Medical Imaging

Writing in the Discipline (p. 368)

Co-Directors: Eric Hall and Kenneth Kinsey

The medical imaging program at Rhode Island College is a joint program in conjunction with the Lifespan School of Medical Imaging. It is a comprehensive four-year program consisting of General Education and cognate courses at Rhode Island College followed by clinical education courses at the School of Medical Imaging.

Clinical education courses are held at Rhode Island Hospital, Hasbro Children’s Hospital, University Orthopedics, The Miriam Hospital, and Rhode Island Medical Imaging. Students who successfully complete the program are eligible to take the appropriate national certification examination.

Students accepted into a medical imaging clinical program are responsible for obtaining certification in cardiopulmonary resuscitation (basic life support for the health care provider) prior to enrolling in clinical courses.

Students must consult with their assigned advisor before they will be able to register for courses.

MEDICAL IMAGING B.S.

Admission Requirements for Concentrations in Diagnostic Medical Sonography, Magnetic Resonance Imaging, Nuclear Medicine Technology, and Radiologic Technology

Concentrators

1. Completion of all required preclinical courses, with a minimum grade of C in each course.

2. A completed application form submitted by the appropriate deadline to the Director of the Medical Imaging Program.

3. A minimum cumulative grade point average of 2.70.

4. An interview with the admissions committee of the Lifespan School of Medical Imaging.

Admission Requirements for Concentrations in Certified Medical Imager Management

Prior licensure in Diagnostic Medical Sonography, Magnetic Resonance Imaging, Nuclear Medicine Technology or Radiologic Technology.

Retention Requirement for All Concentrations

A minimum grade of C in all required courses.

General Education Requirements for Concentration in Certified RT Computed Tomography

Students must complete the college’s General Education requirements, with the following contingencies:

1. Students will take a required MATH course in the cognates for each program that will satisfy their General Education Mathematics category.

2. Students will receive transfer credit for NS 175, which will fulfill the Natural Science category.

3. Students will receive transfer credit for AQSR 175, which will fulfill the Advanced Quantitative/Scientific Reasoning category.

COURSE REQUIREMENTS

CHOOSE concentration A, B, C, D, E, or F below.

A. Certified RT Computed Tomography

CTSC 300 Principles of Computed Tomography 2 As needed

CTSC 301 Computed Tomography Physics and Radiation Protection 2 As needed

CTSC 407 Sectional Anatomy and Pathology 2 As needed

CTSC 432 Computed Tomography Clinical Practice 8 As needed

Cognates

COMM 338 Communication for Health Professionals 4 F

MATH 209 Precalculus Mathematics 4 F, Sp, Su

Note: MATH 209: Fulfills the mathematics category of General Education.

Electives

ELECTIVES 8-11

Radiologic Technology Certification Transfer Credits

TRANSFER CREDITS 60

Total Credit Hours: 90-93

B. Certified Medical Imager Management

Cognates

BIOL 231 Human Anatomy 4 F, Sp, Su

BIOL 335 Human Physiology 4 F, Sp, Su

BIOL 348 Microbiology 4 F, Sp, Su

COMM 338 Communication for Health Professionals 4 F

MATH 209 Precalculus Mathematics 4 F, Sp, Su

MGT 201 Foundations of Management 3 F, Sp, Su

TWO COURSES in management at the 300-level or above 6

Note: MATH 209 Fulfills the mathematics category of General Education.

Electives

ELECTIVES 0-30

Medical Imager Certification Transfer Credits

TRANSFER CREDITS 30-60

Total Credit Hours: 59-89

C. Diagnostic Medical Sonography

DMS 300 Introduction to Diagnostic Medical Sonography 1.5 F

DMS 301 Abdominal Sonography I 1.5 Sp

DMS 302 Scan Lab I 1 Sp

DMS 303 Abdominal Sonography II 1.5 Su

DMS 305 Obstetrical and Gynecological Sonography I 1.5 Sp

DMS 306 Obstetrical and Gynecological Sonography II 1.5 Su

DMS 307 Sonographic Principles and Instrumentation 3 Sp

DMS 310 Clinical Practice I 6 Sp

DMS 312 Scan Lab II 1 Su

DMS 330 Clinical Practice II 8 Su

DMS 333 Abdominal Sonography III 1.5 F

DMS 335 Obstetrical and Gynecological Sonography III 1.5 F

DMS 403 Abdominal Sonography IV 1.5 Sp

DMS 406 Obstetrical and Gynecological Sonography IV 1.5 Sp

DMS 410 Clinical Practice III 8 F

DMS 412 Scan Lab III 1 F

DMS 422 Scan Lab IV 1 Sp

DMS 430 Clinical Practice IV 6 Sp

MEDI 201 Orientation to Medical Imaging 1 F, Sp

MEDI 202 Introduction to Medical Imaging 1.5 F

MEDI 255 Patient Care Interventions for Allied Health 1.5 F

Cognates

BIOL 108 Basic Principles of Biology 4 F, Sp, Su

BIOL 231 Human Anatomy 4 F, Sp, Su

BIOL 335 Human Physiology 4 F, Sp, Su

CHEM 105 General, Organic and Biological Chemistry I 4 F, Sp, Su

COMM 338 Communication for Health Professionals 4 F

MATH 209 Precalculus Mathematics 4 F, Sp, Su

PHYS 110 Introductory Physics 4 Sp, F, Su

Total Credit Hours: 80.5

D. Magnetic Resonance Imaging

MRI 301 Introduction to Magnetic Resonance Imaging 3 Sp

MRI 309 Clinical Observation 3.5 Sp

MRI 310 Clinical Practice I 8 Su

MRI 311 Cross Sectional Anatomy and Imaging Procedures I 3 Su

MRI 321 Physical Principles I 3 Su

MRI 410 Clinical Practice II 8 F

MRI 411 Cross Sectional Anatomy and Imaging Procedures II 3 F

MRI 420 Clinical Practice III 6 Sp

MRI 421 Physical Principles II 3 F

MRI 430 Registry Review 3 Sp

MRI 455 MRI Pathology 1.5 Sp

MEDI 201 Orientation to Medical Imaging 1 F, Sp

MEDI 202 Introduction to Medical Imaging 1.5 F

MEDI 255 Patient Care Interventions for Allied Health 1.5 F

Cognates

BIOL 108 Basic Principles of Biology 4 F, Sp, Su

BIOL 231 Human Anatomy 4 F, Sp, Su

BIOL 335 Human Physiology 4 F, Sp, Su

CHEM 105 General, Organic and Biological Chemistry I 4 F, Sp, Su

COMM 338 Communication for Health Professionals 4 F

MATH 209 Precalculus Mathematics 4 F, Sp, Su

PHYS 110 Introductory Physics 4 Sp, F, Su

Total Credit Hours: 77

E. Nuclear Medicine Technology

MEDI 201 Orientation to Medical Imaging 1 F, Sp

MEDI 202 Introduction to Medical Imaging 1.5, F

MEDI 255 Patient Care Interventions for Allied Health 1.5 F

NMT 231 Clinical Observation 3.5 Sp

NMT 301 Introduction to Nuclear Medicine Technology 3 Sp

NMT 311 Radiation Safety and Radiation Physics 1 Sp

NMT 321 Diagnostic Nuclear Medicine Procedures I 3 Sp

NMT 325 Radiation Physics 1 Su

NMT 332 Clinical Diagnostic Procedures I 8 Su

NMT 402 Instrumentation and Radiobiology 1.5 F

NMT 405 Radiopharmacy 1 Su

NMT 421 Diagnostic Nuclear Medicine Procedures II 3 Su

NMT 425 Diagnostic Nuclear Medicine Procedures III 3 F

NMT 430 Registry Review 2 Sp

NMT 431 Clinical Diagnostic Procedures II 8 F

NMT 432 Clinical Diagnostic Procedures III 6 Sp

CTSC 300 Principles of Computed Tomography 2 As needed

CTSC 301 Computed Tomography Physics and Radiation Protection 2 As needed

CTSC 407 Sectional Anatomy and Pathology 2 As needed

Cognates

BIOL 108 Basic Principles of Biology 4 F, Sp, Su

BIOL 231 Human Anatomy 4 F, Sp, Su

BIOL 335 Human Physiology 4 F, Sp, Su

CHEM 105 General, Organic and Biological Chemistry I 4 F, Sp, Su

COMM 338 Communication for Health Professionals 4 F

MATH 209 Precalculus Mathematics 4 F, Sp, Su

PHYS 110 Introductory Physics 4 Sp, F, Su

Total Credit Hours: 82

F. Radiologic Technology

MEDI 201 Orientation to Medical Imaging 1 F, Sp

MEDI 202 Introduction to Medical Imaging 1.5 F

MEDI 255 Patient Care Interventions for Allied Health 1.5 F

RADT 301 Introduction to Radiologic Technology 2 F

RADT 305 Skeletal Anatomy 3 Sp

RADT 306 Radiographic Procedures I 4 Sp

RADT 307 Radiographic Procedures II 3 Su

RADT 309 Clinical Education I 4 Sp

RADT 310 Clinical Education II 8 Su

RADT 320 Principles of Radiography I 3 Sp

RADT 321 Principles of Radiography II 3 F

RADT 330 Radiation Physics I 3 Su

RADT 411 Clinical Education III 8 F

RADT 412 Clinical Education IV 6 Sp

RADT 425 Ethics/Critical Thinking and Problem Solving 2 F

RADT 431 Radiation Physics II 3 Sp

RADT 461 Registry Review 3 Sp

Cognates

BIOL 108 Basic Principles of Biology 4 F, Sp, Su

BIOL 231 Human Anatomy 4 F, Sp, Su

BIOL 335 Human Physiology 4 F, Sp, Su

CHEM 105 General, Organic and Biological Chemistry I 4 F, Sp, Su

COMM 338 Communication for Health Professionals 4 Sp

MATH 209 Precalculus Mathematics 4 F, Sp, Su

PHYS 110 Introductory Physics 4 Sp, F, Su

Total Credit Hours: 87