RADIOGRAPHY (RAD)

All RAD courses numbered 100 and above may be applied to the major field and elective requirement for the Associate in Arts and Associate in Science degrees.

RAD 101 Introduction to Radiography (1) 0,3
This course introduces the student to Medical Imaging as it relates to the healthcare industry, and Radiologic technology as a profession. It includes an introduction to the healthcare delivery system, outlines the structure of the health system and roles of various departments and health professionals. Other topics include: the history of the profession, an introduction to the various professional organizations, quality customer service, an introduction to medical ethics and law with an emphasis on confidentiality and HIPAA regulations and basic radiation safety. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $135 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Acceptance into the Radiography Program
Semester(s) Offered: Summer

RAD 102 Methods of Patient Care (2) 1,3
This course provides the student with the basic concepts of patient care, including consideration for the physical, developmental and psychological needs of the patient and family. The course covers routine and emergency patient care procedures including: basic EKG, infection control, patient assessment, patient education, venipuncture and contrast injection, introduction to pharmacology, and interacting with the terminally ill. The course includes clinical demonstration of patient care skills. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Explore the radiography program and come to an **information session**

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In-District Tuition/Fees: $358 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Acceptance into the Radiography Program
Semester(s) Offered: Summer

RAD 103 Radiographic Imaging I (3) 2,2
This course is the first in a series of three radiographic imaging courses. It provides the student with an understanding of the components, principles and operation of various medical imaging systems. Factors that impact image acquisition, processing, display, archiving and retrieval are discussed. This course includes demonstrations and laboratory activities to reinforce concepts. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

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In-District Tuition/Fees: $493 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 101 and RAD 102
Semester(s) Offered: Fall

RAD 104 Radiographic Procedures I (4) 3,3
This course provides instruction in radiographic positions and procedures, including demonstrations, and presentation of radiographic images of the human body. The student learns the routine examinations and selected non-routine radiographic examinations of the following body segments: chest, abdomen, upper extremity, lower extremity and pelvis. The curriculum integrates the Radiographic Procedures I course and the Radiography Clinical Practicum I course to promote student's clinical competence in all assigned rotations as well as a thorough knowledge of related anatomy and positioning theory and concepts. It also integrates clinical applications of radiation protection and technique selection. This course includes laboratory experiences, which provide students opportunity for simulated practice. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $628 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 101 and RAD 102, and must be concurrently enrolled in BIO 246 or its equivalent from another accredited institution within the past 5 years.
Semester(s) Offered: Fall

RAD 105 Radiographic Imaging II (3) 2,2
This course is a continuation of Radiographic Imaging I and builds on the fundamental concepts presented in that course. It is designed to develop the student's understanding of the properties of a radiographic image and the factors that control and influence image quality. Concepts of technical factor selection are covered with an emphasis on their impact on image quality and patient exposure. This course includes demonstrations and laboratory activities to reinforce concepts and enhance student learning. Problem solving and critical thinking skills will be emphasized in technique formulation and exposure calculations. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

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In-District Tuition/Fees: $493 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 103
Semester(s) Offered: Spring

RAD 106 Radiographic Procedures II (4) 3,3
This course is a continuation of Radiographic Procedures I, and provides instruction in radiographic positions and procedures, including demonstrations, and presentation of radiographic images of the human body. The student learns all routine and selected non-routine procedures of the: bony thorax, spine, fluoroscopy, mobile radiography and surgery, cranium, facial bones and sinuses. The course includes laboratory experience, which provide students opportunity for simulated practice and is integrated with the Radiography Clinical Practicum II course. Following completion of Procedures II, the student is able to perform all routine radiographic examinations. The student must integrate concepts from radiation protection and exposure technique to produce optimal quality diagnostic radiographs with minimal radiation exposure to the patient. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $628 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 103, RAD 104, RAD 124 and BIO 246
Semester(s) Offered: Spring

RAD 107 Radiologic Physics (2) 1,3
This course reviews the concepts of atomic structure and electromagnetism, and study of radiation -- its nature, production and medical applications. Covered topics include: the electromagnetic spectrum, radioactivity and half life, x-ray production and characteristics, the effects of technique selection on beam quality and quantity, the interaction of radiation with matter, and the circuitry and design of radiographic equipment. The course emphasizes clinical applications of physics concepts in the safe operation of high voltage radiographic equipment. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

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In-District Tuition/Fees: $270 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 103, RAD 104, and RAD 124 Recommended: CHM 101 or CHM 112
Semester(s) Offered: Spring

RAD 124 Radiography Clinical Practicum I (3) 0,15
This course is the first in a series of five clinical courses. Structured, sequential, competency-based clinical assignments enable the student to progress through a series of clinical rotations which reinforce concepts that are introduced in the Procedures I and Methods of Patient Care courses. Opportunities are provided for observation, assistance and participation in radiographic procedures with an emphasis on the actual performance of exams. Students will complete 255 hours of clinical experience under direct/indirect supervision of a radiographer as appropriate. The student will begin documenting competency in radiographic and patient care procedures. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

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In-District Tuition/Fees: $493 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 101 and RAD 102
Semester(s) Offered: Fall

RAD 134 Radiography Clinical Practicum II (3) 0,15
This course is a continuation of Radiography Clinical Practicum I. Structured, sequential, competency-based clinical assignments enable the student to progress through a series of clinical rotations which reinforce concepts that are introduced in Procedures I and II. Opportunities are provided for observation, assistance and participation in radiographic procedures with an emphasis on the actual performance of exams. Students will complete 255 hours of clinical experience under direct/indirect supervision of a radiographer as appropriate. The student will continue attaining, maintaining and documenting competency in a variety of procedures. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $493 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 103, RAD 104 and RAD 124
Semester(s) Offered: Spring

RAD 208 Radiographic Procedures III (2) 1,3
This course covers the advanced radiographic, fluoroscopic and invasive procedures, emphasizing patient care, procedural protocol, and equipment and accessories used. This course covers the following topic areas: trauma radiography, pediatric and geriatric radiography and special procedures (e.g. Myelography, Arthrography, ERCP, Bronchoscopy etc.). The course includes laboratory experience, which provide students opportunity for simulated practice and is integrated with the Radiography Clinical Practicum III course. Following completion of Procedures III, the student is able to perform all routine and special radiographic examinations. The student must integrate concepts from radiation protection and exposure technique to produce optimal quality diagnostic radiographs with minimal radiation exposure to the patient. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $358 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 105, RAD 106, RAD 107, and RAD 134
Semester(s) Offered: Summer

RAD 209 Radiobiology & Radiation Protection (2) 1,2
The radiation biology segment of this course provides an overview of the principles of the interaction of radiation with living systems. The course presents the effects of irradiation of biological molecules and organisms, and the factors affecting biological response. Covered topics include: early and late effects of radiation exposure, epidemiological studies of radiation effects, and the acute radiation syndromes. The radiation protection segment of this course provides the student with an overview of the principles and practices of radiation protection. The course emphasizes the responsibility of the radiologic sciences professional in providing radiation protection to the patient, personnel and the public. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $270 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 105, RAD 106, RAD 107, and RAD 134 Recommended: CHM 101 or CHM 112
Semester(s) Offered: Fall

RAD 211 Radiographic Imaging III (2) 1,2
This course covers the concept of continuous quality improvement in the healthcare environment and the impact of legislation and accreditation standards on quality management programs. Also included are quality control and quality assurance procedures for a variety of imaging equipment and processes. Other imaging topics including PACS and image intensified and flat-panel fluoroscopic equipment are also covered. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $358 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 105
Semester(s) Offered: Summer

RAD 212 Radiographic Pathology (2) 2,0
This course presents a body system approach to the demonstration of human diseases through medical imaging. The course emphasizes adaptations of routine positioning and radiographic technique to best demonstrate pathology and maximize diagnostic quality. Covered topics include patient care considerations relative to disease processes. Discussions include which imaging method or modality will best demonstrate each pathological condition. The course includes review of radiographs and films from Computed Tomography, Ultrasound, Magnetic Resonance, Mammography, Special Procedures and Nuclear Medicine. Systems covered include the respiratory, skeletal, gastrointestinal, urinary, cardiovascular, nervous, hematopoetic system, endocrine, reproductive, and miscellaneous disorders. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $270 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 209, RAD 208, and RAD 242.
Semester(s) Offered: Fall

RAD 220 Pharmacology (2) 2,0
This course explores the role of the radiographer in the administration of contrast media and related medications. Covered topics include: the radiographer scope of practice, legal implications, pharmacology overview, drug measurements and dose calculations, contrast media, preventive care and emergency response to contrast media reactions, imaging pharmaceutical compatibility, select drug administration techniques, and documentation requirements. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $358 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 212, RAD 211, and RAD 256 Recommended: CHM 101 or CHM 112
Semester(s) Offered: Spring

RAD 230 Medical Ethics and Law (2) 2,0
This course provides the student with an understanding of the parameters of professional practice and the legal and ethical responsibilities of the radiologic sciences professional. Covered topics include: elements of ethical behavior, ethical issues and dilemmas in health care, interacting with the terminally ill patient, the scope of practice of radiologic sciences professionals, sources of law, elements of malpractice, employment issues, and litigation. The course emphasizes the student's ability to apply concepts of ethics and law in the development of professional attributes. Course requirements include leading class discussions of issues and case studies. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $270 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Enrollment in the radiography program.
Semester(s) Offered: Fall

RAD 240 Career Development (1) 0,2
This course provides the student an opportunity to conduct a self-assessment and review of each of the content areas of the ARRT examination to prepare for certification. Activities assist the student in organizing review efforts, and emphasizes the synthesis of information from across the curriculum through developmental testing and simulated registry examinations. This course also prepares the students for their professional roles and employment by mastering skills of career planning, resume and portfolio development, interviewing skills, in addition to the creation of a professional development plan. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $223 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 212, RAD 211 and RAD 256
Semester(s) Offered: Spring

RAD 242 Radiography Clinical Practicum III (2) 0,10
This course is a continuation of Radiography Clinical Practicum II. Structured, sequential, competency-based clinical assignments enable the student to progress through a series of clinical rotations which reinforce concepts that are introduced in Procedures I-III. Opportunities are provided for observation, assistance and participation in radiographic procedures with an emphasis on the actual performance of exams. Students will complete 100 hours of clinical experience under direct/indirect supervision of a radiographer as appropriate. The student will continue attaining, maintaining and documenting competency in a variety of procedures. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $358 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 105, RAD 106, RAD 107 and RAD 134
Semester(s) Offered: Summer

RAD 256 Radiography Clinical Practicum IV (5) 0,25
This course is a continuation of Radiography Clinical Practicum III. Opportunities are provided for the continued development of clinical competency and professional development. Emphasis is placed on application of concepts in the actual performance of procedures for both speed and accuracy. Students will complete 425 hours of clinical experience under direct/indirect supervision of a radiographer as appropriate. The student will continue attaining, maintaining and documenting competency in a variety of procedures. Students are also provided an opportunity to observe in some of the advanced imaging modality departments.(1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $763 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 209, RAD 208 and RAD 242.
Semester(s) Offered: Fall

RAD 261 Radiographic Image Evaluation (1) 0,2
This course provides an opportunity for students to apply a systematic approach for evaluating radiographic images to determine diagnostic quality. Students will develop a high degree of radiographic problem-solving ability by correlating technical and positioning procedures with image analysis guidelines for common projections, non-routine situations or when suboptimal images are obtained.(1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $135 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 256
Semester(s) Offered: Spring

RAD 266 Radiography Clinical Practicum V (5) 0,25
This course is a continuation of Radiography Clinical Practicum IV and provides opportunity for final student learning outcomes assessment. Clinical requirements include successful completion of final clinical competencies in all major areas of radiography including critical thinking and problem-solving. Successful completion of final competencies is a program graduation requirement. Emphasis in this course is on continued professional development and proficient and independent performance of all radiographic procedures, with opportunity for continued exploration of selected advanced imaging modalities. (1.2) Proficiency Credit Not Available Pass/No Credit Not Available

Radiography Program Information

SPECIAL NOTE: Students enrolled in this program are required to have the following: 1) criminal background check, 2) drug test, 3) physical exam, 4) lab tests to prove immunity to common illnesses, 5) TB test, 6) health insurance, 7) uniform, 8) social security card 9) Basic Life Support (BLS) Healthcare Provider CPR certification 10) fully vaccinated for COVID-19. .
In-District Tuition/Fees: $763 (effective 2024/25 academic year)
In-district tuition rates are subject to change based on Board approval.
Prerequisite: Grade of C or better in RAD 212, RAD 211 and RAD 256
Semester(s) Offered: Spring