

**CASPER COLLEGE**

**MAGNETIC RESONANCE  
IMAGING**

**PROGRAM ADMISSION  
GUIDE**

**2012/2013**



Revised 1/12/12

## Table of Contents

MRI Program Information .....	3
Program Admission Criteria/checklist.....	4
MRI Program Academic Curriculum .....	5
Estimated Expenses .....	6
Clinical Accessibility Information .....	7
MRI Safety for Prospective Students.....	8
MRI Student Safety Form.....	9
Core Performance Standards .....	10
Radiography Program Application for Admission .....	11

Thank you for expressing an interest in the Casper College MRI Program. Our program spans approximately ten months of both academic and clinical education, at the completion of which the student is awarded a Certificate in Magnetic Resonance Imaging. The program will prepare technologists to take the advanced credentialing ARRT postprimary exam in MRI.

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. MR technologists must be knowledgeable of anatomy, physiology, patient care, communication skills, physics, equipment operation, procedure protocol and patient safety.

The ten month Magnetic Resonance Imaging Certificate Program is designed to provide advanced technical skills to registered Radiologic Technologist (radiographer or radiation therapist): Registered Nuclear Medicine Technologist (ARRT or NMTCB); registered Diagnostic Medical Sonographer (ARRT or ARDMS); or those registry eligible. The program provides the advanced competency requirements needed to take the American Registry of Radiologic Technologists (ARRT) exam in Magnetic Resonance Imaging (MRI).

Technologists can select to apply for the entire certificate program which includes clinical education or they can take individual on-line didactic courses only. If you select taking only on-line non-clinical courses you do not need to apply to the program but must meet the educational and certification requirements listed in this guide. All courses will count toward the ARRT required Continuing Education Units (CEU) to maintain certification.

This certificate program consists of classroom-based and hybrid (web-based) didactic courses as well as clinical education for the student. The program is designed to accommodate working technologists and allows them to continue in their full time working positions while completing the course work. On campus lectures and testing will be held one weekend per month during the fall and spring semester. The clinical component is designed to complete competency exams required to sit the ARRT MRI post-primary certification exam.

The program begins in July and continues through the following May with breaks according to the college calendar. Please review the checklist for admissions to the program enclosed in this packet for more information on the application process.

We are fortunate to have excellent clinical settings in Casper, Gillette, Sheridan, Douglas, Rawlins, and Lander for students to gain hands on experience. Students can select locations in Casper or in one of the outside communities to complete the clinical portion of their radiography education. You may also apply to complete your clinical education at another location not listed above. It is the student's responsibility to complete the required clinical objectives.

Please review the information I have enclosed in this packet. It will outline the necessary pre-requisites and application process for program eligibility. If there is anything I might do to provide you more information or to answer any questions, please feel free to call me. We also extend an invitation for you to visit our campus. If you would like a tour, call the Admissions office at 1-800-442-2963 or 1-307-268-2491, and they will be happy to make arrangements. If you have the opportunity to visit our campus, please come by and see me.

Sincerely,

Laurie Weaver Casper College Radiography Department Program Director  
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Casper, WY 82601  
307-268-2587  
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## MRI Program Admissions Checklist

### Complete all requirements if applying for certificate program

Complete the following checklist to find out if you are ready to apply for admission to the MRI Program. If you have any questions, call Laurie Weaver at 307-268-2587 or E-mail at [lweaver@caspercollege.edu](mailto:lweaver@caspercollege.edu).

### Application Requirements: Applications due April 15<sup>th</sup>

- Apply for admission to Casper College. All transcripts from previous college coursework must be on file in the Enrollment Services Office.
- Graduate of an accredited associate degree or higher program with a 2.8 GPA or higher. Completion of appropriate courses earning a "C" or better in Patient Care, Anatomy and Physiology, Cross Sectional Anatomy, Imaging Physics, Pharmacology and Venipuncture (or demonstrate proficiency in this area).
- 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 (must be registered prior to starting program). Turn in copy of proof of certification.
- Must hold an unrestricted Wyoming State Board of Radiology Examiners License (provide proof).
- Provide official copy of appropriate exam scores (ARRT, NMTCB, ARDMS).
- Review the MRI safety information for prospective students included in this guide. After reviewing this document complete the MRI safety form and turn in with your application.
- Can you comply with the Core Performance Standards (located in this guide), including CPR certification for the healthcare professional?
- No prior misdemeanor felony convictions – to be eligible to take the National Registry. See program director for more information.
- Send all current/previous college transcripts to Enrollment Services and Radiography program director.
- Complete and return the MRI Program Application for Admission form.
- Submit a one page essay outlining your motivation for completing this program as well as future career goals and previous experience and professional involvement in the imaging profession.
- Send two recommendation letters to the Program Director.
  - o One from your most recent employer addressing: sense of responsibility, reliability, and capability of working with limited supervision and having interest/pride in the job
  - o One from someone other than a family member who can attest to your honesty, sincerity, and the ability to work in a team setting.

## Selection Process

The number of students selected for the program will depend on availability of clinical education sites. Selection is based on a point system which includes the following:

- \* Academic Record:  
Cumulative college GPA  
Imaging course grades specifically: Patient Care, Physics/Imaging, Cross Sectional Anatomy.
- \* Essay
- \* Letters of recommendation

## Clinical Education Site Requirements

If you are accepted into the program you must meet the following requirements:

- Complete the Hepatitis B vaccination series: First of the series must be completed prior to the start of clinical education.
- Provide evidence of two MMR immunizations.
- Pass a drug/alcohol screening and background check prior to starting clinical education.
- Provide evidence of current health insurance and a two step PPD skin test.
- Provide evidence of Chicken Pox immunization or provide a signed statement that you have had the chicken pox.
- Provide a copy of your current driver's license.
- Provide proof of the flu shot each fall semester.
- Current BLS for Health Care Providers
- Complete the MRI safety form which will be reviewed by experts in MRI for eligibility to safely work in a magnetic field.

## Certificate of Magnetic Resonance Imaging Curriculum

### Summer I

RDTK1940                      2 Cr    Introduction to Magnetic Resonance Imaging

### Fall I

RDTK 1945                      3 Cr    MRI Clinical Education I (216 total clinical hours)

RDTK1950                      3 Cr    MRI Procedures I

RDTK 1955                      3 Cr    MRI Principles I: Physics of Magnetic Resonance Imaging

### Spring

RDTK 2915                      3 Cr    MRI Clinical Education II (216 Total clinical hours)

RDTK 2920                      3 Cr    MRI Procedures II

RDTK 2925                      3 Cr    MRI Principles II: Instrumentation and Imaging

Total Credit Hours for Certificate Program: 20 Credit Hours

## Casper College Estimated Expenses

Prospective students should refer to the current Casper College catalog for tuition and fee rates.

In addition to tuition and fees, the following expenses and supplies are estimated.

• Background check/Drug screen	\$100
• Books (approximate)	\$270 (Entire Program)
• Uniforms and lab coat	\$200
• Eye protection	\$12
• Chicken pox titer	\$2.50
• Chicken pox vaccine x2 (at Public Health)	\$100 each if negative titer
• Hepatitis titer	\$30
• Hepatitis immunization series	\$90
• MMR titer	\$2.50
• MMR vaccine	\$50
• Health insurance - if not covered by another policy	\$750 annually (2009-2015)
• Flu vaccination	\$15 (approximate)
• Cap and gown fee	\$25
• Application for license	\$185
• ARRT Exam Fee	\$200
• Flu vaccination	\$15 (approximate)

Casper College provides, at no expense to students, liability (malpractice) insurance while MRI students are engaged in their clinical lab activities. As is stated in the catalog, students are responsible for their own transportation and its related expenses.

If you are applying for financial assistance you may be eligible for an increase to your expense budget based on the above estimated expenses. Please contact the office of Student Financial Assistance for instructions on how to request an expense review.



## **Clinical Education Requirements**

### **Casper College MRI Program**

#### **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 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 Casper College MRI 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 from HR that states the agency position on you participating 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 clinical 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.

## **MRI Safety Information for Prospective Students**

Magnetic Resonance Imaging (MRI) machines generate a very strong magnetic field within and surrounding the MR scanner. This magnetic field is always on and unsecured magnetically susceptible (ferromagnetic) materials even at a distance can become accelerated into the bore of the magnet with force sufficient enough to cause serious injury or damage to equipment, patient, and any personnel in its path. Therefore, great care is taken to prevent ferromagnetic objects from entering the MRI scanner room. It is the qualified MR personnel, especially the technologists responsibility to control all access to the scanner room. As a MRI program student, you too become part of this team adhering and obligated to all MRI safety policies and procedures.

It is vital that you remove metallic objects before entering the MRI static magnetic field, including watches, jewelry, and items of clothing that have metallic threads or fasteners.

### Items that need to be removed before entering the MR system room include:

- Purse, wallet, money clip, credit cards or other cards with magnetic strips
- Electronic devices such as beepers or cell phones
- Hearing aids
- Metallic jewelry, watches
- Pens, paper clips, keys, nail clippers, coins, pocket knives
- Hair barrettes, hairpins
- Any article of clothing that has a metallic zipper, buttons, snaps, hooks, or under-wires
- Shoes, belt buckles, safety pins

Before entering the MRI scanner room, you will be asked to fill out a screening form asking about anything that might create a health risk. If you have a bullet, shrapnel, or similar metallic fragment in your body, there is a potential risk that it could change position, possibly causing injury. Also, the magnetic field of the scanner can damage an external hearing aid or cause a heart pacemaker to malfunction.

### Examples of items or things that may create a health hazard or other problems:

- Pacemaker
- Implantable cardioverter defibrillator (ICD)
- Neurostimulator system
- Aneurysm clip
- Metallic implant
- Implanted drug infusion device
- Foreign metal objects, especially if in or near the eye
- Shrapnel or bullet
- Permanent cosmetics or tattoos
- Dentures/teeth with magnetic keepers
- Other implants that involve magnets
- Medication patches that contain metal foil (i.e. transdermal patch)

After the applicant completes the MRI Safety Form the Program Director will consult the MRI facility with any questions or concerns regarding your ability to work in a magnetic field.

**MRI Safety Form:**

After reviewing the MRI Safety for Prospective Students portion of this guide and reading the information below please complete the form and turn it in with your application packet.

The MRI Program and faculty need to ensure your safety and everyone that will be clinically operating around you. We need critical information to be able to appropriately evaluate if it is safe for you to enter and work in the magnetic field. If you are not safe to operate within the scan room, you are not a safe candidate to work in MRI.

Before entering the MRI scanner room, you will be asked to fill out a screening form asking about anything that might create a health risk. If you have a bullet, shrapnel, or similar metallic fragment in your body, there is a potential risk that it could change position, possibly causing injury. Also, the magnetic field of the scanner can damage an external hearing aid or cause a heart pacemaker to malfunction.

After reading the following passages if you have any questions about your safety, please feel free to contact the Program Director.

Do any of the following apply to you personally?

\_\_\_\_ History of any surgical procedure that entails implanted electronic device(s), or any implant within/on your body you were not naturally born with? If yes, please list:

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**Please mark all others that apply to you:**

- \_\_\_\_ Cardiac pacemaker, wires, or defibrillator
- \_\_\_\_ Brain aneurysm clips
- \_\_\_\_ Intracranial shunt: Programmable Type: Codman or Strata
- \_\_\_\_ History of welding, grinding, or metal in eyes
- \_\_\_\_ History of eye injury with metal or metal removed from eye
- \_\_\_\_ Middle ear prosthesis, hearing aid, or implant
- \_\_\_\_ Eye implant or prosthesis
- \_\_\_\_ Any known metal fragments, bullets, BB, pellets

Do you have any contraindications that would prevent you from performing routine tasks in the MRI Department as a student or future technologist?

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I have reviewed the MRI Safety for Prospective Students and completed the MRI Safety Form. I understand that this information is essential for not only my own safety but that of the patient and other MRI personnel.

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Print Name

Signature

Date\_\_\_\_\_

## Core Performance Standards for Students Seeking Admission to a Health Sciences Program

For admission and progression in a Casper College Health Science 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 Health Science fields are practice disciplines 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 program courses, and some of the standards are more prevalent than others. These standards will be used to assist faculty, the Program Director, and the School of Health Science Dean in determining whether a student meets the essential eligibility requirements for admission and progression in the program. These standards should also 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 Accommodative Services Counselor as well as the Program Director. Determination is made on an individual basis as to whether a student meets the essential eligibility requirements or whether or not the necessary accommodations or modifications can be made reasonably for participation in the Health Science program.

<b>ISSUE</b>	<b>STANDARD</b>
Critical thinking	Critical thinking ability to exercise non-clinical and clinical judgment in a timely manner
Interpersonal	Interpersonal abilities sufficient to interact professionally and therapeutically with peers, faculty, staff, administrators, patients/clients, families and groups from a variety of social, emotional, cultural, and intellectual backgrounds
Communication	Communication skills sufficient for interaction with peers, faculty, staff, administrators, patients/clients, families, and groups 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 health 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 of patient/client
Professionalism	The ability to understand and demonstrate sufficient respect for others in non-verbal, verbal, and written communication in the classroom, laboratory, clinical settings, in the Casper College community, and in related public settings. The ability to demonstrate sufficient understanding of the cumulative effect that behavior, appearance, and communication has on the health science professional image.

Approved by attorney, J. Z. Norman

