



**Lifespan
School of Medical Imaging**

Delivering health with care.®

Computed Tomography • Diagnostic Medical Sonography
Magnetic Resonance Imaging • Mammography
Nuclear Medicine Technology • Radiography

Student Handbook

**335R Prairie Avenue
Suite 2A
Providence, RI 02905**

Website: www.rihsdi.org
Telephone: 401-606-8531
Facsimile: 401-606-8532
Email: LSMI@lifespan.org

Student of a Medical Imaging Program:

This Handbook provides essential information about the medical imaging programs at Lifespan School of Medical Imaging. Since you are responsible for reading the Handbook completely and adhering to the stated policies, you must familiarize yourself with the contents. Periodically, the curriculum and policies and procedures of the school change. It is your responsibility to update your Handbook with changes as this information becomes available. This Handbook supplements the Rhode Island College and Lifespan School of Medical Imaging Student Handbooks.

Every student is assigned a faculty advisor. It is extremely important that you meet with your advisor to plan each semester's course of study. You can find out who your advisor is by checking your MyRIC Online site.

The School of Medical Imaging makes every effort to assure that students, faculty, staff, and visitors with special needs are accommodated. It is the responsibility of the person with special needs to identify his/her needs so that accommodations can be made in a reasonable and timely fashion.

The faculty and staff of the School of Medical Imaging are committed to working with you to help you achieve your professional goals. On behalf of the faculty and staff, let me welcome you to the medical imaging program and wish you every success.

Lifespan School of Medical Imaging (LSMI) reserves the right to alter, change, amend or modify any part of this handbook, at any time, for justifiable reason. Students will receive notice of any changes requiring student sign-off.

Implemented: 09/2019

TABLE OF CONTENTS

SECTION	PAGE
Mission Statements	5
School Faculty	6
School and Clinical Affiliates	7
Calendar	9
Admissions Process	10
Advisement Form	17
Academic and Clinical Standards	21
Academic Honesty Policy	21
Advisory Committee	22
Attendance	22
Calculators	24
Change in Personal Data	24
Clinical Affiliate Orientation	24
Clinical Information	24
Complaint and Grievance Procedure	25
Counseling and Corrective Action Policy	26
CPR	28
Credit Hours	28
Didactic Information	28
Emergency Contact	29
Ethics Requirements for Registry Eligible Graduates	29
Evaluations	29
Federal Education Rights and Privacy Act	30
Graduation Requirements	30
Holidays	30
Honors Program	30
Hospital Employee Strike	31
Leave of Absence	31
Meal Break	32
Medical Imaging Student Representative	32
Parking	32
Personal Electronics Policy	32
Policies	32
Policy of Non-Discrimination	32
Pregnancy Policy	33
Probationary Period	33
Professional Appearance Standards	34
Professional Organizations	35
Resolutions of Complaints – JRCERT	35
Safety Policies	36
School Cancellations	37
Solicitation or Distribution	37
Student Health	37
Student Services	38

Student Terminated as Employee	39
Technical Standards	40
Textbooks	41
Tips or Gratuities	41
Transfer Students	41
Tuition and Fees	41
Vacations	41
Venipuncture Training	41
Withdrawal Policy	42
Computed Tomography	43
Diagnostic Medical Sonography	45
Magnetic Resonance Imaging	50
Mammography	55
Nuclear Medicine Technology	57
Radiography	63

MISSION STATEMENTS

LIFESPAN

Delivering health with care.

SCHOOL OF MEDICAL IMAGING

The mission of Lifespan School of Medical Imaging is to work collaboratively with technologists and other healthcare professionals to prepare students with entry level employment skills to meet the needs of the community. The school offers a variety of clinical settings to diversify and enhance student learning and networking in its communities of interest.

ADMINISTRATION

Vice President – Lifespan Imaging and Rehabilitative Services

Todd Cipriani

Medical Director

John Cronan, MD

School Administrator

Program Director – Radiography

Ellen Alexandre, MBA, RTR

LSMI, Room 216

Office – (401) 606-8547

Ealexandre@lifespan.org

Administrative Assistant

Maria Mendes

Office – (401) 606-8531

(EMERGENCY CONTACT)

Mmendes2@lifespan.org

SCHOOL ADMINISTRATION

Program Director – Computed Tomography

Eric Petrosinelli, MA, RT(R)(CT)

LSMI – Room 220

Office – (401) 606-8544

Epetrosinelli@lifespan.org

Program Director – Diagnostic Medical Sonography

Emma Leary, BS, RTR, RDMS, RVT

LSMI – Room 218

Office – (401) 606-8542

@lifespan.org

Program Director – Magnetic Resonance Imaging

Randy Paquette, BS, RT(R)(MR)

LSMI – Room 217

Office – (401) 606-8541

Cell – (401) 378-8141

Rpaquette2@lifespan.org

Program Director – Mammography

Carol Kut, RT(R)(M)

LSMI – Room 223

Office – (401) 606-8531

Ckut@lifespan.org

Program Director – Nuclear Medicine Technology

Lauren Shanbrun, MS, CNMT, RT(N)(CT)

LSMI – Room 219

Office – (401) 606-8543

Cell – (401) 248-4114

Lshanbrun@lifespan.org

Clinical Coordinator – Radiography

Norman Swift, BS, RT(R)

LSMI – Room 221

Office – (401) 606-8545

Cell – (401) 265-2885

Nswift@lifespan.org

Clinical Coordinator – Radiography

Louise Thibodeau, BS, RT(R)

LSMI – Room 222

Office – (401) 606-8546

Cell – (401) 265-3417

Lthibodeau1@lifespan.org

SCHOOL and CLINICAL AFFILIATE LOCATIONS

SCHOOL: 335R Prairie Avenue, Suite 2A, Providence, RI 02905
 401-606-8531
 LSMI@lifespan.org

CLINICAL AFFILIATES:

The School of Medical Imaging offers a balanced clinical education sufficient in quantity and variety of examinations as well as diversified modern equipment. **The student is responsible for their own transportation to and from clinical affiliates. Travel requirements include up to 1 ½ hours.**

Clinical education takes place at the following facilities:

AFFILIATE	ADDRESS
Lifespan: Hasbro Children's Hospital	593 Eddy Street, Providence, RI 02903
Lifespan: Newport Hospital	11 Friendship Street, Newport, RI 02840
Lifespan: Portsmouth Imaging Center	69 Turnpike Avenue, Portsmouth, RI 02871
Lifespan: Rhode Island Hospital	593 Eddy Street, Providence, RI 02903
Lifespan: The Miriam Hospital	164 Summit Avenue, Providence, RI 02906
Rhode Island Medical Imaging: Barrington Medical Center	1525 Wampanoag Trail, Suite 101, East Providence, RI 02915
Rhode Island Medical Imaging: Blackstone Center	6 Blackstone Valley Place, Building 5, Suite 506, Lincoln, RI 02865
Rhode Island Medical Imaging: Cranston	1301 Reservoir Avenue, Cranston, RI 02920
Rhode Island Medical Imaging: George Washington Medical Center	2 Wake Robin Road, Suite 107, Lincoln, RI 02865
Rhode Island Medical Imaging: Greenwich Medical Center	1351 South County Trail, Suite 105, Route 2 South, East Greenwich, RI 02818
Rhode Island Medical Imaging: Blackstone Valley Medical Building	333 School Street, Suite 105, Pawtucket, RI 02860
Rhode Island Medical Imaging: Moshassuck Medical Center	1 Randall Square, Suite 103, Providence, RI 02904
Rhode Island Medical Imaging: North Providence	1500 Mineral Spring Avenue, North Providence, RI 02904
Rhode Island Medical Imaging: Warwick	250 Tollgate Road, Warwick, RI 02886
Southcoast Hospital Group: Charlton Memorial Hospital	363 Highland Avenue, Fall River, MA 02720
Southcoast Hospital Group: St. Luke's Hospital	101 Page Street, New Bedford, MA 02740
University Orthopedics	2 Dudley Street, Suite 200, Providence, RI 02905 1 Kettle Point Avenue, East Providence, RI 02914
Women & Infants Hospital	101 Dudley Street, Providence, RI 02905

Yale New Haven Health Lawrence + Memorial Hospital	Main Campus, 365 Montauk Ave, New London, CT 06320
Yale New Haven Health Lawrence + Memorial Hospital Pegot Health Center	52 Hazelnut Hill Road, Groton, CT 06340
Yale New Haven Health Lawrence + Memorial at Crossroads Waterford	196 Parkway South, Suite 102, Waterford, CT 06385
Yale New Haven Health Westerly Hospital	25 Wells Street, Westerly, RI 02891

CALENDAR

Fall 2019

September 2	Labor Day – No School
September 3	Start of fall semester
October 14	Columbus Day – No School
October 25	Mid semester grades due
November 28 – 29	Thanksgiving Break – No School
December 23	Winter Break Begins

Spring 2020

January 13	Start of spring semester
February 17	President's Day – No School
March 6	Mid-semester grades due
April 10	Good Friday – No School
May 4-8	Spring Break

Summer 2020

May 11	Start of summer semester
May 25	Memorial Day – No School
July 3	Mid semester grades due
July 3	Independence Day Break – No School
August 10	Victory Day – No School
August 24-28	Final Week – No Clinicals
August 31-September 4	Summer Break

Fall 2020

September 7	Start of fall semester
September 7	Labor Day – No School
October 12	Columbus Day – No School
October 30	Mid semester grades due
November 26-27	Thanksgiving Break – No School
December 24	Winter Break Begins

Spring 2021

January 11	Start of spring semester
February 15	President's Day – No School
March 5	Mid-semester grades due
April 2	Good Friday – No School
May 1-9	Spring Break

ADMISSION PROCEDURE

**DIAGNOSTIC MEDICAL SONOGRAPHY
MAGNETIC RESONANCE IMAGING
NUCLEAR MEDICINE TECHNOLOGY
RADIOGRAPHY:**

Initial entrance into the School of Medical Imaging (SMI) clinical education program requires admission to Rhode Island College (RIC) as a medical imaging intended major.

In order for an application to be processed, the following items must be submitted online through MyRIC Online Services:

- Completed application
- Applicant essay (2-page limit)

To be considered for admissions, applicants must satisfy the following requirements:

- Completion of the cognate (pre-clinical) courses with a minimum grade of C in each course (See RIC advisement forms, pages 12-15)
- Completion of the required general education courses (see RIC advisement forms for course list)
- Completion of the college mathematics and writing requirements
- A minimum cumulative grade point average of 2.70
- Completion of RADT 201 Orientation to Medical Imaging. Course must be completed prior to the application deadline with a minimum grade of C.
- Completion of Test of Essential Academic Skills (TEAS) prior to the application deadline. For students exempt from RADT 201, contact SMI to schedule the exam.
- Personal interview
- **ALL COMMUNICATION WILL BE VIA RIC EMAIL (except forms – sent to address on application).**

Important Dates:

- Application Deadline – May 15
- Interview Dates – First 2 weeks in June
- August 1 – notification letters of conditional acceptance or denial

Applicants with an incomplete application will not be considered. Applications will not be accepted after the application deadline. The admissions committee endeavors to select candidates with the most promise of becoming outstanding medical imaging technologists. The committee considers information that depicts an applicant's total qualifications for the medical imaging program. Selection of students is based on the following criteria:

- **See Admission Form** (pages 10-11)

Full acceptance is contingent on satisfying the following requirements prior to the start of the clinical education program:

- Minimum cumulative grade point average of 2.70
- Completion of the minimum requirements of credits
- Completion of all cognate (pre-clinical) courses with a minimum grade of C in each course
- Meeting health requirements necessary to function as a medical imaging technologist
- Submitting to, and successfully completing, a background check
- Completion of CPR – Basic Life Support (Adult, Pediatric, AED)

For admissions information contact:

Eric Hall, Associate Professor

Rhode Island College

401-456-8480

401-456-8010

ehall@ric.edu

School of Medical Imaging

335R Prairie Avenue, Suite 2A

Providence, RI 02905

401-606-8531

LSMI@Lifespan.org

COMPUTED TOMOGRAPHY:

In order for an application to be processed, the following items must be submitted to SMI:

- Completed application
- Official copies of transcripts from all medical imaging programs attended
- Applicant essay (2-page limit)
- Copy of certification card (ARRT and/or NMTCB)

To be considered for admissions, applicants must satisfy the following requirements:

- Registered technologist in nuclear medicine technology, radiologic technology, or radiation therapy
- In good standing with the ARRT or NMTCB
- Personal interview
- **ALL COMMUNICATIONS WILL BE VIA EMAIL (except forms – sent to address on application).**

Application deadlines – July 1

Applicants with an incomplete application will not be considered. Applications will not be accepted after the application deadline. The admissions committee endeavors to select candidates with the most promise of becoming outstanding medical imaging technologists. The committee considers information that depicts an applicant's total qualifications for the medical imaging program. Selection of students is based on the following criteria:

- *See Admission Form CT and Mammography.*

Notification letters of denial or conditional acceptance will be mailed out by August 31

Full acceptance is contingent on satisfying the following requirements prior to the start of the clinical education program:

- Meeting health requirements necessary to function as a medical imaging technologist
- Submitting to, and successfully completing, a background check
- Completion of CPR – BLS for Healthcare Providers
- Current state license

For admissions information contact:

Eric Petrosinelli
School of Medical Imaging
335R Prairie Avenue, Suite 2A
Providence, RI 02905
401-606-8531
LSMI@Lifespan.org

MAMMOGRAPHY:

In order for an application to be processed, the following items must be submitted to SMI:

- Completed application
- Official copies of transcripts from medical imaging programs attended
- Applicant essay (2-page limit)
- Copy of certification card (ARRT)

To be considered for admissions, applicants must satisfy the following requirements:

- Registered technologist in radiologic technology
- In good standing with the ARRT
- Personal interview
- **ALL COMMUNICATION WILL BE VIA EMAIL.**

Application deadlines:

- **July 1 for September start date**
- **December 1 for February start date**

Applicants with an incomplete application will not be considered. Applications will not be accepted after the application deadline. The admissions committee endeavors to select candidates with the most promise of becoming outstanding medical imaging technologists. The committee considers information that depicts an applicant's total qualifications for the medical imaging program. Selection of students is based on the following criteria:

- *See Admission Form CT and Mammography.*

Notification letters of denial or conditional acceptance will be mailed out to all applicants

Full acceptance is contingent on satisfying the following requirements prior to the start of the clinical education program:

- Meeting health requirements necessary to function as a medical imaging technologist
- Submitting to, and successfully completing, a background check
- Completion of CPR – BLS for Healthcare Providers
- Current RI license

For admissions information contact:

Carol Kut
School of Medical Imaging
335R Prairie Avenue, Suite 2A
Providence, RI 02905
401-606-8531
LSMI@Lifespan.org

ADMISSION TRACKING FORM
For School Use Only

STUDENT INFORMATION:

Date: ____ / ____ / ____	RIC Student ID #:
Name:	

PROGRAM (Check all that apply):

- | | |
|--|---|
| <input type="checkbox"/> Diagnostic Medical Sonography | <input type="checkbox"/> Magnetic Resonance Imaging |
| <input type="checkbox"/> Nuclear Medicine Technology | <input type="checkbox"/> Radiologic Technology |

Checklist:	
	Completed application
	Essay – (if applying to multiple programs – one essay to include one paragraph for each interested modality) _____ Diagnostic Medical Sonography _____ Magnetic Resonance Imaging _____ Nuclear Medicine Technology _____ Radiologic Technology
	TEAS test – total score ≥ 60 points If not administered through RIC, must have official transcript sent to SMI via ATI system. Total Score _____
	Scheduled interview date

TALLY SHEET:
Section A: PRE-CLINICAL REQUIRED COURSES (A = 3; B = 2; C = 1; ALL OTHER GRADES = 0)
ALL COURSE GRADES WILL BE INCLUDED IN SCORING

Science and Math Courses	Grade	Points
BIOL 108 – Basic Principles of Biology		
BIOL 231 – Human Anatomy		
BIOL 335 – Human Physiology		
CHEM 105 – General, Organic, and Biological Chemistry I		
MATH 209 – Pre-Calculus Mathematics		
PHYS 110 – Introduction Physics		
RADT 201 – Orientation to Medical Imaging		
Average		

Section B: INTERVIEW

Competency	Points
Punctuality	
First Impression	
Interpersonal Skills	
Communication Skills	
Knowledge of Chosen Modality	
Plans/Goals for Success	
Personal Reflection/Self-Evaluation	
Ambition/Enthusiasm	
Professional Personality	
Average	

SCORING:

<u>Points</u>	<u>Description</u>	<u>Explanation</u>
4	Strongly Agree	Exhibits professional attributes of skill(s)
3	Agree	Exhibits basic attributes of skill(s)
2	Somewhat Agree	Exhibits some attributes of skill(s)
1	Disagree	Lacks attributes of skill(s)

FINAL SCORING:

$(\text{Section A} \times 0.50) + (\text{Section B} \times 0.50) = \text{Total Score}$

CONCERNS:

ADMISSION FORM

STUDENT INFORMATION:

Date: ____ / ____ / ____

Name:

PROGRAM:☐

Computed Tomography

☐

Mammography

Checklist:	
	Completed application
	Essay – (if applying to multiple programs – one essay to include one paragraph for each interested modality) ____ Computed Tomography ____ Mammography
	Transcript (Imaging Program)
	Scheduled interview date

Rhode Island College ADVISEMENT FORM – DIAGNOSTIC MEDICAL SONOGRAPHY

Competency Requirements

	<u>Completed:</u>	<u>Credits:</u>
Math competency	_____	0
Second Language	_____	4–8

General Education Courses

First Year Writing	_____	4	
First Year Seminar	_____	4	
Multiple Voices	_____	4	
Studies in Literature	_____	4	
Connections	_____	4	
Social and Behavioral	_____	4	
Arts	_____	4	32–36

Math, Natural Science, and Advanced Quantitative/Scientific Reasoning included in cognates

Pre-clinical Required Courses

BIOL 108 Basic Principles of Biology (NS)	_____	4	
BIOL 231 Human Anatomy	_____	4	
BIOL 335 Human Physiology (AQSR)	_____	4	
CHEM 105 General, Organic and Biological Chemistry I	_____	4	
MATH 209 Pre-Calculus Mathematics (M)	_____	4	
PHYS 110 Introductory Physics	_____	4	
MEDI 201 Orientation to Medical Imaging	_____	1	25

Clinical Program

MEDI 202 Introduction to Medical Imaging	<u>Fall of year 3</u>	_____	1.5	
MEDI 255 Patient Care Interventions for Allied Health		_____	1.5	
DMS 300 Introduction to Diagnostic Medical Sonography		_____	2	
DMS 307 Sonographic Principles and Instrumentation I		_____	2	
COMM 338 Communication for Health Professionals		_____	4	
Elective or GE or Language		_____	3-4	14-15
DMS 301 Abdomen & Small Parts Sonography I	<u>Spring of year 3</u>	_____	4	
DMS 337 Sonographic Principles and Instrumentation II		_____	2	
DMS 309 Clinical Practice I		_____	3.5	
Elective or GE or Language		_____	3-4	12.5-13.5
DMS 321 Abdomen & Small Parts Sonography II	<u>Summer of year 3</u>	_____	3	
DMS 311 Obstetrical & Gynecological Sonography I		_____	3	
DMS 310 Clinical Practice II		_____	8	14
DMS 421 Vascular Sonography	<u>Fall of year 4</u>	_____	2	
DMS 411 Obstetrical & Gynecological Sonography II		_____	3	
DMS 410 Clinical Practice III		_____	8	13
DMS 455 Registry Review	<u>Spring of year 4</u>	_____	3	
DMS 420 Clinical Practice IV		_____	6	
Elective or GE or Language		_____	3-4	12-13
Clinical Program credits			52	
Total Credits			120	

DO NOT FOLLOW – COURSE TITLES AND CREDITS ARE REVISED. PROGRAM DIRECTOR WILL DISCUSS ON DAY 1!

Rhode Island College ADVISEMENT FORM – MAGNETIC RESONANCE IMAGING
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Competency Requirements

	<u>Completed:</u>	<u>Credits:</u>
Math competency	_____	0
Foreign Language	_____	4-8

General Education Courses

First Year Writing	_____	4	
First Year Seminar	_____	4	
Multiple Voices	_____	4	
Studies in Literature	_____	4	
Connections	_____	4	
Social and Behavioral	_____	4	
Arts	_____	4	32-36

Math, Natural Science, and Advanced Science/Quantitative Reasoning included in cognates

Pre-clinical Required Courses

BIOL 108 Basic Principles of Biology (NS)	_____	4	
BIOL 231 Human Anatomy	_____	4	
BIOL 335 Human Physiology (AQSR)	_____	4	
CHEM 105 General, Organic and Biological Chemistry I	_____	4	
MATH 209 Pre-Calculus Mathematics (M)	_____	4	
PHYS 110 Introductory Physics	_____	4	
MEDI 201 Orientation to Medical Imaging	_____	1	25

Clinical Program

MEDI 202 Introduction to Medical Imaging	<u>Fall of year 3</u>	_____	1.5	
MEDI 255 Patient Care Interventions for Allied Health		_____	1.5	
COMM 338 Communication for Health Professionals		_____	4	
Elective or GE or Language		_____	3-4	
Elective or GE or Language		_____	3-4	13-15
MRI 301 Introduction to Magnetic Resonance Imaging	<u>Spring of year 3</u>	_____	3	
MRI 309 Clinical Observation		_____	3.5	
Elective or GE or Language		_____	3-4	
Elective or Ge or Language		_____	3-4	12.5-14.5
MRI 321 Physical Principles I	<u>Summer of year 3</u>	_____	3	
MRI 311 Cross Sectional Anatomy and Imaging Procedures I		_____	3	
MRI 310 Clinical Practice I		_____	8	14
MRI 421 Physical Principles II	<u>Fall of year 4</u>	_____	3	
MRI 411 Cross Sectional Anatomy and Imaging Procedures II		_____	_____	3
MRI 410 Clinical Practice II		_____	8	14
MRI 455 MRI Pathology	<u>Spring of year 4</u>	_____	1.5	
MRI 420 Clinical Practice III		_____	6	
MRI 430 Registry Review		_____	3	
Elective or GE or Language		_____	3-4	13.5-14.5
Clinical Program credits			52	
Total Credits			120	

Rhode Island College ADVISEMENT FORM – NUCLEAR MEDICINE TECHNOLOGY

Competency Requirements

	<u>Completed:</u>	<u>Credits:</u>
Math competency	_____	0
Foreign Language	_____	4-8

General Education Courses

First Year Writing	_____	4	
First Year Seminar	_____	4	
Multiple Voices	_____	4	
Studies in Literature	_____	4	
Connections	_____	4	
Social and Behavioral	_____	4	
Arts	_____	4	32-36

Math, Natural Science, and Advanced Science/Quantitative Reasoning included in cognates

Pre-clinical Required Courses

BIOL 108 Basic Principles of Biology (NS)	_____	4	
BIOL 231 Human Anatomy	_____	4	
BIOL 335 Human Physiology (AQSR)	_____	4	
CHEM 105 General, Organic and Biological Chemistry I	_____	4	
MATH 209 Pre-Calculus Mathematics (M)	_____	4	
PHYS 110 Introductory Physics	_____	4	
RADT 201 Orientation to Medical Imaging	_____	1	25

Clinical Program

MEDI 202 Introduction to Medical Imaging	<u>Fall of year 3</u>	_____	1.5	
MEDI 255 Patient Care Interventions for Allied Health		_____	1.5	
COMM 338 Communication for Health Professionals		_____	4	
Elective or GE or Language		_____	3-4	
Elective or GE or Language		_____	3-4	13-15
NMT 231 Clinical Observation	<u>Spring of year 3</u>	_____	3.5	
NMT 301 Introduction to Nuclear Medicine Technology		_____	3	
NMT 311 Radiation Safety		_____	1	
NMT 321 Diagnostic Nuclear Medicine Procedures I		_____	3	
Elective or GE or Language		_____	3-4	13.5-14.5
NMT 332 Clinical Diagnostic Procedures I	<u>Summer of year 3</u>	_____	8	
NMT 325 Radiation Physics		_____	1	
NMT 405 Radiopharmacy		_____	1	
NMT 421 Diagnostic Nuclear Medicine Procedures II		_____	3	13
NMT 402 Instrumentation	<u>Fall of year 4</u>	_____	1.5	
NMT 425 Diagnostic Nuclear Medicine Procedures III		_____	3	
NMT 431 Clinical Diagnostic Procedures II		_____	8	
CTSC 407 Sectional Anatomy and Pathology		_____	2	14.5
NMT 430 Registry Review	<u>Spring of year 4</u>	_____	2	
NMT 432 Clinical Diagnostic Procedures III		_____	6	
CTSC 300 Principles of Computed Tomography		_____	2	
CTSC 301 Physics and Radiation Protection		_____	2	12

Clinical course credits

57

Total Credits

120

Rhode Island College ADVISEMENT FORM – RADIOGRAPHY

Competency Requirements

	<u>Completed:</u>	<u>Credits:</u>
Math competency	_____	0
Foreign Language	_____	4-8

General Education Courses

First Year Writing	_____	4	
First Year Seminar	_____	4	
Multiple Voices	_____	4	
Studies in Literature	_____	4	
Connections	_____	4	
Social and Behavioral	_____	4	
Arts	_____	4	32-36

Math, Natural Science, and Advanced Science/Quantitative Reasoning included in cognates

Pre-clinical Required Courses

BIOL 108 Basic Principles of Biology (NS)	_____	4	
BIOL 231 Human Anatomy	_____	4	
BIOL 335 Human Physiology (AQSR)	_____	4	
CHEM 105 General, Organic and Biological Chemistry I	_____	4	
MATH 209 Pre-Calculus Mathematics (M)	_____	4	
PHYS 110 Introductory Physics	_____	4	
MEDI 201 Orientation to Medical Imaging	_____	1	25

Clinical Program

MEDI 255 Patient Care Interventions for Allied Health	<u>Fall of year 3</u>	_____	1.5	
MEDI 202 Introduction to Medical Imaging		_____	1.5	
RADT 301 Introduction to Radiography		_____	2	
COMM 338 Communication for Health Professionals		_____	4	
Elective or GE or L		_____	3-4	13.5-14.5
RADT 305 Skeletal Anatomy	<u>Spring of year 3</u>	_____	3	
RADT 306 Radiographic Procedures I		_____	4	
RADT 309 Clinical Education I		_____	4	
RADT 320 Principles of Radiography I		_____	3	14
RADT 307 Radiographic Procedures II	<u>Summer of year 3</u>	_____	3	
RADT 330 Radiation Physics I		_____	3	
RADT 310 Clinical Education II		_____	8	14
RADT 425 Ethics/Critical Thinking	<u>Fall of year 4</u>	_____	2	
RADT 321 Principles of Radiography II		_____	3	
RADT 411 Clinical Education III		_____	8	13
RADT 431 Radiation Physics II	<u>Spring of year 4</u>	_____	3	
RADT 461 Registry Review		_____	3	
RADT 412 Clinical Education IV		_____	6	12

Clinical course credits

58

Total Credits

120

ACADEMIC AND CLINICAL STANDARDS

Students must maintain a minimum grade of “C/74” or higher in all academic and clinical courses.

- Any student failing to maintain the minimum grade in a required course or course segment will be dismissed from the program.
- At the mid semester counseling sessions, probationary reports will be given to those students who are not maintaining a minimum grade of “C/74”.

RHODE ISLAND COLLEGE GRADING SYSTEM

Grades scored between	Will equal:
94 and 100%	A
90 and less than 94	A-
87 and less than 90	B+
84 and less than 87	B
80 and less than 84	B-
77 and less than 80	C+
74 and less than 77	C (PASSING GRADE)
70 and less than 74	C-
67 and less than 70	D+
64 and less than 67	D
60 and less than 64	D-
0 and less than 60	F

ACADEMIC HONESTY POLICY

School of Medical Imaging requires honesty of all students in their academic work. Honesty is necessary to the learning process, and is integral to the atmosphere of genuine inquiry and intellectual curiosity which our programs seek to foster. Academic dishonesty not only contradicts the expectations of our program but violates our school rules and regulations.

The following actions are reflective of academic dishonesty and are subject to disciplinary action by program faculty. Some offenses may be criminal in nature and therefore prosecutable under local, state, or federal laws.

- Using dishonest, deceptive or fraudulent means to obtain or attempt to obtain credit for academic work.
- Using notes, aids, or another student’s assistance to complete a test, a project or other assignment in a way other than that expressly permitted by the instructor. Unless otherwise directed by the instructor, students should accomplish all assignments individually.
- Looking at another student’s test, answer sheet, or other materials.
- Talking during a test. The instructor cannot be expected to determine the content of a private conversation between students, therefore, all talking during tests is considered cheating.
- Copying from or allowing another student to copy from a test, homework, or other course work which is not intended to be collaborative in nature.
- Tampering with an instructor’s records of grades or scores.
- Accessing, deleting, modifying, transferring, or receiving of computerized files without authorization of the instructor.

ADVISORY COMMITTEE

The advisory committee is comprised of the program administration and faculty, individuals from clinical affiliates, and Medical Imaging Student Representatives. The advisory committee meets once a year to evaluate the programs, discuss changes, and other related programmatic topics.

ATTENDANCE

Attendance is important in order to maintain satisfactory didactic and clinical performance. Students that miss exceptional amounts of time will find it difficult to fulfill their education requirements. Total clinical and didactic studies cannot exceed 40 hours per week. Each program has specific attendance policies and procedures based on the length and structure of the program. See individual program section for specific policies and/or procedures.

SCHEDULES

- Didactic and clinical schedules will be posted in advance.
- Students who work must schedule work shifts accordingly as to not interfere with program commitments.
- No changes will be made to the program schedule to accommodate work schedules.

DIDACTIC ATTENDANCE

- Students are expected to be on time for all class lectures and/or laboratories.
- If the student is absent, it is the student's responsibility to make up assignments.

CINICAL ATTENDANCE

General Information

- Students are expected to be on time and stay for the duration of their assigned clinical rotation.
- If a student is going to be absent or late, he/she **must** call the School of Medical Imaging at 401-606-8531 prior to his/her scheduled clinical start time. The student should indicate his/her full name, program and the assigned clinical area. Should the automated assistant answer, the student must leave the message in the voicemail box.
- E-mail messages, text messaging, and students calling each other in absent are not acceptable forms of reporting absence and will be treated as an unexcused absence.
- If a student is absent consecutive days, the absence must be reported each day prior to his/her scheduled clinical start time. Failure to report an absence is considered an unexcused absence.
- Any missed clinical time must be made up following the Clinical Makeup Time Policy.

Personal Time

- Students are allotted 2 personal days per semester.
- Personal days may be utilized for unscheduled absences (e.g. illnesses, personal emergency, etc.) or scheduled absences (e.g. physician appointments, job interviews, etc.).
- Personal days cannot be carried over to a subsequent semester.

Attendance Documentation

- Students are required to document their attendance through Trajecsyst.
- Only PC's at the clinical sites are to be utilized when using the Trajecsyst system for attendance.
- Students are required to notify program faculty and clock out/in if they leave the clinical affiliate campus during school hours.
- Students are not required to clock out for lunch if they are remaining on campus.

Tardiness

- Students are required to be in their assigned clinical area prior to or by the designated arrival time.
- Tardiness is defined as any arrival time that is one minute beyond the designated time of arrival.
- Excessive tardiness will not be tolerated.
- The Counseling and Corrective Action Policy will follow the following thresholds:

3 rd tardy	Verbal Counseling
6 th tardy	Written Corrective Action Plan
9 th tardy	Final Written Corrective Action Plan
12 th tardy	Dismissal

Unexcused Absence (no call, no show)

- An unexcused absence is any clinical absence which has not been reported to program faculty. Any student who fails to report **two** unexcused absences during the program will be dismissed. The Counseling and Corrective Action Policy will follow the following thresholds:

1 st unexcused absence	Final Written Corrective Action Plan
2 nd unexcused absence	Dismissal

Excessive Absences

- Any student having more than 4 absences in one semester (in addition to the two personal days) will be dismissed from the program.
- The Counseling and Corrective Action Policy will follow the following thresholds:

2 nd absence	Verbal Counseling
3 rd absence	Written Corrective Action Plan
4 th absence	Final Written Corrective Action Plan
5 th absence	Dismissal

Special Circumstances

- Students will be granted time off for special circumstances.
- A written request must be submitted to program faculty.
- All requests will be considered on an individual basis.
- If time off is greater than 5 days, the Leave of Absence policy must be followed.

Clinical Make up Time

- Any missed time exceeding allotted personal time must be made up during the semester vacation in which the time was missed.
- **Any missed time not completed during semester vacation will require the student to remain after program completion date.**
- Students are not allowed to make up time on weekends, school observed holidays or school closings.
- Students are not allowed to attend clinical during non-scheduled clinical time unless time is approved with program faculty.
- Every effort will be made to see that the student is able to make up time in the clinical area in which he/she was absent.
- Students must request makeup time by submitting a *Request for Extra Clinical Time* form to program faculty. A minimum of 24-hour notice is required.

- Only students who sign up in advance will be afforded the opportunity. Students must request make-up time the week prior to scheduled school vacation. Students who have not signed up for makeup time, but attend, will not be credited in terms of hours owed for clinic obligations.

CALCULATORS

Each student will be required to purchase a school approved calculator at the start of the program. It is the student's responsibility to bring the calculator to school each day and to replace a stolen, lost or broken calculator with the same model.

CHANGE IN PERSONAL DATA

All changes in address, telephone number, marital status, legal name and citizenship must be reported to program faculty. Cooperation in the matter will assist us in keeping records up to date.

CLINICAL AFFILIATE ORIENTATION

Students are required to complete orientation at all clinical affiliates. Clinical affiliated may require additional requirements (training, orientation, drug testing, etc...) for students to rotate at their clinical facility. It is the responsibility of the student to complete all necessary requirements of the clinical site

CLINICAL INFORMATION

The clinical aspect of the program is scheduled and formatted to provide cohesiveness between didactic and practicum experience. Clinical hours vary per program and rotation. See individual program section for specific policies and/or procedures.

CLINICAL SUPERVISION

Program faculty schedules each student to practice individually with a registered technologist to ensure close direct or indirect supervision.

Direct Supervision

The registered technologist is present in the room during student performance of a procedure. The technologist is fully responsible for the performance of the student assigned to him/her.

Indirect Supervision

The registered technologist is immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the physical presence of the technologist adjacent to the room or location where the procedure is being performed.

CLINICAL COMPETENCY REQUIREMENTS

All students are given clinical expectations to be completed as a graduation requirement. The clinical requirements ensure that all certification requirements are met to take the certification examination.

Clinical Requirements and documentation

Candidates must demonstrate competence. Demonstration and documentation of clinical competence means that the candidate performed the procedure independently, consistently, and effectively. Candidates must

demonstrate competence in mandatory and elective procedures. The list of required competencies is documented on Trajecsyst.

COMPLAINT AND GRIEVANCE PROCEDURE

POLICY

The purpose of this procedure is to allow enrolled students and school faculty the opportunity to resolve program problems and to be assured of fair, unbiased decisions.

PROCEDURE

1. The student or faculty member is advised to try to resolve the situation/concern with the individual.
2. If the situation/concern is not resolved, the student or faculty member will have five (5) business days to submit a complaint in writing to the appropriate Program Director. The Program Director will have ten (10) business days to respond.
3. If the student or faculty member is not satisfied with the Program Director's response, the student or faculty member may file a grievance. The grievance must be submitted in writing to the School Administrator within five (5) business days. The School Administrator will have ten (10) business days to respond.
4. If the student or faculty member is not satisfied with the School Administrator's decision, the student or faculty member will have five (5) business days to appeal the decision. The appeal in writing must be submitted to the Director of Lifespan Medical Imaging. The Director of Lifespan Imaging will have ten (10) business days to respond.
5. If the student or faculty member is not satisfied with the Director's decision, the student or faculty member will have five (5) business days to appeal the decision. The appeal in writing must be submitted to the Medical Director. The Medical Director along with the Grievance Committee will have twenty (20) business days to respond.
6. If the student or faculty member is not satisfied with the Medical Director's decision, the student or faculty member will have five (5) business days to appeal the decision. The appeal in writing must be submitted to the School Administrator. The School Administrator will present all documentation to a Lifespan Human Resource (HR) Representative. The HR Representative will have twenty (20) business days to respond. The HR Representative's decision will be final.

GRIEVANCE COMMITTEE

The Grievance Committee is comprised of the program administration and faculty, medical director, Vice President of Lifespan Imaging, individuals from clinical affiliates (if necessary), and RIC representative.

Students enrolled at RIC cannot grieve to RIC if they are suspended or expelled (temporarily or permanently) for their failure to comply with the school or clinical affiliates rules, regulations, policies and procedures, or if the student's conduct, competence, attitude or health status may have a detrimental effect of the clinical affiliates professional staff (including other students), its patients, or its visitors. Independent of any action the clinical affiliate may take regarding such misconduct, the student will also be subject to College rules and regulations denoted in the RIC Handbook. Students do have the right to appeal a grade through the appropriate academic channels of the college.

Faculty and Administration of School of Medical Imaging will discuss student issues with enrolled students ONLY. Any follow-up conversations will include Rhode Island College administration.

COUNSELING AND CORRECTIVE ACTION POLICY

The Counseling and Corrective Action Policy is designed to enable students to understand and carry out their responsibilities within a culture of safety.

To assist in providing safe, high-quality, patient care and cost-effective healthcare to our patients, all students are expected to:

- Act in accordance with the vision, mission and values of the school and its clinical affiliates.
- Treat everyone with dignity and respect.
- Continuously seek to maintain the skills necessary to perform their job responsibilities.
- Meet the requirements of their position as student.

It is the policy of the school and its clinical affiliates to provide students with the direction and support to enable students to perform their responsibilities well. When students are unable or unwilling to perform their responsibilities, faculty will take corrective action, as specified in this policy, resulting in either improved performance or if appropriate, dismissal from the program.

Corrective action should be initiated as soon as possible after faculty becomes aware of the performance or behavior issue, after one or more of the following actions have been initiated:

- Performance or behavior expectations were clearly communicated to the student.
- There was an adequate period to assess the student's performance.
- The expectations were consistent with student status.
- The faculty took proactive steps, including counseling, to help the student improve his/her performance or behavior.

COUNSELING

During counseling, assuming the infraction does not warrant immediate dismissal, faculty will discuss with the student:

- What aspect of performance and/or behavior needs to be corrected or improved.
- What the expected standard is and what the student needs to do to meet that standard.
- What consequences may follow from subsequent failure to meet the standards or expectations.
- What faculty will do to help the student meet the expectation or standard (education, training, coaching, etc.).
- How the student's performance or behavior will be monitored.

Documentation of counseling will be kept by program faculty.

FORMAL CORRECTIVE ACTION STEPS

When counseling does not improve the student's performance or behavior, the Formal Corrective Action process will be used. Generally, a Written Corrective Action Plan is the first step in the process. However, an immediate move to Final Corrective Action Plan or dismissal may be appropriate when there is a serious behavior or performance problem. All Corrective Action Plans and dismissal will include consultation with the School Administrator.

Written Corrective Action Plan

This plan is written documentation of the specific performance or behavior that needs improvement. Failure by the student to meet the standards or expectations established in the Written Corrective Action Plan may result in issuance of a Final Written Corrective Action Plan.

Final Written Corrective Action Plan

The Final Written Corrective Action Plan is generally given when the student has not performed successfully under the prior Written Corrective Action Plan. It is the student's last opportunity to improve his/her performance or behavior. If significant improvement is not demonstrated during the time specified in the plan, dismissal is the next step.

Dismissal

Failure to meet the standards or expectations established in a Final Written Corrective Action Plan, or violations of a serious nature, will result in immediate dismissal without additional notice. Students dismissed from the School of Medical Imaging may remain enrolled as a student at Rhode Island College.

Examples of Behaviors Necessitating Immediate Dismissal

The list below **is intended as a sampling, not a complete list**, of performance, behaviors or practices during the program that may cause immediate dismissal based on the results of an investigation:

- Failure to comply with the corrective action plan or to meet the deadline noted in plan
- Engaging in the same or new actions that would result in placing the student on probation or require corrective action
- Gross neglect of duty
- Deliberate violation of federal and state rules and regulations or professional standards
- Conscious, willful or repeated disregard for policies or procedures
- Willfully endanger the safety or well-being of any individual
- Threat of, or actual physical or verbal abuse, or neglect
- Failure to follow discrimination policy
- Falsification of any official document
- Willful neglect, damage to, or theft of property
- Failure to follow HIPAA regulations
- Performing exam without authorized order
- Violation of sexual harassment policy
- Illegal use, possession, or sale of alcoholic beverages and/or drugs
- Possession of firearms or other weapons
- Conviction of felony
- Two (2) incidents of unexcused absence during the program
- Excessive tardiness and/or absences

Examples of Behaviors Necessitating Corrective Action

The list below **is intended as a sampling, not a complete list**, of performance, behaviors or practices during the program that may be a cause for corrective action and/or immediate dismissal based on the results of an investigation:

- Insubordination
- Any form of disruptive behavior
- Violation of any policy
- Refuse to accept a reasonable assignment
- One unexcused clinical absence
- Tardiness and/or absences
- Failure to maintain clinical documentation
- Failure to follow professional appearance standards
- Smoking in prohibited areas
- Failure to follow parking regulations
- Failure to follow identification and verification policies

- Failure to follow safety regulations
- Performance below standards or expectations
- Failure to accurately or completely record the start and end times of clinical practice
- Failure to follow use of Electronics in the Workplace Policy
- Failure to follow Social Media Policy
- Inappropriate utilization of information technology

In addition, an internal finding of wrongdoing that might constitute a violation of state and/or federal law or relevant healthcare or other regulatory standards may be reported to the appropriate legal authorities or regulatory bodies. If the student commits an act of patient neglect or abuse, Risk Management will be notified.

Documentation

The Corrective Action Plan form is designed to help faculty and student understand the process and will be utilized to document all Written Corrective Action Plans. The student's signature on the form signifies that a discussion of its content has taken place. A copy of the Corrective Action Plan is provided to the student and the original signed plan will be placed in the student's school file.

Investigative Suspension

An investigative suspension is used to allow time for faculty to investigate a serious performance or behavior problem that potentially may result in dismissal. A suspension is typically no more than three days. All missed time due to investigative suspension must be made up following the Make-Up Time Policy.

Grievance

When using corrective action, faculty should advise the student of his/her right to grieve. Under the Grievance Procedure, students may grieve any of the steps in corrective action.

It is the policy of the School of Medical Imaging to discuss counseling, corrective action and dismissal with the enrolled student ONLY.

CPR

Students needing CPR renewal during the program must complete the training through the American Heart Association.

CREDIT HOURS

Credit hours are calculated as follows:

- 15 hours of didactic course work is equal to 1 credit hour
- 60 hours of clinical course work is equal to 1 credit hour

DIDACTIC INFORMATION

The didactic program is scheduled and formatted to provide the proper ratio of practical and classroom experience. Didactic classes are held at the School of Medical Imaging, Rhode Island College, and/or Rhode Island Hospital. Class day and times are dependent on instructor availability, number of courses offered and labs associated with the didactic content. See individual program section for specific policies and/or procedures.

EMERGENCY CONTACT

The faculty encourages students to leave the school's main number (401-606-8531) in case of an emergency.

ETHICS REQUIREMENTS FOR REGISTRY ELIGIBLE GRADUATES

ARRT ETHICS

A candidate for certification must be a person of good moral character and must not have engaged in conduct that is inconsistent with the ARRT Standards of Ethics or the ARRT Rules and Regulations and must have complied and agree to continue to comply with the ARRT Standards of Ethics and the ARRT Rules and Regulations. Please refer to arrt.org for details.

NMTCB ETHICS

Nuclear Medicine Technologists, as Certificants of the health care profession, must strive as individuals and as a group to maintain the highest of ethical standards. The Principles (SNMTS Code of Ethics) are not laws, but standards of conduct to be used as ethical guidelines by nuclear medical technologists. These Principles were adopted by the Technologist Section and the Society of Nuclear Medicine at the 2004 Annual Meeting. They are standards of conduct to be used as a quick guide by nuclear medicine technologists. Please refer to nmtcb.org for details.

SDMS ETHICS

The goal of the code of ethics is to promote excellence in patient care by fostering responsibility and accountability among diagnostic medical sonographers. In so doing the integrity of the profession of diagnostic medical sonography will be maintained. Please refer to sdms.org for details.

EVALUATIONS

ASSESSMENT OF DIDACTIC PERFORMANCE

Students will be given frequent oral, written, or practical examinations by individual didactic instructors. See individual course syllabi for grading details.

ASSESSMENT OF CLINICAL PERFORMANCE

Clinical Exam Log:

Students must log each exam and indicate level of performance using Trajecsyst. Clinical logs are reviewed by program faculty.

Evaluation of Student Performance:

Program faculty will complete a comprehensive evaluation for each student once per rotation during their clinical experience.

Competency Evaluations:

During each clinical experience, the syllabus will list the competency requirements that are to be completed for the corresponding semester.

The student will typically request a competency evaluation after he/she has:

- Reviewed the procedure, if applicable
- Observed the procedure
- Performed the procedure with assistance
- Performed the procedure for an indicated number of times with supervision

Evaluation consists of a registered technologist observing the student performing the procedure. In order for the student to pass the competency evaluation successfully, he/she must meet standards on all aspects of the evaluation. Failure to obtain a passing competency will require the student to practice the procedure and be re-evaluated. A clinical competency failed two times will result in the following steps.

Direct one-on-one clinical instruction will be scheduled with program faculty:

- The student, with guidance from program faculty, will write out sequential steps for completing the failed procedure.
- Student will attempt clinical competency.
- Failure to pass the competency evaluation after the above instruction and guidance will result in program dismissal.
- Earning a competency in a procedure does not relieve a student from performing that procedure during their clinical rotation.

Grading

- See individual course syllabi.

FAMILY EDUCATION RIGHTS AND PRIVACY ACT

The School of Medical Imaging complies with the Family Educational Rights and Privacy Act (FERPA), a Federal law that protects the privacy of student education records. Visit the web site for more information at <http://www.ed.gov/policy/gen/guid/fpco/ferpa/index.html>.

GRADUATION REQUIREMENTS

The student must meet the following requirements to be eligible to receive a school certificate:

- All make-up time must be completed.
- Students must return the following items to the school, if applicable:
 - Radiation badge(s)
 - Identification badge
 - Anatomical markers
- Students must complete all didactic courses and clinical requirements according to the established criteria. A student with incomplete records in either area shall not be granted a certificate and will not be authorized by the program faculty as meeting the educational requirements for certification.
- Candidate has met all financial obligations of the school, if applicable.

HOLIDAYS

New Year's Day, Presidents' Day, Memorial Day, Independence Day, Victory Day, Labor Day, Columbus Day, Thanksgiving and Christmas are observed.

HONORS PROGRAM

Departmental Honors offers students the opportunity to undertake an independent research, critical, or creative project on a topic of the student's choice. Normally, the project begins in the senior year, although it may commence earlier, and carries at least six hours of independent study credit over two semesters. Students may participate in Departmental Honors whether or not they have completed General Education Honors or taken Honors 351.

A Departmental Honors project is completed in the department of the student's major. The student must apply formally to the appropriate departmental honors committee, which is responsible for accepting the student's proposal for an honors project, for evaluating the completed project, and for awarding the Departmental Honors designation, which will appear on the student's transcript. If the student's project involves work with persons or animals, the project must also be approved by the Committee on Human Participants in Research or the Committee on Animal Care and Use. See Program Director or School Administrator if interested.

HOSPITAL EMPLOYEE STRIKE

In the event of a strike, didactic classes will be held if possible. Clinical attendance may be suspended until resolution has been made. Depending upon duration of the strike, graduation program completion dates may be extended. Students who are employees of the hospital's striking bargaining unit and are enrolled in the School of Medical Imaging should speak to their HR representative regarding the strike while attending school obligations.

LEAVE OF ABSENCE

Students are advised that a leave of absence (LOA) could interrupt their educational progress. Students may request one of the following options:

- Program LOA
 - Withdrawal from both clinical and didactic instruction.
- Clinical LOA
 - Withdrawal from clinical rotations with continued participation in didactic instruction.

FAMILY LEAVE OF ABSENCE

A family leave of absence may be taken for:

- the birth/adoption of a child, and placement of a foster child
- to care for a spouse, domestic partner, child, parent with a serious health condition

MEDICAL LEAVE OF ABSENCE

A medical leave of absence may be taken due to a student's own health condition.

PERSONAL LEAVE OF ABSENCE

A leave of absence for personal reasons will be considered on an individual basis. A Request for LOA form must be completed and submitted to program faculty. Program faculty will review the request and meet with the student. The student will be notified in writing of the decision to accept or deny the leave.

NOTIFICATION REQUIREMENTS

- Except in emergency situations, students who expect to be absent from school for more than 5 days must complete a Request for LOA form. If it is a medical leave of absence they must also submit documentation from their health care provider.
- Documentation must be submitted to program faculty 30 days in advance of the expected leave. If the leave is not planned (e.g. emergency medical), the student must submit the documentation within 14 days of start of leave.
- A student on a program LOA must provide update to program faculty every 14 calendar days. Failure to update program faculty will result in voluntary withdrawal from the program.
- When planning medical treatment, a student must consult with program faculty to make reasonable effort to schedule treatment as to not disrupt the student's education.
- The student must provide documentation of medical clearance prior to returning to school.

STUDENT OBLIGATIONS

If at any time during enrollment, a student must take a leave of absence, the student will:

- Be responsible for making up all missed didactic work. Dependent on the type of course(s), degree of difficulty of the course(s), the student's academic standing and length of time out, the student may be required to re-take the course(s) in their entirety.
- Be responsible for making up all missed clinical time. This requires the student to complete upon return all clinical competencies and rotations missed or not completed prior to and during the leave of absence. In addition, the student will be evaluated in those clinical competencies completed prior to time out and will be subject to participation for review purposes should the faculty deem it necessary.
- Complete all requirements for graduation.
- Return to full-time status as soon as possible.
- Program LOA: A vacancy will be held for the student for a maximum of 12 weeks. If a program LOA is extended beyond 12 weeks, readmittance will be determined on an individual basis by program faculty.

MEAL BREAK

Students are allotted a meal break each day. This time is designated by the supervising clinical or didactic instructor. All students are expected to report to their clinical assignment promptly after their meal break. Students are **not** allowed to work through their meal break and leave their clinical rotation early. On classroom days, a meal break will be built into the schedule.

MEDICAL IMAGING STUDENT REPRESENTATIVE

A student representative is selected for each modality in the first semester of the program. Selected students will meet at a minimum quarterly with school faculty to discuss program issues. They will also be invited to attend the annual school advisory meeting and participate in leadership programs through the professional societies.

PARKING

- Students **MUST** park in their assigned lot.

PERSONAL ELECTRONICS POLICY

- Cell phones must be turned off in the classroom/clinical settings.
- Students are prohibited from using personal electronic devices in clinical areas. This includes but is not limited to computers, tablets, cell phones and audio devices.

POLICIES

Students are expected to abide by all clinical affiliate policies.

POLICY OF NONDISCRIMINATION

The School of Medical Imaging admits students of any race, color, sex, and national or ethnic origin to all of the rights, privileges, programs, benefits, and activities generally accorded or made available to the school. It does not discriminate on the basis of race, color, gender, sexual orientation, gender identification or expression,

genetic information, age, religion, national or ethnic origin, veteran or disability in administration of its educational policies.

PREGNANCY POLICY

The maximum permissible dose equivalent for the unborn child of a pregnant radiation worker shall be no more than 0.5 rem during the period of gestation, and less than 50 mrem per month. The reading of the waist level “baby” badge will be used to estimate fetal dose.

Students are advised that childbirth and/or pregnancy could interrupt their educational progress. If a student becomes pregnant and wishes to declare pregnancy, they are required to inform the Program Director in writing and complete a *Declaration of Pregnancy* form.

Upon declaration of pregnancy, the student:

- Will have the option to counsel with Medical Physics/Radiation Safety personnel.
- Will submit a statement choosing one of the following options:
 - Immediate leave of absence.
 - Withdrawal from clinical rotations with continued participation in didactic instruction.
 - Continued full-time didactic status with clinical rotation limitations.
 - Continued full-time status.
 - Can withdraw her declaration. A student has the right to “UNDECLARE” her pregnancy at any time. Notification must be made in writing. Once a student has undeclared her pregnancy, the student will be treated as though she were not pregnant.
 - NMT-specific: The student will not be required to (1) assist on administration of ^{131}I therapy doses (2) rotate through Hot Lab (3) rotate through PET/CT.

A student maintaining full-time status with or without clinical limitations will be required to:

- Adhere to all safety precautions.
- Wear a fetal badge at waist level for fetal monitoring. The fetal badge will be worn under the optional lead apron, if worn. The fetal badge will be read monthly.
- Should the student exceed the recommended amount of exposure, she must either withdraw from clinical rotations with continued participation in didactic instruction or request an immediate leave of absence.
- Submit documentation as to any changes or problems in her pregnancy and the advisability of change in program status.
- Stop working immediately and report to program faculty if the pregnant student feels that she is working in an unsafe area or under conditions detrimental to herself or the fetus.
- Make up any missed didactic and/or clinical requirements

PROBATIONARY PERIOD

The first clinical semester is a probationary period to provide an adequate timeframe to assess whether the program and/or school is a good match for a new student. A student may be dismissed at the discretion of the school at any time during the probationary period without recourse to the grievance procedure.

PROFESSIONAL APPEARANCE STANDARDS

GENERAL INFORMATION

The purpose of Professional Appearance Standards is to foster a positive, professional, neat and clean image appropriate for a healthcare environment. Students represent the hospital to everyone who enters and contributes to the hospital's image through personal appearance. Compliance with appearance standards reinforces confidence and respect for the organization, and maintains the health and safety of patients, visitors, employees, and students. It is the responsibility of each student to present a professional image to our patients, visitors, employees, and students through compliance with outlined standards.

IDENTIFICATION STANDARDS

- Hospital-issued identification badge must be worn at all times while on duty.
- The badge must be displayed in the upper chest/shoulder area, on the front of the outer garment, clearly visible and not obscured in any way.
- Lanyards are not acceptable.
- Identification badges should not be altered in any way.

ATTIRE STANDARDS

- School uniform must be worn at all times during clinical education.
- School uniform must be purchased from Alexander's Uniforms (see uniform order form).
- Students are not allowed to wear school embroidered uniforms outside of school hours.
- Uniform must be well-fitting, clean, and neatly pressed.
- Students may wear plain white or black shirts (no writing or design) under their uniform top.
- Sweaters or sweatshirts are not permitted over uniforms. Lab coats may be worn.
- Protective attire should not be worn outside the work area (e.g., OR, trauma, restricted area).
- Isolation attire must be disposed of immediately upon exiting the patient or imaging room.

FOOTWEAR STANDARDS

Student must wear a school-approved white, black, or navy blue (solid color) professional shoe or leather, low-cut, athletic shoe.

- Footwear should be safe, appropriate, and sensible in regard to the work environment.
- Footwear should be neat, clean, polished and in good repair.
- Socks must be white, black or navy blue (solid color).

GROOMING STANDARDS

- Students should be physically clean and free of pervasive body odor, as well as pet, smoke, chemical, and other strong environmental odors for the protection and comfort of patients, visitors, employees, and students.
- Fingernails are to be neat, clean, short in length (1/4 inch beyond the end of the finger) and neutral in color. The use of nail polish is permissible; chipped nails need to be re-polished. Students shall follow the Hospital-wide Hand Hygiene Infection Control policy for guidelines on care of fingernails.
- Hair should be clean, neat, well-groomed and should not represent extremes in color or fashion. Hair longer than shoulder-length must be pulled or tied back away from the face to ensure that it does not impinge the student's own safety or ability to safely perform their job.
- Facial hair should be well-groomed, neat, and trimmed; beards trimmed to jaw line and mustache trimmed to lip line.
- Fragrances, such as perfumes, aftershaves, or other personal care products, should not be pervasive for the protection and comfort of patients, visitors, employees, and students.

- Makeup should be tasteful and appropriate to the healthcare setting.

ADORNMENT STANDARDS

- Jewelry should be appropriate to the healthcare environment and in accordance with job-related, department, and regulatory safety and infection control policies, including the Hospital-wide Hand Hygiene Infection Control policy. It is recommended that only a single watch, bracelet, and one set of rings on one hand be worn.
- Artificial fingernail enhancements of any type are **NOT** to be worn by students as per the Hospital-wide Hand Hygiene Infection Control policy. This includes but is not limited to artificial nails, tips, wraps, appliques, acrylics, gels, and any additional items applied to the natural nail surface.
- Buttons and decorative pins shall not be worn.
- Use of sunglasses indoors is not permissible.

BODY ART STANDARDS

- Tattoos of modest size (i.e., less than 2"x2" or equivalent total area) are permissible provided they are not on the head (with the exception of permanent makeup) or front of neck (from the earlobes forward), or obscene or offensive.
- Obscene or offensive tattoos must be covered at all times. Offensive tattoos include, but are not limited to, sexually explicit or advocate or symbolize sex, discriminatory towards gender, race, religion, or ethnic or national origin, advocate or symbolize gang affiliation, supremacist or extremist groups, or drug use.
- Permanent make-up should be conservative and will not be trendy. Permanent make-up includes eye-liner, eyebrows, and makeup applied to fill in lips.
- Pierced ears, limited to 3 earrings or less per ear.
- All other visible body piercings, include nose and tongue, are not permissible and must be removed, covered, or replaced with a clear or neutral spacer/retainer.
- Intentional body mutilation, piercings, branding/intentional scarring that is excessive or eccentric is not permissible. Some examples include a split or forked tongue; foreign objects inserted under the skin to create a design or pattern; enlarged or stretched out holes in the ears (other than a normal piercing).

Student not in compliance with Professional Appearance Standards:

- Will be sent home and missed time must be made up.

PROFESSIONAL ORGANIZATIONS

Students are strongly encouraged to become members of their professional societies.

RESOLUTION OF COMPLAINTS ALLEGATIONS OF NON-COMPLIANCE WITH *JRCERT STANDARDS*

Any student allegations relating to non-compliance of *JRCERT STANDARDS* will be forwarded to the JRCERT along with a program response.

Policy:

Any student complaint regarding allegations of non-compliance of *JRCERT STANDARDS* (referenced at web site below) should be submitted to the Program Director in writing with supporting documentation. The Advisory Committee will review both complaint and supporting documentation. The Advisory Committee will respond within 5 business days, unless additional time is needed to explore the allegation. A response in writing including the complaint and resolution will be complete within 30 days of submission of the original complaint.

The program will maintain a record of all complaints and their resolutions.

If the student is not satisfied with resolution, the student can:

- Request all correspondence from the complaint including resolution be forwarded to the JRCERT
- Contact the JRCERT directly:

Address: Joint Review Committee on Education in Radiologic Technology (JRCERT)
20 N. Wacker Drive
Suite 2850
Chicago, IL 60606-3182
Phone: 312-704-5300
Fax: 312-704-5304
Email: mail@jrcert.org
Website: www.jrcert.org

SAFETY POLICIES

MRI SAFETY POLICY

This policy is based on the [ACR Guidance Document on MR Safe Practices: 2013](#)

- There are no known biological risks associated with magnetic field or radiofrequency exposure to individuals that work in close proximity to MRI systems. The static magnetic field of the MRI machine is always on, 24hours/7days a-week/365 days a year, requiring Zones III and IV be secured at all times. Ferromagnetic objects carried into Zone IV can become projectiles that may cause serious injury, death or equipment failure.
- MRI machines generate a very strong magnetic field within and surrounding the MRI scanner, therefore all individuals must be screened for MR safety prior to entering Zones III or IV of the MR environment. Students will be educated on MR safety prior to the beginning clinical rotations.
- As a medical imaging student, you are required to follow MRI Safety policies and procedures. It is the students' responsibility to inform the program faculty of any changes that would affect their safety in MRI.

RADIATION SAFETY POLICY

It is the policy of the hospital directed by the State and Federal regulatory agencies that medical imaging students be monitored by means of a dosimetry badge for recording radiation dose levels. The Medical Physics/Radiation Safety department will provide one radiation badge (body badge) for monitoring students. It is the student's responsibility to wear the radiation badge in the proper manner, protect it from damage, avoid losing it and turn it in on time. Failure to comply is a direct violation of policy as well as against State and Federal Laws. The student must wear his/her radiation badge during clinical rotations. No student will be allowed to remain in clinical without his/her radiation badge.

- The radiation badge must be worn at neck level. When rotating through the OR and Fluoroscopy areas, radiation badge must be worn outside lead apron at neck level.
- Never leave radiation badge in an imaging room.
- Never wear radiation badge if the student is having medical or dental radiographs taken.
- Any accidents with the badge or loss of the badge must be immediately reported to program faculty.
- Exposure limits:
- Student whole body (deep dose): 5 rem (5,000 millirems) per 12-month period

- Pregnant Student: 0.5 rem (500 millirems) per entire gestation period or 0.05 rem (50 millirem) in any one month
- A student receiving 0.03 rem (30 millirem) deep or whole-body dose or higher within a one-month period will be counseled by the Program Director and the reason for the exposure documented.
- A student receiving 0.04 rem (40 millirem) deep or whole-body dose or higher within a one-month period will receive written notification for the dose and will be required to respond in writing, providing an explanation for that dose. Radiation safety counseling by the Radiation Safety Officer and the Programs Administrator will also be provided.
- Radiation badges will be read quarterly (except pregnant student) and evaluated by the Radiation Safety Officer. If readings are reported that are outside of the predetermined threshold (ALARA) levels, the student's work habits will be investigated by the Radiation Safety Officer.
- Program faculty will review radiation exposure reports with students quarterly. Students are required to initial reports.
- Radiation exposure reports will be kept on permanent file in the Program Director's office.
- Any questions regarding exposures will be directed to the program faculty and/or Medical Physics/Radiation Safety personnel.

Radiation Safety

- The student is expected to exercise sound radiation protection practices at all times. At no time should a student participate in a procedure that exhibits unsafe protection practices.
- Never make an exposure while the door to the radiographic room is open.
- Always use collimation.
- Always stand behind the lead barrier when making an exposure.
- **Students are never to hold image receptors during radiographic examinations.**
- **Students are never to hold patients during any radiographic procedure when an immobilization method is the appropriate standard of care.**

SCHOOL CANCELLATIONS

The School of Medical Imaging submits all school cancellations through the Rhode Island Broadcasters Association. Tune into local news stations, or log onto websites for cancellations. Students are encouraged to sign up for a free service through the RI Broadcasters Association that allows students to receive school closings with a text message sent directly to their mobile phone or email. If you do not see that the School of Medical Imaging is canceled, you are responsible to report to school/clinical at your scheduled time. Please allow extra travel time as not to be late.

SOLICITATION OR DISTRIBUTION

Solicitation is defined as urging or attempting to verbally persuade another individual to buy a product or service, support a cause, join an organization or make contributions to a fund. Distribution is defined as the handing out of printed or written materials that are not official hospital/school business. The primary purpose of this policy is to protect students, employees, patients and visitors from embarrassment or inconvenience caused by unwanted solicitations.

STUDENT HEALTH

FLU SHOTS

Lifespan provides flu shots to students free of charge.

HEALTH SERVICES

Health services are available to enrolled Rhode Island College students. See the health center's web site at <http://www.ric.edu/healthservices/> for additional information.

HEALTH CHANGES

- The student must notify program faculty of changes to their health status or medications.
- If at any time a student has been hospitalized longer than 24 hours or absent for 3 consecutive days, the student must present documentation of medical clearance to resume didactic and clinical course work.
- There is no opportunity for light duty.

INJURY TO STUDENT

- All accidents or injuries, major or minor, must be reported to a supervisor at clinical affiliate immediately.
- The student must notify program faculty as soon as possible after an injury has occurred.
- An incident report must be completed and filed at the School of Medical Imaging.

COMMUNICABLE DISEASE EXPOSURE

- Students are required to report any exposure to a communicable disease (e.g. hepatitis, tuberculosis, pertussis, etc.) to a supervisor at clinical affiliate.
- The student must notify program faculty as soon as possible after exposure has occurred.
- An incident report must be completed and a copy filed at the School of Medical Imaging.
- If an exposure is reported to program faculty via EOHS, the student must provide written documentation that follow-up occurred.

In the case of student injury/communicable disease exposure, the student may go to their health care provider, RIC health center (if applicable), urgent care center, or emergency department for care. The student is responsible for fees related to medical treatment.

STUDENT SERVICES

ACCOMMODATIONS

The School of Medical Imaging is committed to making reasonable accommodations for students with documented disabilities. If a student is seeking reasonable accommodations for a disability under the American with Disabilities Act, and/or Section 504 of the Rehabilitation Act of 1973, he/she is required to submit the proper documentation to program faculty. Rhode Island College students must register with the Disability Services Center at RIC (401-456-2776, <http://www.ric.edu/disabilityservices>) and provide a *Request for Reasonable Accommodations* letter to their instructors.

ADVISEMENT

Each student attends advisement sessions with program faculty a minimum of two times per semester – mid-semester and end-of-semester. A signed copy of the advisement discussion is placed in the student's file. If additional advisement is necessary, faculty follows the Counseling and Corrective Action Policy.

Enrolled Rhode Island College students have access to the Counseling Center on the RIC campus. The Counseling Center exists to help students fully develop their intellectual, emotional and social potential, and to alleviate the distress and conflicts which may interfere with that development. For more information, visit the center's web site at <http://www.ric.edu/counselingctr>.

CAREER DEVELOPMENT SERVICES

RIC Career Development Center provides counselors for resume and interview workshops at the School of Medical Imaging for medical imaging students. Enrolled Rhode Island College students also have access to the Career Development Center on the RIC campus. For more information, visit the center's web site at <http://www.ric.edu/careerdevelopment>.

COMPUTERS

Students have access to computers in Peters Health Sciences Library and the Technology Center at RIH for educational purposes (see program faculty to obtain access). Computers are also available to enrolled Rhode Island College students on the college campus. Computers in the radiology departments are to be utilized for hospital use only.

LEARNING FOR LIFE

Enrolled Rhode Island College students have access to Learning for Life, a collaboration of the College Crusade, Goodwill Industries of Rhode Island, College Visions and Rhode Island College. Learning for Life (L4L) links students to a wide range of services, supports, and opportunities that will fortify them for college success and remove any challenges and obstacles that may prevent education from remaining a priority in their lives. For more information, visit the web site at http://www.ric.edu/learning_for_life/.

LIBRARIES

The following libraries are available for student use:

- School of Medical Imaging library at Prairie Avenue
- Peters Health Sciences Library at Rhode Island Hospital
- James P. Adams Library at Rhode Island College is available for enrolled Rhode Island College students

TUTORING

Tutoring is available on an as-needed basis to all students upon request. It is the student's responsibility to request tutoring as well as complete any recommended follow-up. Tutoring is scheduled according to instructor availability and should not be scheduled during clinic time.

STUDENT TERMINATED AS EMPLOYEE

In the event a student, working as an employee, is terminated from a clinical affiliate, the student may be dismissed from the program.

TECHNICAL STANDARDS

PHYSICAL

Stoop:	to lift imaging supplies and accessory equipment
Kneel:	to perform CPR to assist patients who may fall or faint
Crouch:	to place supplies and accessory equipment on floor or under imaging table
Reach:	at least 6' from floor to imaging equipment
Handle:	Imaging equipment
Maneuver:	patients in wheelchairs and stretchers, IV poles, oxygen tanks patients on and off the imaging table; in and out of wheelchairs patients who may fall or faint
Lift and Place:	patient and image supplies and accessory equipment
Walk:	for duration of assigned shift
Wear:	lead aprons, thyroid shields and lead gloves if applicable
Hear:	verbal directions/requests from physicians, patients, etc. blood pressure sounds through a stethoscope signals from imaging equipment
See:	Control sheets for information related to examination proper position of patients proper equipment setup motionlessness; respiratory phase of patient
Talk:	to communicate in English to staff, patients, etc.
Manipulate:	small objects such as knobs and buttons, needles and syringes (venipuncture), etc.

MENTAL/ATTITUDINAL

Students must possess the physical and emotional health required for the application of his/her intellectual abilities and the employment of sound judgment in an appropriate and prompt manner.

▪ Demonstrate emotional stability to function effectively under stress
▪ Manage and prioritize multiple tasks
▪ Exhibit social skills necessary to communicate effectively and maturely
▪ Maintain effective, mature, and sensitive relationships with others
▪ Adapt to changing environments and display flexibility
▪ Work independently with indirect supervision
▪ Possess motivation
▪ Maintain professional integrity at all times

MAGNETIC RESONANCE IMAGING SAFETY

▪ Student cannot have contraindicated biomedical devices, implants, and materials (pacemaker)
▪ Student cannot have ferromagnetic contraindicated biomedical devices, implants, and material (aneurysm clip)
▪ Students cannot have accidental ferromagnetic implanted objects and/or materials (shrapnel in eyes, skin)
▪ Students cannot have contraindicated devices assisting in routine tasks (hearing aids)
▪ Students cannot have phobias that would not allow them to perform routine tasks and care in the healthcare environment

TEXTBOOKS

Students will be provided with a textbook list prior to the start of each semester. It is the student's responsibility to obtain all the required textbooks prior to the start of each course.

TRANSFER STUDENTS

The School of Medical Imaging does not accept transfer credit for any previous medical imaging didactic or clinical courses.

TUITION AND FEES

RHODE ISLAND COLLEGE STUDENTS ONLY: Tuition is paid to Rhode Island College (RIC).

RIC Estimated Tuition and Fees (at time of print)

\$9,578	Rhode Island Residents
\$13,688	Northeast Neighbors
\$23,043	Out-of-state Residents

- Visit <http://www.ric.edu/admissions/Pages/Tuition-and-Fees.aspx> for more information on RIC tuition and fees.
- The School of Medical Imaging participates in Title IV financial aid through enrollment in Rhode Island College.
- There are **NO** refunds issued by the School of Medical Imaging.

CT AND MAMMOGRAPHY PROGRAM STUDENTS ONLY: Tuition is paid to LSMI. See individual program section for schedule.

- There are **NO** refunds issued by the School of Medical Imaging.

Other fees:

- Books - \$750
- Calculator - \$50
- Uniforms - \$200-300
- Laptop (with Microsoft Office) - \$750
- Additional fees – up to \$300

VACATIONS

See School Calendar for schedule of vacations.

VENIPUNCTURE TRAINING

- Student will complete Venipuncture Simulation Competency. Failure to pass the competency after two attempts will result in program dismissal.
- After successful completion of Venipuncture Simulation Competency, the student must complete the required venipuncture competencies per clinical affiliate requirements, if applicable.

WITHDRAWAL POLICY

If a student wishes to withdraw from the program for any reason, the program faculty must be notified in writing. There are no refunds from the School of Medical Imaging.



Computed Tomography

This section has been designed to give you specific policies and procedures that govern the Computed Tomography Program.

THE PROGRAM

DESCRIPTION

Lifespan School of Medical Imaging offers a 6-month full time day program designed to offer both clinical and didactic education in computed tomography. Upon successful completion of the program, the student is qualified to take the certifying examinations offered by The American Registry of Radiologic Technology Certification Board.

PROGRAM GOALS

- Students will have entry-level employment skills.
- Students will have effective communication skills.
- Students will be able to critically think to problem solve.
- Students will have the skills necessary to provide appropriate patient care and comfort.
- The program will provide qualified computed tomography technologists to meet the health care needs of the community.

CLINICAL INFORMATION

CLINICAL PRACTICUM

The required clinical practicum is referred to as competency-based education. The curriculum is structured based on defined objectives and competencies.

Clinical education is a planned and structured experience. The 7-month clinical program is an inter-sequential integration of didactic and practical learning through classroom lectures, clinical laboratories, supplementary lectures, discussions, demonstrations, and supervised practice of standardized procedures. The clinical affiliates offer a balanced education sufficient in quantity and variety of nuclear medicine examinations as well as diversified modern equipment.

A standardized evaluation system is followed to document the student's clinical progress throughout the program. All students are required to demonstrate competence in a variety of procedures. School faculty makes every effort to preserve educational cohesiveness without compromising the patient care responsibilities of the department. The program faculty has the right to make changes to the clinical assignment schedule if deemed necessary or advantageous. A student will never be expected to replace a registered technologist.

Clinical sites may be added or deleted at the discretion of the program director and faculty.

CLINICAL HOURS: 7:30a-3:30p

CLINICAL SCHEDULE: Students will be scheduled at a specific clinical site. The schedule will be given in advance so students can plan accordingly. The rotations will be equally distributed. Changes can be made by program faculty due to extenuating circumstances.

DIDACTIC INFORMATION

COURSE SCHEDULE

Didactic classes are held at the Lifespan School of Medical Imaging or at Rhode Island Hospital. The class day and times are subject to change and are dependent on instructor availability, number of courses offered and labs associated with the didactic content. Every effort will be made to inform students of changes in the didactic schedule.

Semester 1 Fall		Credits
CTSC 300	Principles of Computed Tomography	2
CTSC 301	CT Physics and Radiation Protection	2
CTSC 407	Sectional Anatomy	2
Semester 2 Spring		Credits
NMT 432	Clinical Education	8
NMT 430	Registry Review	2

COURSE DESCRIPTIONS

CTSC 300 Principles of Computed Tomography

The course provides students with the basic principles of computed tomography imaging, basic concepts of patient care including pharmacology, drug administration and contrast media for safe injection techniques. Discussion also includes the basic procedures and pathologies associated with computed tomography.

CTSC 301 CT Physics and Radiation Protection

The course provides students with the CT imaging system components and their function. Focus will include image quality as it relates to spatial resolution, contrast resolution, noise, linearity, and uniformity. Radiation safety responsibilities to include minimizing dose while maintaining image quality, QC testing and CT artifacts will also be discussed.

CTSC 407 Sectional Anatomy

This course provides students with basic terminology necessary to study sectional anatomy related to anatomic position, directional terms, body planes, cavities, habitus, and regional divisions. It also provides the students with detailed anatomy by structure and relationship to other structures in several planes.

CTSC430 Registry Review

This course is a review to prepare students for national certification exams offered by the ARRT.

CTSC 432 Clinical Education

This course provides the student exposure to the clinical environment. The student is able to gain the skills required to achieve clinical competencies in a variety of CT examinations. Emphasis is placed on the student gaining confidence and performing routine examinations with minimal interve



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School of Medical Imaging**
Delivering health with care.®

Diagnostic Medical Sonography

This section has been designed to give you specific policies and procedures that govern the Diagnostic Medical Sonography Program.

ACCREDITATION:

Commission on Accreditation of Allied Health Education Programs (CAAHEP)
1361 Park Street
Clearwater, FL 33756
Tel: (727) 210-2350
Fax: (727) 210-2354
Email: mail@caahep.org

Joint Review Committee on Education in Diagnostic Medical Sonography (*JRC-DMS)
6021 University Boulevard, Suite 500
Ellicott City, MD 21043
Tel: (443) 973-3251
Fax: (866) 738-3444
Email: mail@jrcdms.org

The JRC-DMS reviews sonography programs to ensure that the program follows and adheres to standards set and recommends accreditation.

THE PROGRAM

DESCRIPTION

Lifespan School of Medical Imaging offers a 20-month full time day program designed to offer both clinical and didactic education in diagnostic medical sonography. Upon successful completion of Spring 1 Semester, the student is expected to complete and pass the Sonographic Physics & Instrumentation examination offered by the American Registry of Diagnostic Medical Sonographers. Upon successful completion of the SPI examination, the student will continue in the program. Once program requirements are met, the student is qualified to take the abdomen and OB/GYN certifying examinations offered by the American Registry of Diagnostic Medical Sonographers.

PROGRAM GOALS

- Students will have entry-level employment skills.
- Students will have effective communication skills.
- Students will be able to critically think to problem solve.
- Students will have the skills necessary to provide appropriate patient care and comfort.
- The program will provide qualified diagnostic medical sonographers to meet the health care needs of the community.

CLINICAL INFORMATION

CLINICAL PRACTICUM

The required clinical practicum is referred to as competency-based education. The curriculum is structured based on defined objectives and competencies.

Clinical education is a planned and structured experience. The 20-month clinical program is an inter-sequential integration of didactic and practical learning through classroom lectures, clinical laboratories, supplementary lectures, discussions, demonstrations, and supervised practice of standardized procedures. The clinical affiliates offer a balanced education sufficient in quantity and variety of nuclear medicine examinations as well as diversified modern equipment. All students will have an opportunity to observe in other imaging modalities.

A standardized evaluation system is followed to document the student's clinical progress throughout the program. All students are required to demonstrate competence in a variety of procedures. School faculty makes every effort to preserve educational cohesiveness without compromising the patient care responsibilities of the department. The program faculty has the right to make changes to the clinical assignment schedule if deemed necessary or advantageous. A student will never be expected to replace a registered technologist.

Clinical sites may be added or deleted at the discretion of the program director and faculty AND based on the JRC-DMS recognition process.

CLINICAL HOURS: 8:00a-4:00p

CLINICAL SCHEDULE: Students will be scheduled at a specific clinical site. The schedule will be given in advance so students can plan accordingly. The rotations will be equally distributed. Changes can be made by program faculty due to extenuating circumstances.

DIDACTIC INFORMATION

COURSE OUTLINE

Semester 1 Fall		Credits
MEDI 202	Introduction to Medical Imaging	1.5
MEDI 255	Patient Care Interventions for Allied Health	1.5
DMS 307	Sonographic Physics and Instrumentation I	2
DMS 300	Introduction to Diagnostic Medical Sonography	3
Semester 2 Spring		
DMS 301	Abdomen & Small Parts Sonography	6
DMS 337	Sonographic Physics and Instrumentation II	2
DMS 310	Clinical Practice I	3
Semester 3 Summer		
DMS 306	Sonographic Women's Imaging	4
DMS 330	Clinical Practice II	8

Semester 4 Fall		
DMS 401	Vascular Sonography	4
DMS 335	Obstetrical Sonography	4
DMS 410	Clinical Practice III	6
Semester 5 Spring		
DMS 461	Registry Review – Abdomen/OB-GYN IV	3
DMS 402	Advanced Procedures in DMS	3
DMS 430	Clinical Practice IV	6

COURSE DESCRIPTIONS

MEDI 202 Introduction to Medical Imaging

This course covers an introduction to medical imaging including orientation to clinical affiliates and the School of Medical Imaging as well as medical terminology.

MEDI 255 Patient Care Interventions for Allied Health

This course is designed to introduce the student to nursing procedures and techniques related to medical imaging.

DMS 300 Introduction to Diagnostic Medical Sonography

This course covers an introduction to diagnostic medical sonography including history, terminology, ergonomics, and equipment. The student receives hands-on orientation and education to the equipment, instrumentation, and scanning techniques.

DMS 307/337 Sonographic Physics and Instrumentation I and II

This course gives the student the foundation and principles of ultrasound physics and instrumentation. Course topics include preparation for the ARDMS SPI examination.

DMS 301 Abdomen & Small Parts Sonography

This course educates the student on sonographic anatomy, procedures, and pathology of the abdominal cavity. Students will also be educated on the sonographic anatomy, procedures, and pathology of small part organs, including but not limited to the thyroid and scrotum. A lab component gives the student hands-on, supervised experience in the examinations mentioned above.

DMS 310 Clinical Practice I

This course introduces the student to the clinical environment of DMS with emphasis on departmental procedures, ergonomics, and patient care. The student will also be introduced to the practical experiences of observing and participating in sonographic examinations.

DMS 306 Women's Imaging

This course educates the student on sonographic anatomy, procedures, and pathology of the female pelvis. This course also covers sonographic anatomy, procedures and pathology of the breast. A lab component gives the student hands-on, supervised experience

DMS 330 Clinical Practice II

This course is a continuation to DMS 310. The student is able to gain the skills required to achieve clinical competencies in a variety of DMS examinations. The course allows for the practice of skills learned to become proficient in DMS examinations and patient care.

DMS 335 Obstetrical Sonography

This course educates the student on sonographic anatomy, procedures, and pathology of the gravid female. First, second and third trimester development, complications and abnormalities will be conveyed. A lab component gives the student hands-on, supervised experience with scanning a gravid patient.

DMS 410 Clinical Practice III

This course is a continuation of DMS 330. Focus is on routine DMS examinations in various clinical settings. Emphasis is placed on the student gaining confidence and performing routine examinations with minimal intervention.

DMS 401 Vascular Sonography

This course educates the student on sonographic anatomy, procedures, and pathology of the periphery cardiovascular system. A lab component gives the student hands-on, supervised experience in vascular examinations. After completion of this course, the student will be eligible to complete the Vascular Technology registry examination.

DMS 430 Clinical Practice IV

This course is a continuation of DMS 410. Focus is on advanced DMS examinations in various clinical settings. Emphasis is placed on the student gaining independence while functioning as a sonographer.

DMS 402 Advanced Procedures

This course educates the student on advanced applications and procedures that are utilized in sonography. These topics include echocardiography, elastography, and pediatric and musculoskeletal imaging. The purpose of this course is to provide a comprehensive education on post-graduate career-based options.

DMS 461 Registry Review

Review to prepare students for national certification exams offered by the ARDMS.

ERGONOMICS

Education and training in proper body mechanics are incorporated in the DMS program. A program of preventative maintenance exercises will be introduced to successfully prevent work-related musculoskeletal injuries.

- recommended amount of exposure, she must either withdraw from clinical rotations with continued participation in didactic instruction or request an immediate leave of absence.
- Stop working immediately and report to program faculty if she feels she is working in an unsafe area or under conditions detrimental to herself or the fetus.
- Make up any missed didactic and/or clinical requirements.



Magnetic Resonance Imaging

This section has been designed to give you specific policies and procedures that govern the Magnetic Resonance Imaging Program.

ACCREDITATION:

Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive, Suite 2850
Chicago, IL 60606-3182
Tel: (312)704-5300
Fax: (312) 704-5304
mail@jrcert.org
www.jrcert.org

THE PROGRAM

The School of Medical Imaging MRI Program offers a 20-month full time day program designed to offer both clinical and didactic education in the art and science of Magnetic Resonance Imaging. Upon successful completion of the program, the student is qualified to take the certifying examination offered by The American Registry of Radiologic Technologists.

PROGRAM GOALS

Fulfillment of the program's mission is assessed by the degree to which the program achieves the following goals:

- Students will have entry-level MRI technologist skills.
- Students will demonstrate effective critical thinking skills.
- Students will demonstrate effective communication skills.
- Students will model professionalism.
- The program will provide qualified Magnetic Resonance Imaging Technologist to meet the needs of the healthcare community.

OUTCOMES

Goal 1: Students will have entry-level MRI technologist skills.

- Students will be able to perform routine MRI procedures.
- Students will apply MRI safety measures.

Goal 2: Students will demonstrate effective critical thinking skills.

- Students will adapt for non-routine patients.
- Students will critique images for diagnostic quality.

Goal 3: Students will demonstrate effective communication skills.

- Students will demonstrate effective written communication skills.

- Students will demonstrate effective oral communication skills.

Goal 4: Students will model professionalism.

- Students will demonstrate an effective work ethic in the healthcare environment.
- Students will demonstrate the value of lifelong learning.

Goal 5: The program will provide qualified Magnetic Resonance Imaging Technologist to meet the needs of healthcare community.

- The program will recruit those students who are well-prepared to meet the academic challenges of the MRI program.
- The program will help fulfill the needs of the healthcare community.
- Graduates will be satisfied with the practical skills learned in the program.
- Employers will be satisfied with the practical skills learned in the program.

CLINICAL INFORMATION

CLINICAL PRACTICUM

The required clinical practicum is referred to as competency-based education. The curriculum is structured based on defined objectives and competencies.

Clinical education is a planned and structured experience. The entire 20-month program is an inter-sequential integration of didactic and practical learning through classroom lectures, clinical laboratories, supplementary lectures, discussions, demonstrations, and supervised practice of standardized procedures. Clinical sites may be added or deleted at the discretion of the program director and faculty AND based on the JRCERT recognition process. Each student has access to clinical facilities that offer a balanced education sufficient in quantity and variety of MRI examinations as well as diversified modern equipment.

A standardized evaluation system is followed through documentation of a student's clinical progress for the purpose of providing developmental assistance in correcting weaknesses. All students are required to demonstrate their competence in a variety of procedures and tasks. School faculty makes every effort to preserve educational cohesiveness without compromising the patient care responsibility of the Magnetic Resonance Imaging department.

The program faculty schedules each student to practice individually with registered MRI technologists to ensure close direct or indirect supervision and to permit the student to obtain more than ample experience in all practical phases of routine, specialized, and emergency clinical functions. A 1:1 student to magnet ratio is maintained at all times. Clinical schedules are posted by the Educational Coordinator. The program faculty has the right to make changes to the clinical assignment schedule if deemed necessary or advantageous. A student will never be expected to replace a registered technologist.

1. Clinical Hours (Not to exceed 8 hours): All clinical affiliates 6:00 am – 4:30 pm

- Meal Breaks: Scheduled at discretion of supervising technologist

2. Clinic Labs

- Rhode Island Hospital or affiliate clinical site – 6:00 am-8:00 am (see syllabus for dates)
- School of Medical Imaging (see syllabus for dates/times/classroom)

3. Clinical Schedule

- Students will be scheduled at a specific clinical site. The schedule will be given in advance so students can plan accordingly. The rotations will be equally distributed. Changes can be made by the program faculty due to extenuating circumstances.

GENDER SPECIFIC POLICIES

Lifespan Policy: All students, both male and female will be permitted to perform scans/observations that involve gender specific studies (i.e. breast and prostate imaging). However, to assure an environment that is conducive to patient privacy, patients will have the right to refuse a student's participation.

Rhode Island Medical Imaging (RIMI) Policy: Students are to abide by the RIMI/RIVI policy. Detailed information regarding the policy can be found in the MRI program administrative binder and/or Trajecsyst.

DIDACTIC INFORMATION

COURSE SCHEDULE:

Course		Credits
Semester 1		
MEDI 202	Introduction to Medical Imaging	1.5
MEDI 255	Patient Care Interventions for Allied Health	1.5
COMM 338	Communications for the Health Professional	4
Semester 2		
MRI 301	Introduction to Magnetic Resonance Imaging	3
MRI 309	Clinical Observation	3.5
Semester 3		
MRI 311	Cross Sectional Anatomy and Imaging Procedures I	3
MRI 321	Physical Principles I	3
MRI 310	Clinical Practice I	8
Semester 4		
MRI 411	Cross Sectional Anatomy and Imaging Procedures II	3
MRI 421	Physical Principles II	3
MRI 410	Clinical Practice II	8
Semester 5		
MRI 455	MRI Pathology	1.5
MRI 430	Registry Review	3
MRI 420	Clinical Practice III	6

COURSE DESCRIPTIONS

MEDI 202 Introduction to Medical Imaging

This course is designed to introduce the student to medical imaging including history, professional organizations, and the student role in a clinical program.

MEDI 255 Patient Care Interventions for Allied Health

This course is designed to introduce the student to nursing procedures and techniques related to radiography.

MRI 301 Introduction to Magnetic Resonance Imaging

This course covers basic MRI history, instrumentation, safety, positioning, equipment, coils, an overview of the department and scanners. Also included is basic pharmacology, venipuncture, and intravenous contrast media administration.

MRI 309 Clinical Observation

This course provides an introduction to the clinical practice of MRI with emphasis on departmental procedures, MRI safety and patient care. It also offers practical experience observing and applying health care principles.

MRI 311 Cross Sectional Anatomy and Imaging Procedures I

This course covers anatomy seen in multiple orthogonal planes including head, spine, neck and thorax. Bone, muscles, vascular structures, organs and soft tissues are examined. Discussion on imaging techniques and procedures.

MRI 321 Physical Principles I

This course covers a comprehensive overview of MR principles to include: MR signal production, tissue characteristics, widely used pulse sequences, image formation, and image contrast.

MRI 310 Clinical Practice I

Clinical education is designed to gain skills required to achieve clinical competencies in a variety of MRI procedures. It allows for practice of skills learned and to become proficient in MRI and patient care.

MRI 411 Cross Sectional Anatomy and Imaging Procedures II

This course is a continuation of MRI 311, discussing cross sectional anatomy of the abdomen, pelvis, upper and lower extremities. There is a continued emphasis on imaging techniques, procedures and protocols.

MRI 421 Physical Principles II

This course is a continuation of MRI 321 providing a comprehensive overview of: encoding, data collection, image formation, K-space, acquisitions, advanced pulse sequences, flow phenomenon, MRA, cardiac MRI, and quality assurance.

MRI 410 Clinical Practice II

This course continues the experiences learned in MRI 310 including routine MRI procedures in various clinical settings on all patient types. Emphasis is placed on gaining confidence and manipulating parameters.

MRI 430 MRI Registry Review

Students will review the specifications of the ARRT MRI examination, the guidelines for application, study strategies and content included in the exam.

MRI 420 Clinical Practice III

This course continues experiences learned in MRI 410, including advanced MRI procedures in various clinical settings on all patient types. This course prepares students to become independent functioning MRI technologists.

MRI 455 MRI Pathology

This course covers the common pathologies found in magnetic resonance imaging and the appearance of these pathologies in various imaging protocols. Content is inclusive of all commonly-imaged body systems and areas.



Mammography

This section has been designed to give you specific policies and procedures that govern the Mammography Program.

THE PROGRAM

DESCRIPTION

Lifespan School of Medical Imaging offers a 5-month part-time day program designed to offer both clinical and didactic education in mammography. Upon successful completion of the program, the student is qualified to take the certifying examinations offered by The American Registry of Radiologic Technology Certification Board.

PROGRAM GOALS

- Students will have entry-level employment skills.
- Students will have effective communication skills.
- Students will be able to critically think to problem solve.
- Students will have the skills necessary to provide appropriate patient care and comfort.
- The program will provide qualified nuclear medicine technologists to meet the health care needs of the community.

CLINICAL INFORMATION

CLINICAL PRACTICUM

The required clinical practicum is referred to as competency-based education. The curriculum is structured based on defined objectives and competencies.

Clinical education is a planned and structured experience. The 5-month clinical program is an inter-sequential integration of didactic and practical learning through classroom lectures, clinical laboratories, supplementary lectures, discussions, demonstrations, and supervised practice of standardized procedures. Each student has access to Rhode Island Hospital which offers a balanced education sufficient in quantity and variety of mammography examinations as well as diversified modern equipment.

A standardized evaluation system is followed to document the student's clinical progress throughout the program. All students are required to demonstrate competence in a variety of procedures. School faculty makes every effort to preserve educational cohesiveness without compromising the patient care responsibilities of the department. The program faculty has the right to make changes to the clinical assignment schedule if deemed necessary or advantageous. A student will never be expected to replace a registered technologist.

Clinical sites may be added or deleted at the discretion of the program director and faculty AND based on the JRCNMT recognition process.

CLINICAL HOURS

Clinical hours are based on an 8-hour day and start times can vary based on clinical site and rotation. Hours are scheduled between 6:30 am - 4:00 pm.

CLINICAL SCHEDULE: Students will be scheduled at a specific clinical site. The schedule will be given in advance so students can plan accordingly. The rotations will be equally distributed. Changes can be made by program faculty due to extenuating circumstances.

DIDACTIC INFORMATION

Didactic courses follow the ARRT Structured Education guidelines.



Lifespan School of Medical Imaging

Delivering health with care.®

Nuclear Medicine Technology

This section has been designed to give you specific policies and procedures that govern the Nuclear Medicine Technology Program.

ACCREDITATION:

Joint Review Committee on Educational Programs in Nuclear Medicine Technology
820 W Danforth Rd, # B1
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THE PROGRAM

DESCRIPTION

Lifespan School of Medical Imaging offers a 20-month full time day program designed to offer both clinical and didactic education in nuclear medicine technology. Upon successful completion of the program, the student is qualified to take the certifying examinations offered by The American Registry of Radiologic Technology Certification Board and/or the Nuclear Medicine Technology Certification Board.

PROGRAM GOALS

Students will have entry-level employment skills.

- Students will practice radiation safety techniques.
- Student will perform quality control on various instruments.
- Students will prepare, calculate and administer radiopharmaceuticals and pharmaceuticals as permitted.
- Students will be able to perform a variety of nuclear medicine procedures including PET.
- Students will observe and assist with a variety of therapeutic nuclear medicine procedures.
- Students will be able to evaluate images and take additional views if necessary.

Students will have effective communication skills.

- Students will be able to demonstrate age appropriate effective communication skills.
- Students will demonstrate respect for cultural diversity.
- Students will be able to critically think to problem solve.
- Students will be able to perform non-routine nuclear medicine procedures.
- Students will observe interpreting physicians to develop understanding of clinical correlation.

Students will have the skills necessary to provide appropriate patient care and comfort.

- Students will provide appropriate patient care.

The program will provide qualified nuclear medicine technologists to meet the health care needs of the community.

- The program will recruit those students who are well prepared to meet the academic challenges of the program.
- Students will be satisfied with the courses, didactic instructors and clinical rotations.
- Graduates will be satisfied with the practical skills learned in the program.
- Employers will be satisfied with the practical skills graduates learned from the program.

PROGRAM OBJECTIVES

Upon completion of the program the student will be able to:

- Maintain compliance with local, state and federal regulations in radiation safety practices under the supervision of an authorized user or radiation safety officer.
- Provide patient care while providing diagnostic and therapeutic nuclear medicine services.
- Perform quality control on nuclear medicine instrumentation.
- Properly purchase, prepare, identify, and label radiopharmaceuticals.
- Perform entry level nuclear medicine diagnostic procedures with confidence.
- Assist an authorized user in preparation and application of therapeutic radionuclides.

CLINICAL INFORMATION

CLINICAL PRACTICUM

The required clinical practicum is referred to as competency-based education. The curriculum is structured based on defined objectives and competencies.

Clinical education is a planned and structured experience. The 20-month clinical program is an inter-sequential integration of didactic and practical learning through classroom lectures, clinical laboratories, supplementary lectures, discussions, demonstrations, and supervised practice of standardized procedures. The clinical affiliates offer a balanced education sufficient in quantity and variety of nuclear medicine examinations as well as diversified modern equipment.

A standardized evaluation system is followed to document the student's clinical progress throughout the program. All students are required to demonstrate competence in a variety of procedures. School faculty makes every effort to preserve educational cohesiveness without compromising the patient care responsibilities of the department. The program faculty has the right to make changes to the clinical assignment schedule if deemed necessary or advantageous. A student will never be expected to replace a registered technologist.

Clinical sites may be added or deleted at the discretion of the program director and faculty AND based on the JRCNMT recognition process.

CLINICAL HOURS

Clinical hours are based on an 8-hour work day and start times can vary based on clinical site and rotation. Schedules will be determined by the individual clinical site. Any changes to the schedule must be approved by the affiliate education supervisor and program director.

CLINICAL COMPETENCY REQUIREMENTS

During each clinical internship, the syllabus will list the competency requirements that are to be completed for that semester. Students must complete competencies to ensure they have mastered the procedure or technique. All competencies will be completed on Trajecsys ®

CLINICAL SCHEDULE

Students will be scheduled at a specific clinical site. The schedule will be given in advance so students can plan accordingly. The rotations will be equally distributed. Changes can be made by program faculty due to extenuating circumstances.

CLINICAL SITE REQUIREMENTS

Clinical sites may require additional requirements (training, orientation, drug testing, etc...) for students to rotate at their clinical facility. It is the responsibility of the student to complete all necessary requirements of the clinical site.

DIDACTIC INFORMATION

		Credits
Semester 1: September to December		
MEDI 202	Introduction to Medical Imaging	1.5
MEDI 255	Patient Care Interventions for Allied Health	1.5
COMM 338	Communications for the Health Professional	4.0
Semester 2: January to April		
NMT 301	Introduction to NMT	3.0
NMT 321	Diagnostic Nuclear Medicine Procedures I	3.0
NMT 311	Radiation Safety	1.0
NMT 231	Clinical Observation	3.5
Semester 3: May to August		
NMT 405	Radiopharmacy	1.0
NMT 325	Radiation Physics	1.0
NMT 421	Diagnostic Nuclear Medicine Procedures II	3.0
NMT 332	Clinical Diagnostic Procedures I	8.0
Semester 4: September to December		
NMT 402	Instrumentation	1.5
NMT 425	Diagnostic Nuclear Medicine Procedures III	3.0
NMT 431	Clinical Diagnostic Procedures II	8.0
CTSC 407	Sectional Anatomy and Pathology	2.0
Semester 5: January to April		
NMT 430	Registry Review	2.0
CTSC 300	Principles of Computed Tomography	2.0
CTSC 301	Physics and Radiation Protection	2.0
NMT 432	Clinical Diagnostic Procedures III	6.0

COURSE DESCRIPTIONS

MEDI 202 Introduction to Medical Imaging

This course gives the student an overview of the medical imaging profession. The student role in a healthcare program will be discussed including time-management, communication and clinical education.

MEDI 255 Patient Care Interventions for Allied Health

This course gives the student the skills necessary for patient care including patient interactions, safe patient movement, vital signs, pharmacology, infection control and an introduction to medical terminology.

NMT 301 Introduction to Nuclear Medicine Technology

This course covers an introduction to medical imaging including orientation to clinical affiliates and the School of Medical Imaging. Topics include math, statistics, computers, clinical procedures, instrumentation and venipuncture

NMT 231 Clinical Observation

Provides an introduction to the clinical practice of nuclear medicine with an emphasis on departmental policies and procedures, radiation safety and patient care. Offers practical experience observing and applying health care principles.

NMT 311 Radiation Safety

This course covers principles and applications of radiation safety and protection. Specific topics include personal monitoring, regulations, waste disposal and radiotherapy.

NMT 325 Radiation Physics

This course covers concepts and physical principles that govern radioactivity and interactions of ionizing radiation with matter. Students will learn the law of radioactive decay and biological effects of radiation.

NMT 405 Radiopharmacy

This course will define and discuss the theory and practice of radiopharmacy and radiochemistry, including preparation, calculation of doses, quality control, radiation safety and applicable regulations.

NMT 402 Instrumentation

This course will define the principles of operation and quality control for all non-imaging and imaging instruments in nuclear medicine.

NMT 321 Diagnostic Nuclear Medicine Procedures I

This course covers anatomy & physiology, pathophysiology, radiopharmacy, imaging techniques and interpretation of images. It is designed to be taught in an integrated system by system approach as applied to nuclear medicine.

NMT 421 Diagnostic Nuclear Medicine Procedures II

This course covers anatomy & physiology, pathophysiology, radiopharmacy, imaging techniques and interpretation of images. It is designed to be taught in an integrated system by system approach as applied to nuclear medicine.

NMT 425 Diagnostic Nuclear Medicine Procedures III

This course covers anatomy & physiology, pathophysiology, radiopharmacy, imaging techniques and interpretation of images. It is designed to be taught in an integrated system by system approach as applied to nuclear medicine.

NMT 332 Clinical Diagnostic Procedures I

Clinical education designed to gain skills required to achieve clinical competencies in a variety of nuclear medicine procedures. Emphasis is placed on the integration of clinical and didactic education leading to proficiency.

NMT 431 Clinical Diagnostic Procedures II

Clinical education designed to gain skills required to achieve clinical competencies in a variety of nuclear medicine procedures. Emphasis is placed on the integration of clinical and didactic education leading to proficiency.

NMT 432 Clinical Diagnostic Procedures III

Clinical education designed to gain skills required to achieve clinical competencies in a variety of nuclear medicine procedures. Emphasis is placed on the integration of clinical and didactic education leading to proficiency.

CTSC 407 Sectional Anatomy and Pathology

This course provides students with basic terminology necessary to study sectional anatomy related to anatomic position, directional terms, body planes, cavities, habitus, and regional divisions. It also provides the students with detailed anatomy by structure and relationship to other structures in several planes.

CTSC 300 Principles of Computed Tomography

The course provides students with the basic principles of computed tomography imaging, basic concepts of patient care including pharmacology, drug administration and contrast media for safe injection techniques. Discussion also includes the basic procedures and pathologies associated with computed tomography.

CTSC 301 CT Physics and Radiation Protection

The course provides students with the CT imaging system components and their function. Focus will include image quality as it relates to spatial resolution, contrast resolution, noise, linearity, and uniformity. Radiation safety responsibilities to include minimizing dose while maintaining image quality, QC testing and CT artifacts will also be discussed.

NMT 430 Registry Review

Review to prepare students for national certification exams offered by the ARRT and NMTCB.

RADIATION BADGE POLICY

It is the policy of the hospital and directed by the State and Federal regulatory agencies that students be monitored by means of a dosimetry badge for recording radiation dose levels. The Medical Physics/Radiation Safety department will provide two radiation badges (ring badge and body badge) for monitoring students. It is the student's responsibility to wear the radiation badges in the proper manner, protect it from damage, avoid losing it and turn it in on time. Failure to comply is a direct violation of policy as well as against State and Federal Laws.

- The student musts wear his/her radiation badges during clinical rotations. No student will be allowed to remain in clinical without his/her radiation badges.
- The body badge must be worn at waist level and the finger badge can be worn on either hand with the label palm up.
- Radiation badges should be never left in an imaging room, hot lab or injection room.
- Radiation badges should not be worn if the student is having medical or dental radiographs.

- Any accidents with the badge or loss of the badge must be immediately reported to program faculty.
- Radiation badges will be read monthly and evaluated by the Radiation Safety Officer. If readings are reported that are outside of the predetermined threshold (ALARA) levels, the student's work habits will be investigated by the Radiation Safety Officer.
- Program faculty will review radiation exposure reports with students monthly. Students are required to initial reports.
- Radiation exposure reports will be kept on permanent file at the Medical Physics/Radiation Safety department.
- Any questions regarding exposures will be directed to program faculty. Radiation Safety Officer will be consulted as needed.

SYRINGE SHIELD

Radiation protection includes using a syringe shield when preparing, manipulating and administering radiopharmaceuticals. All students are required to purchase a syringe shield. Ordering and pricing information will be provided at orientation. Syringe shields must be properly maintained and replaced immediately if lost or broken. **The fee for syringe shield is estimated to cost \$150.00.**



Radiography

This section has been designed to give you specific policies and procedures that govern the Radiography Program.

ACCREDITATION:

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THE PROGRAM

The School of Medical Imaging – Radiography Program is a 20-month full-time day program designed to offer both clinical and didactic education in the art and science of radiography. Upon successful completion of the program, the student is qualified to take the certifying examination offered by the American Registry of Radiologic Technology Certification Board.

Goals

- Students will have entry-level RT employment skills.
- Students will have effective communication skills.
- Students will critically think to solve problems.
- Students will model professionalism.
- The program will provide qualified radiographers to meet the health care needs of the community.

Student Learning Outcomes

Goal 1 – Students will have entry-level RT employment skills.

- Students will position patients accurately for diagnostic images.
- Students will demonstrate safe radiation protection practices.
- Students will provide appropriate patient care.
- Students will evaluate images effectively.

Goal 2 – Students will have effective communication skills.

- Students will demonstrate age appropriate effective communication skills.

Goal 3 – Students will critically think to solve problems.

- Students will perform non-routine radiographic procedures.
- Students will correct non-diagnostic images effectively.
- Student will critically think in the healthcare environment.

Goal 4 –Students will model professionalism.

- Students will demonstrate an effective work ethic in the healthcare environment.
- Students will articulate how to maintain their professional status in the medical imaging field.

Goal 5 – The program will provide qualified radiographers to meet the health care needs of the community.

- The program will recruit those students who are well prepared to meet the academic challenges of a Radiography Program.
- The program will graduate students to help fulfill the needs of the surrounding healthcare community.
- Graduates will be satisfied with the practical skills learned in the program.
- Employers will be satisfied with the practical skills graduates learned from the program.

CLINICAL INFORMATION

CLINICAL PRACTICUM

The required clinical practicum is referred to as competency-based education. The curriculum is structured based on defined objectives and competencies.

Clinical education is a planned and structured experience. The 20-month training program is an inter-sequential integration of didactic and practical learning through classroom lectures, clinical laboratories, supplementary lectures, discussions, demonstrations, and supervised practice of standardized procedures. All clinical affiliates offer a balanced education sufficient in quantity and variety of general radiography examinations as well as diversified modern equipment. All students will have an opportunity to observe in interventional radiography, radiation therapy, nuclear medicine technology, computed tomography, diagnostic medical sonography and magnetic resonance imaging.

A standardized evaluation system is followed to document the student's clinical progress throughout the program. All students are required to demonstrate competence in a variety of procedures and tasks. School faculty makes every effort to preserve educational cohesiveness without compromising the patient care responsibilities of the department. The program faculty has the right to make changes to the clinical assignment schedule if deemed necessary or advantageous. A student will never be expected to replace the registered technologist.

CLINICAL HOURS

- All clinical affiliates: 6:30 am-4:00 pm (Not to exceed 8 hours)
- Meal Breaks:
 - RIH – 12:00-1:00p
 - TMH/NPH – 45 minutes scheduled at discretion of Education Coordinator or supervising technologist
 - UOI/RIMI/BPPC – 30 minutes scheduled at discretion of supervising technologist

CLINICAL SCHEDULE

Students will be scheduled at a specific clinical site. The schedule will be given in advance so students can plan accordingly. The rotations will be equally distributed. Changes can be made by program faculty due to extenuating circumstances.

CLINICAL SUPERVISION

Program faculty schedules each student to practice individually with a certified radiologic technologist (RT) to ensure direct or indirect supervision.

Direct Supervision

An RT is present in the x-ray room during student performance of a procedure or task. The RT will assess patient condition in relation to student knowledge and assist as needed throughout the exam. Direct supervision is required:

- Until the student proves competent on a particular procedure or task
- During performance of a competency evaluation
- During repeat images
- During RIMI rotations

Indirect Supervision

An RT is immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the physical presence of an RT adjacent to the x-ray room or location where the procedure or task is being performed.

Patient/Procedure Identification Policy

The purpose of the patient/procedure identification policy is for the student to understand the importance of checking and verifying the following information before performing all standard protocol radiology procedures as well as following through during and after the procedure has been completed:

- Correct patient
- Correct procedure
- Correct side
- Correct reason
- Correct anatomic marker

Procedure:

- Student – Competency not completed on procedure – Direct Supervision: An RT is present in the x-ray room during student performance of a procedure. The RT will assess patient condition in relation to student knowledge and assist as needed throughout the exam.
- Student – Competency complete on procedure – Indirect Supervision: An RT is immediately available to assist students regardless of the level of student achievement. Immediately available is interpreted as the physical presence of an RT adjacent to the x-ray room or location where the procedure is being performed.

The following process is performed for direct/indirect supervision:

- The RT and student will review the control sheet and student's competency evaluation report prior to performing an exam.
- During the control sheet review, the student will verbally explain to the RT what exam will be performed as well as specific projections to be done during exam.
- The RT will review the student's competency evaluation report to decide whether direct or indirect supervision is needed.

The student will use the following process for the identification of Diagnostic Imaging (DI) patients and verification of the exam to be performed:

- The student will verify the patient's identity and exam using the TPERS+ ID process listed below. Once verified, the student will complete the BEGIN PROCEDURE step in LifeChart and then perform exam.

TPESR+ ID process is a 10-step process, allowing for a TIME OUT prior to imaging. The Student will confirm this by placing a check mark next to each element on the RIS order.

- (1) Time and Date of order
- (2) Patient ID
- (3) Exam ordered
- (4) Side and labeling
- (5) Reason for exam
- (6) Student sets up patient for imaging exam
- (7) TIME OUT
- (8) Student verifies TPESR and initials RIS order (next to exam and side to be performed) **
- (9) Image is taken
- (10) + Review images with RT and confirm they match RIS order

Once the exam is complete, the student performs the END PROCEDURE step using the following process:

- TECHNOLOGIST – The technologist that verifies the images in PACS.
- SUPPORTING STAFF – The student that assists/performs the exam.

Additional information:

** The student will perform a time out prior to each image verifying correct exam, side, and anatomical marker. The student is not allowed to manipulate any images in CR/DR until the responsible RT is present.

When working alone or in teams (2 or more person team, buddy-system, etc.):

- Each individual technologist and/or student will verify all of the above steps are performed as it relates to their workflow.

Disciplinary Action:

If the student fails to perform any of the steps in the *Patient/Procedure Identification Policy* resulting in a mistake, a SafetyNet event report will be completed. After reviewing the incident, the student will be disciplined following the *Counseling and Corrective Action Policy*.

CLINICAL SCHEDULES

Typical clinical schedule:

- Spring (Year 1): two days per week
- Summer and Fall: four days per week
- Spring (Year 2): three days per week

DIDACTIC INFORMATION

COURSE SCHEDULE

Semester 1: September to December		Credits
RADT 301	Introduction to Radiography	2
MEDI 255	Patient Care Interventions for Allied Health	1.5
MEDI 202	Introduction to Medical Imaging	1.5
Semester 2: January to April		
RADT 305	Skeletal Anatomy	3
RADT 306	Radiographic Procedures I	4
RADT 320	Principles of Radiography I	3
RADT 309	Clinical Education I	4
Semester 3: May to August		
RADT 307	Radiographic Procedures II	3
RADT 330	Radiation Physics I	3
RADT 310	Clinical Education II	8
Semester 4: September to December		
RADT 425	Ethics/Critical Thinking and Problem Solving	2
RADT 321	Principles of Radiography II	3
RADT 411	Clinical Education III	8
Semester 5: January to April		
RADT 431	Radiation Physics II	3
RADT 461	Registry Review	3
RADT 412	Clinical Education IV	6

COURSE DESCRIPTIONS

MEDI 202 Introduction to Medical Imaging

This course is designed to introduce the student to medical imaging including history, professional organizations, and the student role in a clinical program.

MEDI 255 Patient Care Interventions for Allied Health

This course is designed to introduce the student to nursing procedures and techniques related to radiography.

RADT 301 Introduction to Radiography

This course provides an introduction to radiographic imaging including history, basic x-ray equipment, positioning terminology, and patient preparation. The student will learn basic medical terminology with respect to anatomy, pathology, and radiographic examinations. The student will observe the various clinic areas in an x-ray department as well as be introduced to department policies and procedures, patient contact and interactions, and x-ray equipment.

RADT 305 Skeletal Anatomy

This course is designed to give the student an understanding of the functional and structural anatomy of the skeletal system.

RADT 306 Radiographic Procedures I

This course is designed to provide the student with basic positions in terms of patient positioning, technical factors, shielding, respiration and structures best demonstrated. Topics include chest, abdomen, upper and lower extremities, bony thorax, pediatric, and vertebral column radiography. Laboratory Procedures: The student will receive hands-on experience to assist with positioning and exposure manipulation taught in class. Experiments will be performed in conjunction with class materials.

RADT 307 Radiographic Procedures II

This course is designed to provide the student with basic positions in terms of patient positioning, technical factors, shielding, respiration and structures best demonstrated. Topics include skull and facial bones, and contrast studies including digestive, biliary and urinary systems. Other topics include trauma and portable radiography and additional imaging procedures. Laboratory Procedures: The student will receive hands-on experience to assist with positioning and exposure manipulation taught in class. Experiments will be performed in conjunction with class materials.

RADT 309 Clinical Education I

This course teaches the student to interact in a clinical environment. The students should be able to perform basics positioning of the chest, abdomen, upper and lower extremities, bony thorax, and vertebral column. Technical factors will be introduced.

RADT 310 Clinical Education II

This course is a continuation of Clinical Education I. The student should continue to perform exams listed in Clinical Education I. The student should be able to perform basic positioning of the skull, facial bones, and contrast studies including digestive, biliary, and urinary tracts. The student should also be able to perform basic positioning of portable, trauma and pediatric exams.

RADT 320 Principles of Radiography I

This course will discuss the basic concepts of science and technology of x-ray imaging. Topics include mathematics, fundamentals of physics, the atom and electromagnetism. The practical fundamentals of imaging and exposure will include discovery and properties of x-rays, x-ray production, image quality, and scatter control. Students will be introduced to technical factor selection.

RADT 321 Principles of Radiography II

This course is designed to emphasize topics that are specific to the physics of imaging. Topics include: basics of computer operation and its application of imaging techniques including digital radiography, tomography, fluoroscopy, and interventional radiography. This course also discusses the use of x-rays and other ionizing and non-ionizing sources in the use of therapy as well as the fundamentals of radioisotope technology in all diagnostic imaging modalities. The absorption of radiation, its effect upon tissue and tissue recovery will be discussed.

RADT 330 Radiation Physics I

This course is designed to give the student an understanding to the x-ray circuitry components, methods of rectification, construction of the x-ray tube, and x-ray interactions.

RADT 411 Clinical Education III

Clinical Education III is a continuation of Clinical Education II. The student should continue to perform exams listed in Clinical Education I and II. Technical factors will be stressed and critical thinking skills will be introduced. During Clinical Education III, the student will have the opportunity to observe other imaging modalities.

RADT 412 Clinical Education IV

Clinical Education IV is a continuation of Clinical Education III. The student should continue to perform exams listed in Clinical Education I to III. During Clinical Education IV, the student will have the opportunity to observe other imaging modalities.

RADT 425 Ethics/Critical Thinking and Problem Solving

This course is designed to give the student the basic knowledge to make competent, informed clinical decisions in the clinic areas presenting the student with situations to which they must solve. The student will receive an introduction into concepts and professional standards of practice. The student will also develop a professional development plan for their future.

RADT 431 Radiation Physics II

This course is designed to give the student the basic knowledge of radiobiology and radiation protection. Topics include radiation quantities and units, and radiation monitoring.

RADT 461 Registry Review

This course is designed to help prepare the student for the National Registry Exam. The student will take and be graded on mock registry exams in preparation for the exam.

LEAD MARKERS

- Identifying lead markers (right and left) are to be used on all images taken by the student.
- When a student is gaining competency on an evaluation only his/her own student issued markers will be permissible.
- The student is responsible for all images bearing their markers.
- The student is responsible for replacing lost anatomic markers.