

RADIOGRAPHY

Faculty

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Radiographers are experts in the art and science of diagnostic medical radiography and are valuable members of the health care team. The Associate of Science in Radiography Program at Casper College spans 24 months of continuous education which includes two summer sessions. Didactic instruction (theory), is conducted at the college where students are required to obtain 53-58 academic-technical credit hours. Clinical instruction (practicum), is conducted at the Wyoming Medical Center, the two radiology departments of Outpatient Radiology of Casper, Community Health Center of Central Wyoming, Central Wyoming Neurosurgery, Memorial Hospital of Converse County, Sheridan Memorial Hospital, Lander Valley Medical Center, Mountain View Regional Hospital, Riverton Memorial Hospital, Campbell County Memorial Hospital, Casper Orthopedics, Memorial Hospital of Carbon County, and Western Medical for a total of 1125 clinical education hours accounting for an additional 20 clinical education credits.

Mission

The Associate of Science in Radiography Program at Casper College produces competent medical radiographers eligible for immediate employment or advanced education, by offering high quality educational and clinical experiences.

Purpose

The radiography program at Casper College provides quality learning opportunities for its students in order to accomplish its mission. It also encourages and supports life-long learning. By maintaining national accreditation, the radiography program will prepare students to meet the demands of the profession. This includes technical skills, as well as their ability to be intellectually adaptive and communicate well, to think analytically, to integrate knowledge, and to appreciate cultural and social diversity. Graduates will learn to exhibit and apply high ethical values and standards of practice in regard to patient care in the healthcare field.

Program goals

1. Clinical Performance and Competence

Students will produce high quality images by possessing the knowledge, clinical application, radiation safety practices and patient care skills needed to meet the needs of the radiography community as entry level radiographers.

2. Problem Solving and Critical Thinking

Students will demonstrate sound problem solving and critical thinking skills necessary to function effectively in the clinical setting.

3. Communication

Students will communicate effectively with patients, peers, and other members of the healthcare team. Through effective communication students will function as a productive member of the healthcare team.

4. Professional Growth and Development

Students will understand the purpose and importance of professional values, ethics, continuing education, and life long learning.

5. Program Effectiveness

Graduates will fulfill the needs of the health care community. The program will provide the community with graduates who are able to function as an active member of the health care team.

Accreditation and certification

Casper College's radiography program is accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), located at 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-2901. The JRCERT phone number is (312) 704-5300 and the website with program information is located at JRCERT.ORG. Graduates of this program meet eligibility requirements for taking the national certification examination in radiography administered by the American Registry of Radiologic Technologists (ARRT). Upon passing this examination, students are certified as Registered Radiologic Technologists, R.T., ARRT, with all rights and privileges. The ARRT may refuse certification to a person who has a prior felony conviction. The American Registry of Radiologic Technologists is located at 1255 Northland Drive, St. Paul, MN; and can be reached by phone at (651) 687-0048. Please consult the radiography program director for further information.

Background check and drug/alcohol policy

Students enrolled in any of the health science programs will participate in clinical experiences in a variety of agencies. Prior to participating in the clinical experiences, students will be subject to that agency's requirements for a background check, drug testing and/or drug abuse prevention policies. Students are then subject to the random drug testing policy of that agency.

Following graduation, several of the state and/or national licensing or certification (registry) boards, including the American Registry of Radiologic Technologists (ARRT), may refuse to allow a graduate to sit for the required exam or issue a license or certification to a person who has a prior felony conviction or proven history of drug or alcohol abuse. Applicants to whom this applies should consult the program director for further information.

Clinical accessibility policy

The radiology program utilizes a variety of health-care agencies in the community for clinical experience for the students. If you have been employed in one or more of the agencies and are not eligible for rehire as an employee, the agency may not permit you to participate in the essential clinical component of the program.

Please contact the human resources department of the affected agency and request documentation that states the agency position on your participation in the clinical component of the program. If you receive a negative response from the agency, you are automatically ineligible to apply. A response indicating you will be permitted to attend clinicals in the agency will be given to the program director prior to the selection process for admission to the program. If you are unable to fulfill clinical requirements due to a previous employer issue and have not complied with the above, you could be dismissed from the program.

Physical Abilities for Student Seeking Admission to the Radiography Program

For the purpose of the Radiography Program, a qualified individual is one who, with or without reasonable accommodation or modification, meets the essential eligibility requirements for participation in the program.

The field of radiography is a practice discipline with cognitive, sensory, affective, and psychomotor performance requirements. Based on these requirements, a list of "Core Performance Standards" has been developed. These standards are part of each radiography course and some of the standards are more prevalent than others.

These standards should be used to assist students in determining whether accommodations or modifications are necessary for the student to meet program requirements. Students who identify potential difficulties

with meeting the "Core Performance Standards" must communicate their concerns to the Student Services department as well as the program director. Determination is made on an individual basis as to whether or not the necessary accommodations or modifications can be made reasonably.

Core Performance Standards for Admission and Progression

Critical thinking: Critical thinking ability to exercise clinical judgment in a timely manner.

Interpersonal: Interpersonal abilities sufficient to interact therapeutically with patients/clients, families and groups from a variety of social, emotional, cultural, and intellectual backgrounds.

Communication: Communication skills sufficient for interaction with patients/clients, families, staff, faculty and other students in verbal, nonverbal, and written form.

Mobility: Physical abilities sufficient to move from room to room, safely perform treatments/procedures and assist patients/clients; lift and transfer patients/clients; manipulate equipment; walk and/or stand for extended periods of time.

Motor skills: Gross and fine motor skills sufficient to provide safe and effective patient/client care.

Hearing: Auditory ability sufficient to monitor and safely assess patient/client needs.

Visual: Visual ability with or without corrective lenses sufficient for observation and assessment necessary in safe patient/client care.

Tactile: Tactile ability sufficient for physical assessment.

Program admission requirements

New students are selected once each year, mid-spring semester. February 15 is the deadline to apply. Students failing to complete all requirements by this time will have to wait for program selection the following year. Professional education starts at the beginning of the summer semester. A maximum of 21 students are admitted each year.

Academic requirements

Students must:

1. Contact program faculty member for program application;
2. Be admitted as a classified student to Casper College before the deadline;
3. Be 18 years of age or older;
4. Have completed the following college courses with a minimum GPA of 2.3:

ENGL 1010 English Composition I	3
HLTK 0950 American Heart Association BLS for the Healthcare Provider	33
HLTK 1200 Medical Terminology	3
MATH 1400 Pre-Calculus Algebra	4
ZOO 2040 Human Anatomy and ZOO 2041 Human Anatomy Lab, and ZOO 2110 Human Physiology	4

5. It is recommended that the cultural environment elective is completed prior to admission to the program.
6. Participate in an observation period (fall semester) and a personal interview if selected based on criteria and grades (spring semester);
7. Submit two letters of recommendation;

8. If accepted into the program present documentation of MMR, chicken pox, and hepatitis B vaccination, PPD test, and evidence of health insurance and current driver's license as required by the clinical affiliates. Present evidence of a recent health examination.

Recommended coursework

High school physics or chemistry or equivalent (PHYS 1050 or 1110).

Transfer students

Students desiring to transfer into Casper College's medical radiography program from other JRCERT accredited programs may be accepted if there is adequate space available. All transfer students are expected to meet all program requirements of Casper College's Radiography Program before they graduate. Interested students should contact the program director.

Registered Radiologic Technologists (R.T.), ARRT

Technologists currently holding certificates in radiography from the American Registry of Radiologic Technologists and who do not possess an associate degree in radiologic technology from an accredited educational institution may pursue an associate degrees with a major in radiography at Casper College.

Technologists will be expected to meet academic institutional degree requirements for the associate of science degree.

A maximum of 20 clinical education credits will be awarded to all registered technologists. A maximum of 27 didactic radiography credits may be awarded if technologists can verify they are currently employed as practicing radiographers. Individuals who have been unemployed beyond one year will be required to take specific didactic radiography courses. Interested technologists should contact the program director.

Associate of Science Degree Radiography

(Recommended Curriculum)

General Education (Minimum 32 credits) Credits
General education coursework can be completed from within or outside of the major field of study.

1. Exploration and Participation
 - ZOO 2040 Human Anatomy 3
 - ZOO 2041 Human Anatomy Lab 1
 - ZOO 2110 Human Physiology. 4
 - MATH 1400 Pre-Calculus Algebra 4
2. Communication
 - ENGL 1010 English I: Composition. 3
 - ENGL 1020 English II: Composition 3
3. Relationship with the World
 - PSYC 1000 General Psychology or
 - SOC 1000 Introduction to Sociology 3-4
 - U.S. and Wyoming constitutions 3
 - Cultural environment. 3
4. General Education Electives
Must be chosen from areas 1, 2, or 3 above.
5. Physical Education 1

Major Requirements

- COSC 1200 Computer Information Systems 3
- HLTK 1200 Medical Terminology. 3
- HLTK 2200 Sectional Anatomy 3
- RDTK 1500 Intro to Radiologic Technology 1
- RDTK 1530 Patient Care and Management 2
- RDTK 1580 Radiographic Positioning I 2
- RDTK 1610 Radiographic Imaging I 3
- RDTK 1640 Radiographic Imaging II 3
- RDTK 1680 Radiographic Positioning II 2
- RDTK 1710 Clinical Education I 2
- RDTK 1810 Clinical Education II. 3
- RDTK 1830 Pharmacology for Radiographers 1
- RDTK 1910 Clinical Education III 3
- RDTK 2580 Radiographic Positioning III. 2
- RDTK 2630 Radiographic Pathology 2
- RDTK 2640 Radiation Biology and Protection 2
- RDTK 2710 Clinical Education IV 2
- RDTK 2810 Clinical Education V 5
- RDTK 2910 Clinical Education VI 5
- RDTK 2930 Transition from Student
to Radiographer. 2

To continue in the Associate of Science Radiography Program, a student must maintain a cumulative GPA of 2.3 or better and earn a "C" or better in all radiography, allied health, and laboratory science courses.

A minimum of 64 approved semester credits are required for graduation. For specific graduation requirements see "Academic Policies" and "Degree Requirements."

Magnetic Resonance Imaging Certificate

Magnetic Resonance Imaging (MRI) Technologists are highly skilled professionals who use specialized computerized equipment to produce cross sectional images that aid radiologists in diagnosing disease and disorders. MRI technologists must be knowledgeable of anatomy, physiology, patient care, communication skills, physics, equipment operation, procedure protocol and patient safety. The one year magnetic resonance imaging certificate program is designed to provide advanced technical skills to graduates of an accredited radiography program who are also registered technologists. The program provides the advanced competency requirements needed to take the American Registry of Radiologic Technologists (ARRT) exam in Magnetic Resonance Imaging (MRI). This certificate program consists of classroom-based and hybrid (web-based) didactic courses as well as clinical education for the student. The clinical component is required to complete competency exams required to sit the ARRT MRI post-primary certification exam.

Admissions Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); or be registry eligible.

Certificate Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); registered Diagnostic Medical Sonographer (ARRT or ARDMS); or be registry eligible.

(Certificate Requirements)

- RDTK 1940 Intro to Magnetic Resonance Imaging. . 2
- RDTK 1945 MRI Clinical Education I 3
- RDTK 1950 MRI Procedures I 3
- RDTK 1955 MRI Principles I: Physics of Magnetic
Resonance Imaging 3
- RDTK 2915 MRI Clinical Education II 3
- RDTK 2920 MRI Procedures II 3
- RDTK 2925 MRI Principles II: Instrumentation and
Imaging 3

Computed Tomography Certificate

Computed Tomography (CT) Technologists are highly skilled professionals who use specialized computerized equipment to produce cross sectional images that aid radiologists in diagnosing disease and disorders. CT technologists must be knowledgeable of anatomy, physiology, patient care, communication skills, physics, equipment operation, procedure protocol and patient safety. The one year computed tomography certificate program is designed to provide advanced technical skills to graduates of an accredited radiography program who are also registered technologists. The program provides the advanced competency requirements needed to take the American Registry of Radiologic Technologists (ARRT) exam in Computed Tomography (CT). This certificate program consists of classroom-based and hybrid (web-based) didactic courses as well as clinical education for the student. The clinical component is required to complete competency exams required to sit the ARRT CT post-primary certification exam.

Admissions Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); or be registry eligible.

Certificate Requirements: Must be a registered Radiologic Technologist (radiographer or radiation therapist); Registered Nuclear Medicine Technologist (ARRT or NMTCB); or be registry eligible.

(Certificate Requirements)

RDTK 1915 Intro to Computed Tomography	2
RDTK 1920 Computed Tomography Procedures I . . .	3
RDTK 1925 Computed Tomography: Physics and Instrumentation I	3
RDTK 1930 Computed Tomography Clinical I	3
RDTK 2935 Computed Tomography Clinical II	3
RDTK 2941 Computed Tomography: Physics and Instrumentation II	3
RDTK 2945 Computed Tomography Procedures II . . .	3

ONLY COURSES NUMBERED 1000 OR ABOVE CAN BE USED TOWARD THE ASSOCIATE OF ARTS, ASSOCIATE OF SCIENCE, ASSOCIATE OF BUSINESS, ASSOCIATE OF FINE ARTS AND ASSOCIATE OF APPLIED SCIENCE DEGREES.