: Radiologic Pathology II, Radiation Biology and Radiation Protection)

Total Quality Management (TQM) (4.0 Credits)

This course provides the students with a systematic process for solving problems within a radiography department. Emphasis is placed on the students solving a dilemma in the radiology department or working on a project to improve the Imaging Department or the School of Radiography. Project management principles are used to resolve the problem.

(Prerequisites: Radiologic Pathology II, Radiation Biology and Radiation Protection)

^{*}Program Officials reserve the right to revise curriculum as indicated.

Curriculum Sequence

Quarter 1	Title	Clock Hours	Quarter Credits
	Patient Care in Radiography [‡]	30	3.0
	Medical Terminology I [‡]	30	3.0
	Radiographic Procedures I [‡]	30	3.0
	Radiographic Exposure and Technique I	30	3.0
	Radiographic Procedures I Lab	40	2.0
	Clinical Practicum I	288	3.5
	Total:	448	17.5

[‡] Courses offered in a blended format, a combination of online and on campus.

Quarter 2	Title	Clock Hours	Quarter Credits
	Radiographic Procedures II [‡]	30	3.0
	Radiographic Procedures II Lab	40	2.0
	Medical Terminology II [‡]	30	3.0
	Radiographic Exposure and Technique II	30	3.0
	Clinical Practicum II	288	3.5
	Total:	418	14.5

[‡] Courses offered in a blended format, a combination of online and on campus

Quarter 3	Title	Clock Hours	Quarter Credits
	Radiographic Procedures III [‡]	30	3.0
	Radiographic Procedures III Lab	40	2.0

Quarter 3	Title	Clock Hours	Quarter Credits
	Radiologic Physics I	40	4.0
	Clinical Practicum III	288	3.5
	Total:	398	12.5

[‡] Courses offered in a blended format, a combination of online and on campus

Quarter 4	Title	Clock Hours	Quarter Credits
	Radiographic Procedures IV [‡]	30	3.0
	Radiographic Procedures IV Lab	40	2.0
	Radiologic Physics II	40	4.0
	Cross Sectional Anatomy	30	3.0
	Clinical Practicum IV	288	3.5
	Total:	428	15.5

[‡] Courses offered in a blended format, a combination of online and on campus

Quarter 5	Title	Clock Hours	Quarter Credits
	Radiographic Procedures V	40	4.0
	Radiologic Pathology I	40	4.0
	Clinical Practicum V	384	4.5
	Total:	464	12.5

[‡] Courses offered in a blended format, a combination of online and on campus

Quarter 6	Title	Clock Hours	Quarter Credits
	Radiologic Pathology II [‡]	40	4.0
	Radiation Biology and Radiation Protection	40	4.0

Quarter 6	Title	Clock Hours	Quarter Credits
	Clinical Practicum VI	320	4.0
	Total:	400	12.0

[‡] Courses offered in a blended format, a combination of online and on campus

Quarter 7	Title	Clock Hours	Quarter Credits
	Medical Legal and Ethics [‡]	30	3.0
	Registry Review I [‡]	30	3.0
	Topics in Radiology [‡]	40	4.0
	Clinical Practicum VII	336	4.0
	Total:	436	14.0

[‡] Courses offered in a blended format, a combination of online and on campus

Quarter 8	Title	Clock Hours	Quarter Credits
	Registry Review II [‡]	40	4.0
	Total Quality Management (TQM)‡	40	4.0
	Clinical Practicum VIII	280	3.5
	Total:	360	11.5

[‡] Courses offered in a blended format, a combination of online and on campus

Credit Hours Calculator:

Classroom = 1 credit/10 hours

Lab = 1 credit/20 hours

Clinic = 1 credit/80 hours

The VAHCS School of Radiologic Technology uses the professional curriculum developed by the American Society of Radiologic Technology (ASRT). Every two years, program officials revise and update the curriculum.

Program Officials reserve the right to revise curriculum as indicated.

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