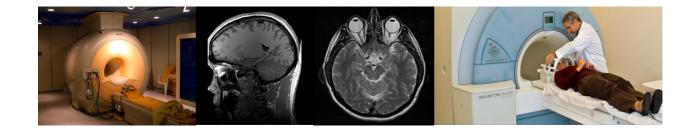


# MAGNETIC RESONANCE IMAGING PROGRAM HANDBOOK



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# **DIRECTORS MESSAGE**

# Director's Message:

Welcome to both Casa Loma College and the MRI program. I am certain you will enjoy your experience in learning with us. Casa Loma College promotes an environment that is conducive to learning and creating an enlightened educational experience. The MR team is enthusiastic and motivated in assisting your learning and create a successful opportunity for a promising future as an MR Technologist.

The Magnetic Resonance Imaging Program is a blueprint to stimulate competency and educate operational practices in MRI, placing emphasis on ethical values, attitudes, patient care and behaviors that encourage the professional growth from a student to a Technologist. Education is the core premises and your level of accountability for this profession will set the tone for success in this field. You will be expected to master student learning objectives that will introduce, reinforce and allow you to assess, communicate effectively, cooperate with fellow workers, and display the dependability expected of a professional in the Medical Imaging field. All students will uphold strong ethical morals towards your classmates, instructors, and your clinical site experience that introduces you to the patient element of MRI.

Clinical learning experiences are provided by the presence of Labs, affiliating hospitals, and MRI clinical facilities. Students will also gain access to simulated MR scanning to encourage positive insight into the daily routine of a MR Technologist. Didactic learning experiences occur in supportive course work through both online (general education) and residential (core) classes. These experiences are developed to meet established objectives and eligibility requirements put in place by accreditors and your licensing branches The American Registry of Magnetic Resonance Imaging Technologists (ARMRIT) and the American Registry of Radiologic Technologists (ARRT) - MRI Primary Pathway Exam (MR). Your coursework is expected to be accelerated and rigorous. We encourage developing time management and organizational skills. Instructors are here to benefit you achieve your overall progression in the MRI program.

The program faculty, clinical staff, instructors, and other college personnel work extremely hard to strengthen your overall success towards graduation and realization of your dreams... MRI Technologist Ultimately, it is up to you, the student, to be successful...we are here to help you achieve your goals.

#### Regards,

#### MRI Educational Team

The purpose of this handbook is to serve as a guide for the imaging student. It is the student's responsibility to carefully review this handbook to understand what is expected of them and what can be expected from the program. Imaging students who fail to read this student handbook will not be excused from compliance with the policies and requirements herein. Students are required to follow the rules and regulations in the Casa Loma College Catalog, in addition to the specific program requirements in the Student and Clinical Handbook.

It is the responsibility of the College to provide instruction and to advise students regarding Program requirements, graduation, and requirements to take the national certification examinations by the American Registry of Magnetic Resonance Imaging Technologists (ARMRIT) and the American Registry of Radiologic Technologists(ARRT) - MRI Primary Pathway Exam (MR). It is the student's responsibility

to see that these requirements are met. Failure to meet the requirements may result in termination of a student from the Program or delay graduation and eligibility to take the Registry examinations.

# **KEY PERSONNEL & CONTACT INFORMATION**

# **Campus Addresses:**

#### **Van Nuys Campus**

6725 Kester Avenue

Van Nuys, California 91405-4523

Phone: (800) 270-5052 Fax: (818) 785-2191

#### Nashville Center

750 Envious Lane Nashville, TN 37217

Phone: (800) 270-5052

Simone Quinto, Associate Professor/MRI Program Director <a href="mailto:simone.quinto@casalomacollege.edu">simone.quinto@casalomacollege.edu</a>. 818-785-2726 ext. 220

Khamsay (Sai) Sasengbong, MRI Assistant Administrative Coordinator to ACCE <a href="mailto:khamsay.sasengbong@casalomacollege.edu">khamsay.sasengbong@casalomacollege.edu</a>

# **Kelly Kumar, Imaging Administrative Coordinator**

kelly.kumar@casalomacollege.edu. 818-785-2726 ext. 202

Students with concerns, issues, or questions, should contact Kelly Kumar – who will direct your question to the correct individual.

Scott Sand, Ph.D. President/Campus Director, ext. 214
Christy Ruoff Senior Director of Financial Aid, ext. 205

Kimberly Duncan Registrar, ext. 207

Nicholas Walsh-Davis Director of Student Affairs, ext. 208 Veronica Pantoja Disability Officer, Title IX

# **MRI Instructing Team:**

Each campus has an education team of primary instructors for core residential courses. Online general education course instructors can vary based on availability.

COURSE	INSTRUCTOR
ANA 200 Anatomy & Physiology	Allea Cauilan
BIO 224 Cross Sectional Anatomy	Bahaa Karatahan
MRI 140 Patient Care	Janet Nishina
MRI 111 & 112 Physics I & II	Brian Anhalt
MRI 201 Imaging & Procedures	Miguel Valdivia
MRR 300	Thomas Macias

# **ACCREDITATION**

#### Definition

Accreditation is the recognition that an institution maintains standards requisite for its graduates to gain admission to other reputable institutions of higher learning or to achieve credentials for professional practice. The goal of accreditation is to ensure that education provided by institutions of higher education meets acceptable levels of quality.

#### What are the two types of Accreditations?

There are two basic types of educational accreditation, one identified as "institutional", and one referred to as or "programmatic."

Institutional accreditation applies to an entire institution, indicating that each of an institution's parts is contributing to the achievement of the institution's objectives, although not necessarily all at the same level of quality.

Programmatic accreditation, also known as specialized or professional accreditation, is designed for specialized departments, programs, schools, or colleges within a university or institution that has already received institutional accreditation.

#### What is Regional Accreditation?

Regional accreditation is the educational accreditation of schools, colleges, and universities in the United States by one of seven regional accrediting agencies. Each regional accreditor oversees the vast majority of public and private educational institutions, both not-for-profit and for-profit, in its region.

#### Pros:

- o The gold standard of college accreditation; highest prestige
- Most widely recognized type of college accreditation
- Credits and degrees widely accepted in transfer
- Eligible for all corporate tuition reimbursement plans
- Usually provide instructor-led courses

#### Cons:

- Often more expensive than nationally accredited colleges
- Often require more liberal arts coursework
- May offer less career-oriented programs
- Often enforce more competitive admission standards

# What is National Accreditation?

These agencies are called "national agencies" because they are not organized by and limited to regional geographic areas.

These national agencies have historically focused on approving career, vocational, and trade schools that offer certificates and degrees. Because of the specialized focus, the requirements to earn a certificate or degree from a nationally accredited school are not as standardized as a regionally accredited school. Nationally accredited schools are reviewed every 3-5 years to ensure that they still meet the requirements.

# Pros:

Often less expensive than regionally accredited counterparts

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- May require less liberal arts coursework
- May offer more practical, career-oriented majors
- May employ more relaxed admission standards

#### Cons:

- Credits not widely accepted in transfer if you later attend a regionally accredited college
- Coursework and degrees may not be widely accepted for professions that require licensing after degree attainment, which might affect those in licensed careers such as teaching, accounting, engineering and healthcare
- Sometimes excluded from corporate tuition plans
- o Sometimes provide self-study courses without instructor-led course sessions

Casa Loma College is nationally accredited by the Accrediting Bureau of Health Education Schools (ABHES) 7777 Leesburg Pike, Suite 314 N. Falls Church, VA 22043; Phone (703) 917-9503; Email: info@abhes.org; website <a href="https://www.abhes.org">www.abhes.org</a>

Casa Loma College is a private institution and approved to operate by the California Bureau for Private Postsecondary Education. Approval to operate means the institution is compliant with the standards contained in California Education Code CEC §94897(I) and the California Private Postsecondary Education Act of 2009.

1747 North Market, Suite 225, Sacramento, CA 95834; Phone: (916) 574- 8900 or (888) 370-7589; Website: <a href="https://www.bppe.org">www.bppe.org</a>

A student or any member of the public may file a complaint about this institution with the Bureau for Private Postsecondary Education by calling (888) 370-7589 or by completing a complaint form, which can be obtained on the Bureau's Internet Web site at <a href="https://www.bppe.ca.gov">www.bppe.ca.gov</a>.

The Magnetic Resonance Imaging Program is approved by the American Registry of Magnetic Resonance Imaging Technologist (ARMRIT), 2444 NW 8<sup>th</sup> St, Del Ray Beach, FL 33445; Phone: (718) 347-8690; website: https://www.armrit.org/

The Magnetic Resonance Imaging Program is accredited as a primary-pathway educational program by the American Registry of Radiologic Technologists (ARRT)(MR). <a href="https://www.arrt.org/">https://www.arrt.org/</a>

# **MAGNETIC RESONANCE IMAGING**

Magnetic Resonance Imaging (MRI) is an exciting imaging modality that has changed the ability to see anatomy, pathology, and physiology. Although clinically MRI has been used for just about 30 years, it is still complex and evolving at a rapid pace.

As an MR Technologist, you will be challenged to integrate your knowledge of the fundamental principles of MRI safely into the field of medicine. In order to stay current, a successful technologist must be proficient in MR Safety, MR Physics & Instrumentation, Cross-Sectional Anatomy & Physiology, MR common Pathology and Clinical Applications. MRI provides the ability to view cross-sectional images of anatomical regions in any arbitrary plane. This is done with a non-invasive procedure that uses extremely strong magnetic fields and radio waves.

To perform an MRI scan, the patient is placed on an imaging table and the usage of a coil will be placed on the dedicated imaging part of the patient. While open MRI machines and short-bore magnets are becoming more common, most model designs still require patients to lie in a narrow tube for up to 40 minutes, which leads to anxiety, claustrophobia or even panic for some patients. The support of a calm and caring technologist makes all the difference in the patient's experience. MRI scanners create powerful magnetic fields that line up certain atomic nuclei within the body. When stimulated by radio waves, these nuclei produce rotating magnetic fields that can be converted into images by a computer. Technologists have a nuanced understanding of the physics behind this process that allows them to create pictures with excellent contrast and signal to noise ratios. They also rely on their expertise in landmarking the human anatomy to position the patient and target the body structures to be studied.

Once a study is complete, the technologist reviews images for quality. The radiologist makes the diagnosis and communicates it to the patient's physician. As vital players on the health care team, MRI techs take great pride in producing the high-quality images physicians need to diagnose and treat with confidence and accuracy.

http://www.innerbody.com/careers-in-health/guide-to-becoming-mri-tech.html

#### ESSENTIAL FUNCTIONS OF THE MRI STUDENT AND MRI TECHNOLOGIST

Auditory	<ul> <li>Ability to hear verbal directions/requests from physicians, patients, etc.</li> <li>Patient in the MRI scanner trying to communicate through the microphone</li> </ul>
Crouch	To place coils or lift them into position
Fine-motor skills	<ul> <li>Manipulate small objects such as knobs, buttons, and switches on MR equipment</li> <li>Perform procedures as intravenous access and injection</li> </ul>
Kneel	<ul><li>To perform CPR</li><li>Assist patients who may fall or faint</li></ul>
Lift @ 50lbs	<ul> <li>To lift coils on &amp; off scanning table &amp; storage areas</li> <li>Assist patients on/off table, stretches &amp; wheelchairs</li> </ul>
Reach	<ul> <li>To reach across the patient to their opposite side for positioning/coil, and ancillary equipment placement</li> </ul>

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	To reach whiling using appropriate lifting techniques for moving or maneuvering patients
Stoop	To lift coils
Verbal	To communicate with staff, patients, etc. (Includes writing, verbal, and reading)
Visual	<ul> <li>Patient identification</li> <li>Read the exam orders</li> <li>Read and document patient's clinical history</li> <li>Ability to id patient in distress while outside the scan room</li> <li>Recognize proper exam set up</li> <li>Recognize proper window and leveling on images</li> </ul>
Walk	<ul> <li>For duration of assigned shift</li> <li>A good distance between department scanners</li> </ul>

#### Mental/Attitudinal Standards:

- Function safely, effectively, and rationally under stressful conditions
- Maintain composure while managing multiple tasks simultaneously
- Prioritize multiple tasks
- Exhibit social skills necessary to interact effectively with patients, families, supervisors, and co-workers of the same or different cultures such as respect, politeness, tact, collaboration, teamwork, and discretion
- Must exhibit and maintain professionalism (Maintain personal hygiene...)

#### MAGNETIC RESONANCE IMAGING SAFETY STANDARDS

Prior to the program start, all MRI Students will sign an MRI Safety Screening form, signed by both the students and MRI Program Director. Based on conditions below, a conversation for clearance will be made with the Program Director, the Implant companies' position, and the risk vs. benefits decided on by students Physician.

- Student cannot have contraindicated biomedical devices, implants, and materials (pacemaker)
- Students cannot have ferromagnetic contraindicated biomedical devices, implants, and material (aneurysm clip)
- Students cannot have accidental ferromagnetic implanted objects and/or materials (shrapnel, metal fragments 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
- Students should notify the Program Director if they are pregnant. MRI does not use ionizing
  radiation, occupational MRI exposure to the fetus is considered safe; however, because MRI is a
  relatively new technology, all the radiobiological questions are not completely answered.
  Pregnant health care practitioners are permitted to work in and around the MR environment
  throughout all stages of pregnancy; however, they are requested not to remain within the
  MR scanner room during actual data acquisition/scanning itself.

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• If the student declares a pregnancy, plans for program continuation and completion must be made. The student has the following options: 1) remain in the program as scheduled. This option requires that all courses must be completed with a passing grade and continued attendance and satisfactory progress must be maintained. In addition, the clinical rotation will be monitored so the student will NOT receive any exposure to the RF. 2) The student may take a Leave of Absence as agreed upon by the Program Director and student and in accordance with the policies of Casa Loma College. The student is encouraged to return to the program as soon as possible.

Magnetic Resonance Imaging (MRI) machines generate a very strong magnetic field within and surrounding the MR environment. Although there are no known risks to the operator and/or patient for the use of MR Clinically, there are safety precautions that should be taken seriously. The magnetic field is always on, so unsecured magnetically susceptible (Ferromagnetic) materials (even at a distance) can become accelerated into the bore of the magnet with a force sufficient enough to cause severe injury or damage to the equipment, patient, and/or any personnel in its path.

Anyone entering in this environment without being screened by the qualified MR personnel may potentially endanger the safety of everyone in the MR environment. It is the qualified MR personnel, especially the MRI technologist's, responsibility to control all access to the scanner room. As an MRI student, you too become part of this safety team adhering and obligated to all MRI Safety policies and procedures based upon the guidelines of your clinical site. At any point a student has doubt, an MRI Technologist and/or Radiologist should be perused for reasoning and assurance on the correct answer.

NO ONE may enter the MRI scan room without an appropriate safety screening

The MRI Program and faculty need to ensure your safety and the safety of 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 (scan room). If you are NOT safe to operate within the scan room, you are NOT a safe candidate to work in MRI.

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

The following can have potential contraindications depending on type, placement, and etc. Please look at the list below, if any of the following you have or have questions in regard, please bring it to the MRI Program Director or ACCE immediately:

Each student must fill out, sign, and return to the MRI Program Director/ACCE. This is a prerequisite during the interviewing process.

Do any	of the following apply to you personally?
Do any	
	A surgical procedure that entails implanted electronic device(s), and/or any implant within/on your
	body you were not naturally born with
	Cardiac Pacemaker, wires, or defibrillator
	Brain/Aneurysm Clip(s)
	Intracranial shunt: Programmable Type: Codman or Strata
	History of any welding, grinding, or metal in your eyes
	Middle ear prosthesis, hearing Aid, or implant
	Eye implant or prosthesis
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<ul> <li>Have you ever had an eye injury with metal, metal removed from your eye, and/or told by a docto that all of the metal has been removed after an injury</li> <li>Any known metal fragments, bullets, BB, pellets,</li> <li>Pregnancy, this is at the discretion of the candidate and/or enrolled student</li> </ul>
Do you have any serious illness, disabilities, or contraindications that would prevent you from performing routine tasks in the Magnetic Resonance Imaging Department as a student and future technologist?
IMPORTANT: Students are responsible to report immediately anything related to the above safety screening and policy

Students are responsible to report immediately anything related to the above safety screening and policy to the director. The director will need to assess and address any potential safety issue related.

#### EQUAL OPPORTUNITY, NON-DISCRIMINATION, ANTI-HARRASSMENT

Casa Loma College is committed to establishing and maintaining a safe and nondiscriminatory educational and working environment for all College community members. It is committed to a policy of nondiscrimination in matters of admission, employment, and in access to and participation in its education programs, services, and activities. Casa Loma College does not discriminate on the basis of color, race, national origin, ancestry, religion, citizenship status, gender, gender identity, gender expression, sexual orientation, pregnancy, age, medical condition (cancer related, or HIV/AIDS related), genetic characteristics, disability, military or veteran status, uniform service member status, or any other category protected by federal, state, or local laws. In accordance with applicable federal and state laws protecting qualified individuals with known disabilities, CLC will attempt to reasonably accommodate those individuals unless doing so would create an undue hardship on the College. Any qualified applicant or employee with a disability who requires an accommodation in order to perform the essential functions of his or her job should contact the Human Resources Office.

The prohibition on harassment includes sexual harassment, as well as sexual misconduct, dating and domestic violence, and stalking.

The College forbids and will not tolerate any form of discrimination and harassment and has enacted administrative procedures to assure equal opportunity and to recognize and eliminate violations of this policy in accordance with state and federal laws. It is both illegal and prohibited by this policy to retaliate against any individual for filing a complaint or participating in an investigation.

The following person(s) has been designated to handle inquiries or complaints regarding nondiscrimination policies: Veronica Pantoja, Title IX Coordinator and Director of Human Resources, veronica.pantoja@casalomaCollege.edu, 818-785-2726

#### PROGRAM MISSION

In harmony with the Casa Loma College mission, the mission of the Magnetic Resonance Imaging Program is to educate in both didactic and clinical applications of MRI, while maintaining superb patient care. We graduate competent technologists specialized in Magnetic Resonance Imaging,

#### PROGRAM LEARNING OUTCOMES

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

- 1. Interview the patient and recognize contraindication to an MRI exam.
- 2. Demonstrate knowledge of MRI physics, theory, pulse sequence parameters, and image optimization.
- 3. Perform MRI exams according to the Doctors orders and protocols set up by the facility.
- 4. Properly film, format, and archive imaging studies.
- 5. Demonstrate appropriate communication skills with patients and colleagues.

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- 6. Act in a professional and ethical manner.
- 7. Respect all information as "privileged." Adhere to all HIPAA policies.

#### PROGRAM GOALS

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

- 1. The Graduate will perform clinically with confidence and competence, as an entry-level technologist
- 2. The Graduate will complete the required clinical experiences specified by ARMRIT and ARRT
- 3. The Graduate will demonstrate critical thinking and problem-solving skills
- 4. The Graduate will communicate in the healthcare environment effectively
- 5. The Graduate will be encouraged to value lifelong learning to achieve personal and professional growth
- 6. The Graduates will provide qualified Magnetic Resonance Imaging Technologists to meet the healthcare needs of the community

#### PROGRAM OUTCOMES SUPPORTING THE SUCESS OF ITS GOALS

Graduates of the Magnetic Resonance Imaging Program

Upon completion of the Magnetic Resonance Imaging Program, the student will be able to meet the outcomes linked to the goals of the program.

- Will demonstrate an understanding of the role of the MRI Technologist by working in a manner consistent with the laws and regulations of the jurisdictions in which they practice.
- Demonstrate clinical competence consistent with entry level MRI Technologist professionals.
- Apply patient care and management techniques to ensure confidentiality, safety, comfort, modesty, health, and well-being of the patient.
- \*70% of those attempting the ARRT and/or ARMRIT credentialing examination will pass on their first attempt.
- \*70% of program starters will complete the program.
- \*70% of graduates, who have sought employment, will be employed within 12 months of graduation.
- Graduates will be members of a professional society.
- · Graduates will engage in lifelong learning.
  - \*Minimum goals and outcomes

### **DEGREE GRANTED**

Upon successful completion of all coursework and program requirements, the student is granted an Associate in Applied Science Degree in Magnetic Resonance Imaging.

#### **LICENSURE**

There is no state or national licensure requirement for MRI Technologists; however, it is becoming extremely competitive to work in this field without advanced certification. Casa Loma College prepares its graduates to take the American Registry of Magnetic Resonance Imaging Technologist credentials (ARMRIT) and the American Registry of Radiologic Technologists MRI Primary Pathway Exam (ARRT)(MR).

# AMERICAN REGISTRY OF MAGNETIC RESONANCE IMAGING TECHNOLOGIST

Applicants for **ARMRIT Certification** must meet the criteria to be eligible to sit for the certification exam:

- 1. Graduate of an approved MRI Technologist Program with at last one-thousand hours (1,000) of externship clinical experience.
- 2. Application completed
- 3. Application fee of \$300.00 (non-refundable)
- 4. Resume (CV)
- 5. Copy of Diploma within three (3) years of graduation
- 6. Copy of driver's license
- 7. Original letter of recommendation signed and dated within the last twelve (12) months from your MRI Clinical Supervisor or externship Coordinator stating you have 1,000 MRI Clinical hours and are competent as an MRI Technologist

# AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS MAGNETIC RESONANCE IMAGING PRIMARY PATHWAY

Applicants for the ARRT MRI Primary Pathway Exam are completed online and must have:

- 1. Completed an MRI educational program that is accredited by a mechanism acceptable to the ARRT. (Casa Loma College is approved for the MRI primary pathway exam)
- 2. Applicants to the ARRT will have three years from the date of program completion to submit application.
- 3. Must have earned an academic degree
- 4. Must demonstrate competency in didactic coursework and an ARRT specified list of 28 clinical competencies and 1,000 hours by completing the Magnetic Resonance Imaging Didactic and Clinical Competency Requirements.
- 5. Satisfaction of that requirement must be indicated by signature of your MRI Program Director and, if required, an authorized faculty member on your application for certification and registration.
- Must comply with the Rules of Ethics contained in the ARRT Standards of Ethics
- 7. Application fee of \$225.00

#### SCHEDULE

Theory days: One day per week – Saturdays

8:00 AM to 4:00 PM

Online Courses: At student/faculty convenience (weekly attendance required)

Externship: Five days per week

40 hours per week MRI 181 / 40 hours per week MRI 182

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# MRI GENERAL PROGRAM OVERVIEW

The MRI Program is a two-year commitment; students are required to be on campus every Saturday. In semester four (4), students may have mandatory scheduled lab days on Sundays. Labs are conducted at an imaging center; the schedule availability is based on the department not having scheduled patients. Currently, most centers/departments run Monday – Saturday, leaving Sunday as the only potential day for lab days. The MRI Program Director makes every effort to get the dates for lab in advance for your scheduling purposes. If lab days are scheduled, you will have the Saturday of that weekend off.

In addition, the MRI Program has 8 general education courses, scheduled throughout the six semesters. General education supports the general mission of the College to prepare students to enter the workforce with a well-rounded knowledge base including written and verbal communication skills, the ability to solve problems, to work well with others, and to adapt to a changing workplace.

General education requirements vary among the programs - some programs require most of general education be taken prior to advancing to the core program; others intersperse general education throughout the program. While we understand the students desire to concentrate on the core program, it is also the student's responsibility to complete a minimum number of courses in general education.

#### GENERAL DIDATIC INFORMATION

Didactic is scheduled in a definite format to provide the proper ratio of practical and classroom experience. Therefore, full-time attendance is compulsory. Didactic instruction times will vary according to course schedules during the course semesters. Students who miss lecture material are responsible for obtaining the missed information; as well as being responsible to know the information. It is the students' responsibility to pursue the missed information and discuss any questions with the instructor.

#### GENERAL CLINICAL INFORMATION

The clinical component of the program has been scheduled in a definite format to provide cohesiveness between didactic and practicum experience. Therefore, attendance is compulsory. Outside appointments should never be scheduled during clinical time. Please be prepared to:

- Attend MRI 181 40 hours per week for 15 weeks
- Attend MRI 182 40 hours per week for 15 weeks
- Attend scheduled hours based on the site's availability and their patients' needs
- Complete a minimum of 1000 total hours to complete the MRI program; a minimum of 500 hours (and a minimum of 10 completed competencies) to pass MRI 181 and a minimum of 500 hours (and 28 completed competencies) to complete MRI 182.
- Interact online through the entire externship with the required system (need internet and computer)

The MRI ACCE will schedule the clinical experience for clinical externship. Students are given the opportunity to share requests and concerns. There is no guarantee that the requests will work or be approved.

Students fulfilling an eight-hour clinical experience will receive a 30-minute meal break. All clinical requirements are logged, tracked, and evaluated on a web-based system.

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A student will not be released from externship or receive their clinical grade if they meet the 1000 clinical hours prior to the 30 week/2 semester completion date. If a student does not meet the 1000 clinical hour minimum in addition to all other requirements, the student will fail the externship clinical semester and must repeat it in its entirety. Please see the below completion policy.

To ensure our students success and timely completion of the MRI Program, there is a very clear Externship completion policy. The purpose of the policy is to be sure all students have met all program requirements by the designated completion (graduate) date. To be a successful graduate of the Applied Associates of Science in MRI program, this date must be met.

#### **EXTERNSHIP COMPLETION**

Students are required to complete each semester of externship within the time provided, as designated by the start and end date of the semester. Students who do not complete their externship between the dates of the semester II, will receive an INC (incomplete) for that course and will be allowed 14 days to complete the remaining hours of externship. Students not completing within the 14 days, will receive a FAIL for that course.

#### CLINICAL EXTERNSHIP PLACEMENT

Clinical Externship placement is a very complex process; there is no guarantee of a site that will offer individual time flexibility. Although all efforts are attempted to meet the student's needs, the student must be available to meet their required hours within the business hours of their clinical site. Students must be prepared to travel to their clinical site within the necessary commute. All transportation expenses are the student's responsibility. The student will have to meet the clinical hour and competency requirements to pass clinical externship.

While the MRI clinical education coordinator will make every effort to assign students to a clinical site that is within 50 miles of the College Campus, this is not guaranteed. Clinical assignments are based upon the number and type of sites available, and the first consideration of an assignment is to provide a well-rounded comprehensive clinical experience in preparation for graduation as an entry-level MRI Technologist. There may be times a student will be asked to change clinical sites or visit a clinical site to acquire a competency. Students are responsible for travel, meals, and any other expenses incurred for attending clinical.

# CLINICAL EXTERNSHIP SITE NOT AVAILABLE

Every effort is made by our clinical team to find an appropriate clinical site for your externship. In rare occasions, students, who have not been assigned to an externship site at completion of the required program and exit competencies, will have 14 days from last day of semester to be placed in a site before termination will take place (*This is a procedure required by our accrediting agency, ABHES.*)

When an externship site is available, student will reenroll:

- If student owed money based on refund calculation, student will not be required to pay prior to returning to school. School will spread out the payments for duration of externship
- If student was delinquent in any payments prior to termination, the delinquent payments must be brought to date prior to reenrollment.

#### EXTERNSHIP AND EMPLOYMENT

Students should make sure their clinical hours are separate from employment hours. No student may be employed in a position as an MRI Technologist before graduation. Any employment of students must be outside the regular educational/clinical hours and cannot be used as the required clinical hours. Students may not receive monetary gifts from staff or patients. Any questions or concerns about clinical requirements should be brought to the attention of the ACCE or MRI Program Director.

#### STUDENT WORK AND EDUCATIONAL SCHEDULE

Your coursework will be rigorous, and at times you may wonder what you have gotten yourself into, but your perception of intensity has much to do with the amount of time, dedication, and commitment you spend towards your chosen profession; therefore, working full-time while in the MRI Program is extremely difficult and not recommended since work schedules will generally conflict with class and clinical rotations. Any activity that impairs the student's ability to attend class, participate actively in all classroom, lab and clinical sessions, and/or meet the requirements of each course must be avoided.

#### LEARNING RESOURCES

The College uses a Learning Management System called Canvas. Login information with secure password is provided to all students and faculty. Canvas can be accessed from individual computers at home. Canvas provides a forum for students to access classroom materials posted by the instructors as well as a grade book with which the students can monitor their grades. Students can send emails to their instructors and classmates via Quick mail on Canvas. The College website has a tab for access to library resources http://library.casalomacollege.edu. The ProQuest database is used for student research needs. Links are provided under the http://library.casalomacollege.edu/databases.html tab. A librarian is available to assist students in utilizing the library and obtaining resources. The library has copies of Program texts and other Program-specific books that may be checked out by the students. The list is found at http://library.casalomacollege.edu/images/shelflist.pdf.

#### ACADEMIC TUTORING

Individualized instruction is available without charge to all students. This instruction must be scheduled with the course instructor. Every effort is made to counsel students who's academic performance, clinical practice attitude, or personal qualities are not commensurate with the requirements of future MRI Technologists. The MRI Program Director, ACCE, and instructor will inform a student when work is substandard. It is the student's responsibility to arrange tutoring by contacting the appropriate person.

#### CAREER SERVICES

The Career Services department is integral to your success throughout the program and on the path to your ultimate career goals. Their knowledge and up-to-date analysis of the current workforce and its trends is an invaluable resource, providing guidance to current students and graduates alike. Their importance increases as you progress in the program and enter externship, graduate, pass your board exams, and begin your search for employment as an entry level MRI technologist. All interactions and requests by the Career Services department are required and part of your programmatic requirements. Failure to complete any assignment provided by the Career Services department may result in delay of your semester/program completion documentation.

#### MRI PROGRAM CURRICULM

The Associate of Applied Science in Magnetic Resonance Imaging program consists of 2099 hours consisting of 1099 hours of theory and lab and 1000 hours of clinical externship, over six semesters. Students attend classes online and residential.

#### **Introduction to Online Learning**

Prerequisite to the MRI Program

This course assesses the student's readiness to participate in online courses. Course consists of introduction to the learning management system and how to navigate throughout the system. Students must complete the course and receive a pass out of a pass/fail grade to be eligible to start MRI Program; those not completing or passing the course will not proceed with the MRI Program. Students must be enrolled by orientation to participate in the Introduction to Online Learning course and be eligible to proceed in the program.

#### CORE RESIDENTIAL

# ANA 200 Human Anatomy & Physiology (MRI) 120 Clock Hours Theory / 61 Clock Hours Lab / 10.0 CR

This course focuses on the necessary foundation for our future medical imaging professionals focusing on anatomy and physiology concepts following a system-based approach. Human anatomy & physiology introduces the students to the study of the structure and function of the human body. Basic concepts on the levels of structural organization, structure and function of chemicals, atoms, molecules, cells, tissues, organs, and systems are explored. The course covers the integumentary, skeletal, muscular, nervous, and endocrine systems, special senses, blood, cardiovascular, lymphatic, digestive & metabolism, urinary and reproductive systems. In addition, the course will include the relevant medical terminology.

#### **BIO 224 Cross Sectional Anatomy**

# 120 Clock Hours Theory / 61 Clock Hours Lab / 10.0 CR

This course is the study of cross sectional normal and abnormal anatomy, known as pathology. The course will demonstrate and educate the student on the correlation of the study of cross-sectional anatomy and MRI. MRI allows a detailed view into the human body with multiple orthogonal planes (axial, sagittal, coronal, and oblique planes). Looking at the human anatomy in multiple orthogonal planes with MRI allows an evaluation of soft tissue, vascular structures, bony structures, organs, and muscles.

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This course allows logical and transitional time for the student to evaluate the different anatomic regions in the human body. In BIO 224 the following anatomic regions are explored:

- Head and Soft Tissue Neck
- CNS: Central Nervous System (brain and spine)
- Thorax and Mediastinum (Thoracic Cavity, Heart, and Breast) Abdomen
- Pelvis
- Musculoskeletal
- Upper Extremity (Shoulder, upper arm, elbow, forearm, wrist, and hand
- Lower Extremity (hip, thigh, knee, leg, ankle, and foot)

This course will familiarize the student with the Common Pathologies found in Magnetic Resonance Imaging and their appearance with various imaging protocols. The content will encompass all of the common Anatomic Regions evaluated in the Anatomy component.

# HCR 202 Ethics for Science and Health (MRI) 45 Clock Hours / 3.0 CR

This course will equip students with the knowledge needed to identify, understand, and analyze ethical issues in in healthcare.

# MRI 111 MRI Physics and Instrumentation I 56 Clock Hours Theory / 45 Clock Hours Lab / 5.0 CR

This course is designed to provide the student with a comprehensive overview of MR imaging principles and instrumentation. In this course the student can integrate these topics and grasp how they all work together in MR imaging. The topics covered in this course will be: Instrumentation (System components: varying MR magnets, Radio Frequency, Gradient, Shim & Shielding Systems); Magnetism & Magnetic Properties; NMR Signal Production; Tissue Characteristics (Intrinsic Characteristics); Spatial Localization & Image formation; Pulse Sequences; Imaging Parameters, Options & Contrast (Extrinsic Characteristics); Special Applications; Safety; and Quality Assurance. These topics are divided into two parts: 1. Physics/Physical Principles; 2. Instrumentation in MR.

# MRI 112 MRI Physics and Instrumentation II 56 Clock Hours Theory / 45 Clock Hours Lab / 5.0 CR Prerequisite: MRI 101

This course is designed to provide the student with a comprehensive overview of MR imaging principles and instrumentation. In this course the student can integrate these topics and grasp how they all work together in MR imaging. The topics covered in this course will be: Instrumentation (System components: varying MR magnets, Radio Frequency, Gradient, Shim & Shielding Systems); Magnetism & Magnetic Properties; NMR Signal Production; Tissue Characteristics (Intrinsic Characteristics); Spatial Localization & Image formation; Pulse Sequences; Imaging Parameters, Options & Contrast (Extrinsic Characteristics); Special Applications; Safety; and Quality Assurance. These topics are divided into two parts: 1. Physics and Physical Principles; and 2. Instrumentation in MR.

# MRI 140 MRI Patient Care & Management 48 Clock Hours Theory / 24 Clock Hours Lab / 4.0 CR

This course focuses on the student's ability to provide basic and appropriate patient care in the MRI environment. The course is broken into key components: patient care & management, CPR/BLS certification, and pharmacology and drug administration procedures. Emphasis is placed on effective

communication skills, patient safety, medical ethics, and patient's rights, assessment, proper body mechanics, infection control, emergency medicine in MRI and being aware of the patient's individual needs.

# MRI 181 Clinical Externship I 500 Clock Hours / 11.0 CR

# Prerequisites: Successful Completion of All MRI Core Classes

This course is designed to provide students with hands-on experience in a supervised clinical setting. The student will apply concepts learned in their coursework to the performance of MRI examinations. Prescribed competencies are requirements of this course.

# MRI 182 Clinical Externship II 500 Clock Hours / 11.0 CR Prerequisites: MRI 181

This course is designed to provide students with hands-on experience in a supervised clinical setting. The student will apply concepts learned in their coursework to the performance of MRI examinations. Prescribed competencies are requirements of this course.

# MRI 201A MR Imaging and Procedures

# 80 Clock Hours Theory / 150 Clock Hours Lab / 10.0 CR

This course will provide the student with an overview of the fundamental principles of Magnetic Resonance Imaging terminology, safety, instrumentation, imaging, protocols, and procedures. The students receive an introduction to instrumentation, physics, principles, and advanced imaging concepts later discussed in MRI Physics. To better prepare the student to recognize the need for protocol and procedure adjustments, the course familiarizes the students to common pathologies, disease processes, and characteristics found in magnetic resonance imaging. The course is set up in multiple supporting facets: imaging & procedure lecture, pathology lecture, and lab practicum. The course starts with an introduction to MR: imaging, safety, and environment. The course applies anatomy and physiology to imaging in MRI. The student learns to image throughout the body based on characteristics that are presented in the patient history, diagnosis, treatment, and/or physician's order.

#### MRI 203 MRI Safety

#### 45 Clock Hours / 3.0 CR

Students will learn the basic principles underlying the potential areas of safety concern involved in the MR imaging process and magnetic resonance environment.

# MRR 305 MRI Course and Clinical Application Review 60 Clock Hours / 4.00 CR

#### **Prerequisites: Completion of All MRI Core Classes**

This is a comprehensive review, at an advanced level. This course is designed to provide the student with an accumulative review of ALL MRI Courses material. The goal is to refresh all their didactic and clinical knowledge, helping to focus on the application of all that has been taught. The course reviews and focuses students studying for advanced level exams, as the ARRT Post Primary MRI Certification. The course includes mock exams, topic quizzes, and homework/study assignments.

#### **GENERAL EDUCATION - ONLINE**

General Education is an important part of the undergraduate educational experience. General Education will provide students with the skills they will need to excel in whatever career path they choose to pursue.

Employers are hiring and promoting people who have more than just knowledge in a discipline; they are looking for people who can do things like write and speak clearly, solve problems, work well in diverse teams, and make ethical decisions.

The general education program at Casa Loma College prepares our students to fully participate in a world that is

demanding and constantly changing.

# ENG 101 Introduction to College Writing and Composition 45 Clock Hours/3 CR

This course contains a review of grammar and usage including subject-verb agreement, use of pronouns, proper verb usage, sentence structure, effective paragraphs, logical sequencing, etc. Students will learn effective written communications and will utilize their writing skills in building their practices or gaining employment.

# ENG 105 Critical Thinking and Analysis 45 Clock Hours/3 CR

This course is an introduction to the subject of critical thinking. Critical thinking and analysis have a fundamental impact on how problems are solved, and decisions are made. In this course students will explore the basic tools involved in developing critical thinking skills and learn to apply these tools to daily life; personally, and professionally.

# SOC 100 Adaptive Strategies – for Life and Learning 45 Clock Hours / 3 CR

This course has been developed to assist students with the development of skills and competencies that lead to success and growth in the personal, professional, and academic environment. Students will work in small groups with dedicated instructors to identify individual learning strategies for optimal outcomes, as well as practice professional competencies most desired by Allied Health employers and facilities.

# SOC 105 Leadership Skills: Foundations of Leadership 45 Clock Hours/ 3 CR

This course introduces students to terms, theories and concepts relevant to identifying and cultivating leadership skills. This course further prepares students for personal and professional leadership by addressing topics such as change, innovation, entrepreneurship as well as goal setting, identifying mechanisms of control and developing effective communication skills. Students will be introduced to various structures and styles of leadership and management and compare ideas for effective business strategy.

### **CDV 100 MRI Career Development**

#### 45 Clock Hours / 3.0 CR

This course is designed to help the student identify the various career opportunities within the field of Magnetic Resonance Imaging. It is further designed to encourage the student to create and pursue a long-term trajectory with reference to career development.

#### **BIO 121 Medical Terminology (MRI)**

# 45 Clock Hours / 3.0 CR

Medical Terminology is the language of medicine. Basic word building skills, prefixes, suffixes. Combining of forms and abbreviations are covered. This course helps the student understand the language and translate it into common vernacular.

#### DIDACTIC GRADE

- Students must achieve a minimum grade point of 78% / 2.30 / C+ in general education and core classes
- Students must have a minimum cumulative grade point average of 2.30 to graduate.
   Assignments are due on required dates. The instructor has the right to: alter the required date,
   maintain the date, or reduce points. Didactic evaluations, in the form of examinations, are given throughout all courses. Test dates are posted well ahead of time thus giving the student time to master the information necessary.

The program and students are on a specific schedule both didactically and clinically; the student meets didactically once a week, not leaving much leeway for missed course work or exams. No exam is returned graded until all the students in the class have taken the exam.

# CLINICAL EXTERNSHIP

Externship grade is pass or no pass.

Pass/No Pass is determined by:

- Completion of 100% of the assigned practicum hours
- Satisfactory completion of all assigned performance objective competencies
- Completion of all clinical logs
- Satisfactory rating on all clinical evaluation forms

Clinical externship consists of 1000 hours and is in the last two semesters of the program.

Semester 5: 500 hours: Students are required to attend 40 hours per week, with a minimum of 32 hours. The typical schedule is 5 days per week / 8 hours per day; however, this will depend on the clinical site.

- Students who do not complete 500 hours of clinical externship by the end of Semester 5 will be terminated from the program and required to repeat Semester 5 clinical externship. There are no exceptions to this policy.
- Note: Hours beyond 500 do not transfer to Semester 6. There are no exceptions to this
  policy.

Semester 6: 500 hours: Students are required to attend 40 hours per week, with a minimum of 32 hours. The typical schedule is 5 days per week / 8 hours per day; however, this will depend on the clinical site.

- Students who do not complete 500 hours of clinical externship by the end of semester 6
  (minimum of 1000 hours total) and a minimum of 10 out of 28 competencies will have 14 days
  from the last scheduled date of the program to complete the required 500 hours.
- Students who do not complete the hours within these 14 days will be terminated and required to repeat Semester 6 Clinical Externship. There are no exceptions to this policy.

Background checks are obtained on all students in the program. External licensing bodies may
require students with negative background checks are to go through an ethical review prior to
licensure. Casa Loma College will require that this review be done prior to clinical placement.
Dependent upon the issue, a student may be required to go through an ethical review to
determine status at the college. See your Program Director for more information.

# MAKE-UP AND RETAKES

Students are allowed only two (2) make-up and/or retakes of weekly quizzes / tests, or a combination thereof for all core courses except MRI201. **MRI 201 are allowed two (2) make-up and/or retake of quiz or test.** 

#### Make-up

- Students not in attendance on a test must make up their exam at the end of the term.
- A student can make up the quiz based on the discretion of the instructor prior to the end of the grading term. A zero (0) will be given, unless an exception has been made by the MRI Program Director. The maximum grade students can receive on make-up/retake is 78%.
- No early quizzes or tests will be given. Any urgent issues must be addressed to the MRI Program Director for exceptions.
- Final exams cannot be made up.
- It is the students' responsibility to contact the instructor and schedule makeup tests.

#### **Retakes**

- No final exams are allowed retakes regardless of the situation.
- The maximum grade students can receive on retakes/make-ups is 78%. All final exams are a single attempt.
- Retakes must be completed prior to the start of the new semester.
- It is the students' responsibility to contact the instructor and schedule retakes.

#### **Assignments**

- Class assignments submitted after the due date will receive no more than a 50% grade if submitted by the following class session.
- Assignments submitted more than one week after the due date will receive a grade of "zero" (0).

#### ONLINE COURSE GRADING

#### **Weekly Self-Evaluation**

In order to demonstrate participation and proactive learning students will fill out a self-evaluation at the end of each week. This self-evaluation will include discussion about time management, assignment preparation, and address any concerns. Instructors will review and provide appropriate feedback in a timely manner. These self-evaluations will be worth 10 points and 10% of the attendance/participation grade.

#### **Mid-Course Evaluations**

Students will be required to provide a mid-course self-evaluation. This evaluation will include an acknowledgement of current grade and identify any action to be taken to improve learning and participation as course progresses. Instructors will review and provide appropriate feedback. Assessments will be compiled and forwarded to MRI Program Director.

#### **Online Grading**

Online courses utilize the same grading scale as all residential course and the passing grades correspond with the passing grades in the individual programs.

Students are allowed two retakes for failed courses. If a student fails academically more than twice and can demonstrate that they are working with a tutor they can petition the academic committee for a third attempt. This appeal must be submitted in writing and include documentation that identifies remediation or tutoring.

Recycling of work, which is work submitted and graded for an earlier course and turning it in for credit for a second course – is not permitted. Original work must be turned in for any course repeated.

Students who fail general education courses in a semester must have the approval of the Registrar and the MRI Program Director to progress in the program.

#### **ATTENDANCE**

#### GENERAL ATTENDANCE POLICY

Casa Loma College emphasizes the need for all students to attend classes on a regular basis. Our programs prepare students for safe patient care. We also expect students to attend each class, laboratory, and clinical session to develop the theoretical and practice components of their profession.

Attendance is mandatory. Students are expected to attend all classes. Students may not be absent more than:

#### Residential:

- 1 absence per 8 week course
- 2 absences per 16 week core program module
- 0 absences per 15 week clinical externship

#### Online:

Refer to section for Online and Attendance and Dismissal Policy

# **CLASSROOM ATTENDANCE**

#### **Saturday Hours:**

- All students are required to be on campus every Saturday 8:00 a.m. 4:00 p.m. Appropriate, breaks
  and lunch are scheduled into the academic day. It is at the discretion of the instructor when to
  dismiss the students for breaks and lunch, based on the lecture and material.
- Students must be in attendance 100% of the time to be given full attendance credit.
- If a student is going to be absent, he/she must notify their instructor, in advance of the class start via text or phone call. Students should have contingency plans for issues such as sick children, transportation, and traffic problems.
- Students should schedule medical, dental, and personal appointments before or after school hours.
- When extenuating circumstances exist, which include <u>only</u>, the death of a family member, infectious
  or serious illness of student or statutory government responsibilities and documentation is provided,
  the MRI Program Director will make the final determination if the absence is excused.

- When a student reaches the maximum absences, he/she will receive one warning letter from the Registrar's Office.
- Absences due to bereavement count towards the allowed absences in the term.
- Students are responsible for keeping an individual record of attendance, as well as grades. Students can access grades at any time through online learning system-Canvas.
- Students are responsible for obtaining lecture notes and any materials that reflect the objectives and assignments for any days missed.
- Termination may ensue following a student's exceeding the maximum absences in their program.
- The MRI Program Director Is authorized to use professional judgment to make an exception for a student
  - who exceeds the maximum absences. The exception must be documented with reasoning.
- Arriving Late or Leaving Early:
  - Students may not arrive late or leave early as these behaviors disrupt the learning environment.
  - Any student arriving after the start of class will be considered tardy. No grace period is allowed. In addition, students arriving to class late after breaks are considered tardy.
  - o Students leaving class early will be counted absent for the day, regardless of the time left.
  - o Students arriving to class 60 minutes or later are counted absent for the day.
  - Three times tardy equal one day's absence; three more will result in another day's absence and so forth.

#### TARDY POLICY - RESIDENTIAL & CLINICAL

Tardiness is unacceptable at both clinical sites and didactics days. MRI students need consistent, exposure, experience, and repetition clinically to support all that is learned didactically. They are components that work together; the program does not view either component to be of less significance.

Being punctual is a professional trait that is always appreciated and respected. In the Imaging field you are often relieving a staff member or being relieved. The student should practice being reliable and punctual, traits that will aid in future success as an employee in the MRI department. Remember your eight-month clinical training should be treated as an extended interview. Clinical staff will be constantly evaluating whether you will be a reliable team member.

If a student is at their allowed absences for residential classes and receives another absence from 3 tardies, allowed absences will have been exceeded and the student will receive a course attendance drop/termination.

### ONLINE ATTENDANCE

Students are required to actively participate in all aspects of enrolled online courses. A student must demonstrate attendance in each of their registered online courses by posting an academic activity in each enrolled GE course by Wednesday of the first week of the course. If this requirement is not met by the first week of the course, a student will be administratively withdrawn.

#### **ONLINE OFFICE HOURS**

Instructors will hold weekly office hours. Office hour attendance availability varies per instructor and is held in a one on one with the instructor and student. Any discussion that requires confidentiality will need to be approved by the student in order to aid in compliance of any student issues that may cause interference in academic success and a scheduled meeting may be offered at a different time.

#### ONLINE COURSE WEEKLY SCHEDULE:

- The FIRST DAY of each course week is 12:01 a.m. (0001) Pacific Time each Monday.
- The LAST DAY of each course week is 11:59 p.m. (2359) Pacific Time each Sunday (of the following week).
- The LAST DUE DATE for all course assignments is 11:59 p.m. (2359) Pacific Time on the published course END date.

#### CLINICAL ATTENDANCE

- 1. Clinicals must be attended between 32 40 hours per week; NO LESS, and must be treated as if it was a job
- 2. Students MUST maintain their hour requirements within the designated time frame per semester
- 3. Students will be put on attendance probation if they miss 3 days within the 15-week semester and/or students fail to maintain the hour requirements for 4 consecutive weeks.
- 4. Once on attendance probation, if hours are not made up, the student will not progress to the next semester.
- 5. The student can be dropped from externship at the discretion of the MRI Program Director and Clinical Site.
- 6. Students can be terminated clinically for attendance issues. It is mandatory that students are clocking in/out for worked days and not lunches in the remote system from a site IP address/computer.

#### REPORTING CLINICAL ABSENCES

Absence is defined as any failure to be in attendance during scheduled hours (including scheduled makeup hours). Absence includes personal illness, family member illnesses, personal emergencies, and any other type of absence. MRI Program Director/ACCE must be notified via phone call/text and submitting the Attendance Policy Form: Reporting Absences (as seen below). Notifying the Director does not mean the absence did not occur

Students are required to report all unscheduled didactic absences to the ACCE and MRI Program Director via phone or email.

Student is to clearly leave the following information on the answering machine, if the MRI Program Director/ACCE (during externship only) is not reached:

- Name
- Program (if left on the school answering machine for any reason)
- Your course and Class ID

Note: MRI 200 labs and MRI132 have mandatory attendance to pass. Exceptions must be cleared with the Program Director and clinical lab instructor.

# ALLOCATED TIME OFF: VACATION AND SICK

Students should keep in mind the MRI program is a two-year commitment; both didactic and clinical education components are rigorous and pertinent. All personal time taken should be at your discretion. All absences should be done with proper notification; all vacation time should be done with written request to the MRI Program Director.

Students follow the MRI Program Academic Calendar; this allows for recognized holidays during didactic studying. This calendar is not followed during clinicals. Any questions contact the MRI Program Director.

# **ACADEMIC POLICIES AND PROCEDURES**

#### **HEALTH AND SAFETY**

Interactions with patients in the health care system carry inherent risks to both the patient and caregiver, including, but not limited to, communicable diseases. In the curriculum, students will be given information regarding known risks for various diseases and measures to decrease these risks. All students are expected to provide appropriate care to all assigned patients in any setting. These assignments may include patients with medical diagnoses of tuberculosis; hepatitis A, B, or C; AIDS; or other infectious diseases. Students are expected to implement standard precautions and appropriate barrier protection in the care of all assigned patients.

#### DRESS CODE

Casa Loma College understands and fully supports students' right to self-expression. The College also has an obligation to create a learning environment where all members of the community are comfortable and not offended by inappropriate dress. The dress code is designed to provide appropriate guidelines so that all students may dress in a manner that is respectful of themselves and the community.

The general dress code policy states that the following standards must be adhered to by all members of the campus community:

- Dress that is neat, modest, and casual is the minimum requirement at all times.
- Hats, caps, do-rags, and other headgear must be removed when inside campus buildings.
- "Baggy" pants or sloppy dress will not be permitted at any time.
- Clothing that is provocative or contains obscene messages will not be permitted.
- Uniform Dress Code

Patients and employees of the health care field view technologist as professional health care team members and therefore expect them to look professional. Inappropriate dress may interfere with the ability to interact with patients and other health care providers. The MRI student is expected to conform to a standard of dress and grooming set forth by the MRI Program Student Handbook. The following standard of dress is applicable to all classroom and clinical externship settings. Failure to comply with this rule may result in the student being denied classroom or clinical entry for the day.

Specific information and ordering of the uniforms will be provided during program orientation. Students are expected follow the guidelines outlined above as well as the program dress code.

- The uniform is designated as the following:
  - College issued scrubs
  - College issued long sleeve or short sleeve cotton t-shirt must be worn under the tunic top
  - Socks to match the uniform must be worn.
  - Clean white or black shoes and shoelaces.
  - No canvas shoes, open toe shoes or visible colored brand names.

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# Name badge

- Badges must be displayed at all times with the name of the student facing outward so that student is easily recognizable.
- Loss of name badge is to be reported immediately. Replacement cost of badge is \$20.00
- College patch on uniform sleeve
- Warm up jacket

#### •

#### Uniform Notes:

- Only the college issued warm up jacket is allowed in the lab/clinical facilities.
- No shirts, other than college issued t-shirts are permitted under the tunic top.
- Pants must be worn on the hips. Baggy "sagging" uniform pants are STRICTLY PROHIBITED
- Nothing is to be "hanging" from the shirt pockets or the pants pockets.
- Personal coats may be worn in the classroom.
- Due to allergies with clinical patients, perfume or cologne is prohibited at the clinical facility.
- Men and women, hair must be pulled up off of the uniform collar.
- No beads, fabric, ribbons, scrunches, or hair clips of any color are permitted.
- Jewelry is limited to wedding/engagement ring, small post earrings and a wristwatch. Medical
  alert jewelry is acceptable. No nose rings, tongue rings, or other visible body piercings will be
  permitted.
- No adornments or "fanny packs" are allowed.
- Tattoos: All tattoos must be covered.

#### HEALTH REQUIREMENTS

Students are financially responsible for obtaining the required health examination. Students must meet health requirements to maintain enrollment status. Prior to a clinical externship, students must provide documentation of a current physical exam with proof of immunization of the following: full Covid vaccination including booster, Flu shot, T-dap, Varicella and MMR, proof of PPD or chest x-ray, Hepatitis B or proof of having begun Hepatitis B series or having signed a declination. Titers are for vaccinations are accepted and a quantiferon exam for PPD. No student will be permitted into a clinical rotation with a disqualifying result or failure to meet the specified deadline provided by the ACCE.

#### CRIMINAL BACKGROUND CHECK

Casa Loma College's allied health programs require a criminal background check prior to clinical placement. Assignment to clinical placement is contingent upon satisfactory results of a criminal background check. The background check will include county, statewide, and federal screening. In order to be accepted into certain affiliates for clinical placements/field work, students may also be required to submit to additional checks.

Students with negative background checks may be required to go through an ethical review with external licensing bodies.

Complete information can be obtained from the Program Director.

#### DRUG TESTING

The College's Drug and Alcohol Prevention Program prohibits the unauthorized use, possession, sale, conveyance, distribution, and manufacture of controlled substances, including marijuana, as well as being under the influence of legally prescribed drugs that prevent an individual from performing the essential functions of his or her job or where the individual poses a direct threat while using those drugs. Casa Loma College adheres to all policies of clinical facilities with which the College affiliates for student clinical internship/externship learning experiences. Clinical facilities often require students to submit to a drug screen and to test negative for drugs as a condition of acceptance at that clinical facility. Accepted candidates for admission to a program may therefore be required to pass a drug test prior to enrollment in a program, randomly while in the program, and/or prior to the start of a clinical rotation.

Accepted candidates who refuse to submit to screening or fail to pass a drug screening may be withdrawn from consideration or enrollment into a program; enrolled students who refuse to submit to screening or fail to pass a drug screen may face disciplinary action up to and including termination.

For additional information, see the Drug and Alcohol Prevention Program on the College website <a href="http://www.casalomacollege.edu/admissions/drugs">http://www.casalomacollege.edu/admissions/drugs</a> or in the College Catalog under Policies and Procedures, Drug and Alcohol Prevention Program.

#### **HEALTH INSURANCE**

The College does not provide personal health insurance coverage for students. Casa Loma College students are encouraged to carry some type of personal health insurance. Should medical care be required, the student is responsible for all costs of treatment/medical care.

# STANDARD PRECAUTIONS AND HIPPA

Students enrolled in the Imaging Program must adhere to all policies and procedures concerning Standard Precautions and Infectious Disease Policies and Health Insurance Portability and Accountability Act of 1996 (HIPAA) as practiced at the assigned clinical affiliate.

Rev. 7/16; 7/17; 9/17; 10/17; 2/18; 6/18; 7/18; 11/18; 1/19; 7/19; 10/19; 3/20; 8/20; 4/21; 5/22

Students must never disclose confidential information including anything pertaining to the medical history, diagnosis, treatment, and prognosis to anyone not directly involved in the care of the patient. In addition, students are required to follow HIPAA regulations on "Protected Health Information" which includes any "individually identifiable health information." This includes information such as the individual's past, present or future physical or mental health or condition, the provision of health care to the individual, or the past, present, or future payment for the provision of health care to the individual, and that identifies the individual or for which there is a reasonable basis to believe it can be used to identify the individual. Individually identifiable health information includes many common identifiers (e.g., name, address, birth date, Social Security Number).

Please visit www.hhs.gov/ocr/privacy/hipaa/understanding/summary/index.html for more information.

Failure to adhere to this code constitutes a violation of the "Right to Privacy Act," as well as HIPAA and is professionally unacceptable, as well as potentially compromising from a medical/legal standpoint.

# LATEX ALLERGY

Approximately 3 million people in the U.S. are allergic to latex. Latex is used in more than 40,000 industrial, household, and medical products. Exposures to latex may result in skin rashes, hives, flushing, itching; nasal, eye, or sinus symptoms, asthma, and (rarely) shock. Reports of such allergic reactions to latex have increased in recent years. This statement is provided to notify students of the possible risk of latex allergies. It is important to notify the program and clinical affiliate if you are or become allergic/sensitive to latex products.

#### CLINICAL LABORATORY

Laboratory class sessions are provided to give students an opportunity to practicing hands-on techniques. Instructor's structure and guide laboratory activities. Students are expected to maximize their time in the lab by self-directing their learning activities as part of a group. Students are responsible for setting up and cleaning up after the lab sessions. By state regulation, no eating or drinking is allowed in the lab. Water in a transparent container is allowed but must be stowed in a bag or backpack when not being used.

#### FIELD TRIPS

Required off-campus non-clinical activities may be scheduled at times to enhance the educational experience of the student and are supervised at the location by program faculty. Students are responsible for their own transportation and insurance coverage for travel to and from off-campus activities. Students must be present for the entire time, unless approved by the instructor.

#### FOOD AND BEVERAGE

By state regulation, no eating or drinking is allowed in the lab. Water in a transparent container is allowed but must be stowed in a bag or backpack when not being used. Vending machines are in the student lounge offering such items as snacks, soda, juice, and water. A refrigerator and microwaves are in the student lounge.

Rev. 7/16; 7/17; 9/17; 10/17; 2/18; 6/18; 7/18; 11/18; 1/19; 7/19; 10/19; 3/20; 8/20; 4/21; 5/22

# STANDARDS AND CODE OF ETHICS OF MRI STUDENT & MRI TECHNOLOGIST

Like Registered MRI Technologist, the MRI student must be able to perform all the:

- Ethical, moral, professional standards
- Physical, psychological, and emotional tasks this career will entail.

To ensure that potential candidates and students are aware, the program has a summary listed below.

#### **PROFESSIONAL GREETINGS**

Make eye contact. Smile. Introduce yourself. Call people by name, using Mr. Mrs. or Ms. when addressing patients and their family members. Extend a few words of concern.

## **ANTICIPATE NEEDS**

You will often know what people want before they ask. Take the initiative. It's everyone's job to help or find help when needed.

## **PRACTICE COURTESY**

Be quiet, courteous, and attentive. Polite words are soothing and reassuring. Noise annoys. Make people feel special.

#### **EXPLAIN WHAT YOU ARE DOING**

People are always less anxious when they know what is happening.

## **OFFER ASSISTANCE**

If someone is lost and confused, stop and try to help.

## **RESPOND QUICKLY**

When someone is worried, concerned, or ill, every minute is an hour. Waiting time is more tolerable if the patient or family is kept informed.

# **BE CAREFUL OF WHAT YOU SAY**

Privacy and confidentiality are of extreme importance. Watch what you say and where you say it. Show respect for patients and their families.

# TREAT ALL PATIENTS WITH DIGNITY

Have patience. Slow down and take time to give. Imagine yourself on the receiving end. Offer choices. Be understanding. Make sure your words or tone of voice doesn't imply insult.

# TAKE TIME TO LISTEN

When someone talks to you, even to complain, take time to listen. Remember that patient or visitor is forming an instant perception of you that could be lasting.

## **HELP EACH OTHER**

Everyone benefits you when you and your co-workers act as a team. Offer assistance to others and accept help graciously.

# **USE GOOD PHONE SKILLS**

When you are on the phone, speak pleasantly. Be helpful and listen with understanding. Remember that others often overhear how you speak with a caller. Always introduce yourself and maintain professional judgment while communicating.

#### LOOK THE PART

You represent more than just one individual. You are a part of a long-standing and proud medical tradition. Your appearance and attitude are reflective of your personal pride in that tradition.

## **RELATIONSHIPS**

All relationships should be based on mutual respect. Student-Technologist many times must concentrate on their work during peak periods to such a degree that the student may feel that they are receiving little directed attention in the clinical environment. Patient care is always our number one priority and students will quickly fall into the workflow of the department

**Student – Student** Students should make every effort to get along with their peers. You will assist each other as students and compete for jobs as colleagues.

**Student –Site Managers** Students should pay due respect to all managers and technologists. If the student feels the respect is not mutually given, please discuss the situation with the ACCE and Program Director

**Student – Instructors** Students must realize that instructors have accepted this assignment on a voluntary basis. They also have patient care responsibilities they must complete.

# PROFESSIONAL CREDENTIALING:

Professional credentialing is a designation earned by a person to assure qualification to perform his/her job.

## WHY SEEK LICENSURE, REGISTRATION, OR CERTIFICATION?

Because such recognition:

- Demonstrates your competency, qualification, and expertise in your profession
- Shows your commitment to understanding, professional, ethical, and societal responsibilities

## **CERTIFICATION**

Certification is a formal process to identify and acknowledge individuals who have met a recognized standard. Usually this standard includes education, experience, and an exam of knowledge, skills, and abilities needed to perform the job. When an individual meets the standard, they receive certifications from a certifying agency.

Professional certification is a voluntary process by which a non-governmental professional organization grants recognition to an individual who has met certain qualifications. It is a credential which attests that the individual has demonstrated a certain level of proficiency in a specific body of knowledge and skills within the relevant field of practice.

#### **LICENSURE**

Is a non-voluntary process by which an agency of government regulates a profession. It grants permission to an individual to engage in an occupation if it finds that the applicant has attained the degree of competency required to ensure the public health, safety, and welfare will be reasonably protected. Licensing it always based on the action of a legislative body. Once a licensing law has been passed it becomes illegal for anyone to engage in that occupation unless they have a license. The health care professions are typically licensed at the state and/or local level, but not usually at the federal level.

## CERTIFICATION DIFFERS FROM LICENSING

Certification is nearly always offered by a private, non-governmental agency. Such agencies are usually outgrowths of professional associations which create certifying agencies to identify and acknowledge those who have met a standard. Another contrast with licensure is that, under a licensing law, practitioners of the licensed occupation must have a license in order to practice. It is involuntary. On the other hand, certification is voluntary. One does not have to be certified in order to practice. An individual takes the certification exam because they want to enjoy the benefits of certification. However, to use the title and initials copyrighted and associated with the professional, one must be certified.

PRIMARY CERTIFICATION is ARRT's primary category of certification in five disciplines of radiologic technology including Radiography, Nuclear Medicine, Radiation Therapy, Cat Scan, Mammography, Magnetic Resonance Imaging and Sonography. To document that didactic and clinical competencies have been satisfied the Program Director and ACCE must sign the Endorsement Section of the Application for Certification and Registration.

Eligibility for ARRT Primary Certification includes requirements have been met in ethics, practicum, and clinical setting.

ETHICS are mandatory standards of minimally acceptable professional conduct for all registered technologists and candidates, intended to promote the protection, safety, and comfort of patients.

One issue addressed by the Rules of Ethics is conviction of a crime — which includes a felony, gross misdemeanor or misdemeanor, the only exceptions being speeding and parking violations. All alcohol and/or drug related traffic violations must be reported and application filed to the ARRT Ethics Committee Ethical Review.

A second question asked whether you have had any professional license, permit, registration or certification subjected to any conditions or disciplinary action by a regulatory authority or certification board. The application also asks you to respond to a question about violations or sanctions related to the honor code.

EDUCATION candidates must have attended an ARRT approved program and candidates who complete a program of study in 2015 and beyond must have earned an Associate Degree or more advanced degree from an institution accredited by an agency recognized by ARRT (Casa Loma College's MRI Program is recognized and approved by ARRT and awards an Associate Degree in Magnetic Resonance Imaging).

**EXAMINATION** candidates have three attempts to pass the exam and those attempts must be used within a three-year period of the initial ARRT exam date.

POST PRIMARY CERTIFICATION is for the Radiologic Technologist pursuing a second credential. ARRT offers a Post-Primary category of certification and registration in Mammography, Computed Tomography, Magnetic Resonance Imaging, Bone Densitometry, -Interventional Radiology, Vascular-Interventional Radiology, Sonography, Vascular Sonography and Breast Sonography.

Eligibility for ARRT Post-Primary Certification includes requirements have been met in ethics, practicum and clinical settings.

ETHICS are mandatory standards of minimally acceptable professional conduct for all registered technologists and candidates, intended to promote the protection, safety, and comfort of patients.

One issue addressed by the Rules of Ethics is conviction of a crime — which includes a felony, gross misdemeanor or misdemeanor, the only exceptions being speeding and parking violations. All alcohol and/or drug related traffic violations must be reported.

A second question asks whether you have had any professional license, permit, registration, or certification subjected to any conditions or disciplinary action by a regulatory authority or certification board. The application also asks you to respond to a question about violations or sanctions related to the honor code.

EDUCATION candidates must meet two set or requirements: 1) certification and registration by ARRT in an appropriate supporting discipline and completion of a structured education and clinical experience requirements.

2) Candidates must maintain certification and registration in the supporting disciplines to be eligible for certification and registration in the Post-Primary disciplines.

Candidates for Post-Primary are required to complete 16 hours of structured education related to the content outline for that discipline. The education must either Recognized Continuing Education Evaluation Mechanism (RCEEM)-approved or institutionally awarded from an approved ARRT program.

APPLICATION REQUIREMENTS candidates for MRI Post Primary certification and registration must document performance of a minimum of 125 repetitions of MRI procedures according to a specified list.

**EXAMINATION** candidates have three attempts to pass the exam and those attempts must be used within a three-year period of the initial ARRT exam date.

## CONTINUING EDUCATION REQUIREMENTS AND OPPORTUNITIES

#### NATIONAL

## **ARRT**

Renewal of Certification and Registration requires annual renewal. https://www.arrt.org

Continuing Education Requirements mandate that every two years a registrant must either obtain 24 continuing education(CE) credits or obtain certification in an additional discipline recognized by ARRT. The continuing education must be in the subject of MRI.

## **ARMRIT**

All Certified MRI Technologists are required to renew their certification for a three-year period and must submit evidence of eight (8) CME credits per year for a total of twenty-four (24) CME credits in MRI Technology as awarded by the AHRA, ACCME, AMA, ASRT or other qualified CME granting organization. https://www.armrit.org/

#### STATE

The state of California does not have any standards on continuing education for MRI.

## **REGIONAL**

There are no regional standards related to continuing education in MRI.

## CONTINUING EDUCATION OPPORTUNITIES

Collegiate/educational private, public, and professional organizations offer opportunities to obtain continuing education hours in MRI. Professional organizations including but not limited to ARMRIT, ASRT, ARRT are a few of these organizations.

Self-Learning Activities self-study CE activities are materials developed for individuals who need the flexibility in the location and scheduling of courses. These self-paced activities may be in the form of video or audio tapes, journals or newsletters, manuals or computer programs or any combination. Learners demonstrate satisfactory completion of the learning experience by exam, completion of an assignment or demonstrated attendance and participation.

Professional Conferences provide technologists with amazing opportunities to network and learn about the most recent MR techniques and practices. Conferences, conventions and meetings will provide CME's for the participant.

# **ADVANCEMENT OPPORTUNITIES**

There is room for advancement in the field of MRI. However, to advance in this career or any career, you must stay abreast of the latest changes in the field or return to school to further your education.

SPECIALIZATION and Post Primary MRI Technologists can specialize in areas such as pediatrics, cardiac, neurological, or intraoperative imaging. In addition, through Post Primary Certification, MR Technologists can receive credentials in Nuclear Medicine, Radiation Therapy, and Sonography. With the appropriate training and education, technologists can also become Shift Supervisors, Chief Radiologic Technologists and even Director of Imaging. Other areas of interest might be as an Instructor or a Program Director.

MEDICAL INFORMATICS is computer applications in medical care. Simply put, it is the merger of information technology and healthcare documentation. The applications of computers in health care are very extensive, but the field of medical informatics can be structured or divided into the following domains:

- Signal processing ECG, Electroencephalography (EEG), Electromyography (EMG) analysis by computer
- Image processing Radiography, US, CT scanning, MRI/Magnetic Resonance Angiography (MRA), Single Photon Emission Computed Tomography (SPECT) scanning/Positron Emission Tomography (PET) scanning, Cerebral Angiography
- Computerized patient records
- Decision support systems
- Telemedicine
- Internet and web-based medical communications

MRI Technologists can use their knowledge of healthcare and MRI systems and technology in combination with education/training in information or product implementation to obtain a position on a Heath Informatics Team.

SALES REPRESENTATIVES primarily prospects for new customers, generates referrals from facilities and physicians, provides customer care, sells the products and services of the company. This position generally requires experience in the field and is a fast-paced high energy job.

CLINICAL SPECIALISTS with prior experience as an MRI Technologist, can become, a Clinical Applications Specialist MR, Clinical Specialist installing software on site or via remote support; working alongside sales staff to conduct onsite installations of machines; demonstrate the use of machines; support marketing; and provide telephone support for customers.

# NATIONAL ORGANIZATIONS AND PROFESSIONAL ASSOCIATIONS

A national organization or association is usually a non-profit organization seeking to further a particular profession, the interests of individuals engaged in that profession and the public interest.

## HOW CAN A PROFESSIONAL ORGANIZATION HELP ME?

Cherwin, Kelly A., "Why Join a Professional Association"

Creating professional relationships is important, and joining a group allows you to have a sense of security and trust. From this, you are able to support and help one another in reaching your professional goals. Associations sponsor numerous events throughout the year that allow you to connect with your peers. Since most associations have national or local conferences, you can participate and have the opportunity to learn about breaking news in your career, learn "best practices" or new ideas, hear about key achievers in your field and also meet and brainstorm with others who are also looking to share and learn new information. Another benefit of enhancing your network is that you may find a mentor to help you with your professional needs or you may be in a position to become a mentor to someone else. Participating in forums, chat groups or discussion boards sponsored by the association is also a great way to grow your network. This allows you to use your peers as sounding boards and often make some great friends with the same interests as you.

Take charge of your career by taking advantage of career resources. Associations often have job listings online or in print available only to their members. This is a great way to find targeted job postings for your area of interest. Additionally, many associations have career resources available such as tips on effective resumes or cover letters, job searching strategies and negotiating techniques. Some associations even have panels of experts that you can contact for specific questions on career issues. Other benefits include information about seminars, training or certification classes that may be suitable for you. Often these classes can be done through web- or podcasts so you don't even have to leave your home. And don't forget, listing your association membership on your resume is impressive to current or future employers as it shows that you are dedicated to staying connected in your profession.

Broaden your knowledge by accessing resource information such as: case studies, articles, white papers, and books written by experts in your field or area of interest. Also, major journal, magazine and newsletter access is provided as a part of your membership privileges. Another reason to join an association is to learn more or stay informed about issues in diversity. Additionally, associations provide a source for scholarship information, links to publications, and awards for persons achieving excellence in their field.

AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS (ARRT) is the world's largest organization offering credentials in Medical Imaging, Interventional Procedures, and Radiation Therapy. ARRT certifies technologists in a range of disciplines by overseeing and administering education, ethics, and examination requirements. The mission of ARRT is to promote high standards of patient care by recognizing qualified individuals in medical imaging, interventional procedures, and radiation therapy. https://www.arrt.org

Individuals completing their education from an approved ARRT school, such as Casa Loma College's MRI, can obtain certification through the ARRT. While many MRI Technologists have obtained their ARMRIT Certification, and most Sonographers their RDMS Certification, these certifications are not as widely accepted among imaging centers and hospitals. ARRT is the gold standard within the healthcare field.

NUCLEAR MEDICINE TECHNOLOGY CERTIFICATION BOARD (NMTCB) is the premier certification board for nuclear medicine technologists. The standards established by the NMTCB include educational requirements, practical experience, and successful completion of an appropriate competency-based examination. The mission of the NMTCB is to promote quality healthcare by certifying individuals through psychometrically sound examinations to practice and advance in Nuclear Medicine and Molecular Imaging. https://www.nmtcb.org/

AMERICAN REGISTRY OF DIAGNOSTIC MEDICAL SONOGRAPHERS (ARDMS) is an independent organization that administers examinations and awards credentials in areas of ultrasound. ARDMS awards credentials in RDMS, RDCS (cardiac), RVT (vascular) and RMSKS) Musculoskeletal). The RDMS credential is designed to certify competence in the field of diagnostic medical sonography. http://www.ardms.org

AMERICAN HEALTHCARE RADIOLOGY ADMINISTRATORS (AHRA) THE association for medical imaging management is the professional organization representing management at all levels of hospital imaging departments, free standing imaging centers, and group practices. AHRA is a resource for the development of professional leadership in medical imaging management. http://www.ahra.org

RADIOLOGY ADMINISTRATION CERTIFICATION COMMISSION (RACC) is a separate and autonomous functional body within the AHRA responsible for the examination and certification of radiology administrators (CRA). https://www.ahra.org/CRA

# AMERICAN REGISTRY OF MAGNETIC RESONANCE IMAGING TECHNOLOGISTS (ARMRIT)

is the first certifying body that required specific MRI education, in-depth clinical training, and hands-on experience. It offers an alternative place for MRI Technologists who opt to train specifically in MRI without undergoing a radiology/radiography background. ARMRIT certifies MRI Technologists who have met its established criteria, and who work in MRI facilities at hospitals and private non-hospital facilities. ARMRIT is the number one proponent of the MRI Profession, educating Legislators on all levels, Federal, State, and Local. ARMRIT focuses its efforts on the need for universal standards for the education, training, and assurance of the highest levels of knowledge and performance of the MRI Technologist to ensure the safest and most diagnostic experience of the MRI patient. https://www.armrit.org

AMERICAN SOCIETY OF RADIOLOGIC TECHNOLOGISTS (ASRT) is the world's largest and oldest membership premier and professional association of people working in medical imaging and radiation therapy. The mission of the ASRT is to advance the Medical Imaging and Radiation Therapy profession and to enhance the quality of patient. Members enjoy access to high-quality continuing education, peer-reviewed journals, a member magazine just for R.T.s, and discounts on many products and services. Membership fees range from \$35.00 to \$125.00 annually. https://www.asrt.org/

AMERICAN HEALTHCARE RADIOLOGY ADMINISTRATORS (AHRA) is an organization for imaging leaders. Members benefit through availability of knowledge, networking, education and resources, and professional development products. Individual membership fee is \$125.00 plus a \$25.00 application fee. http://www.ahra.org/

ASSOCIATION OF COLLEGIATE EDUCATORS ION RADIOLOGIC TECHNOLOGY (ACERT) is a non-profit educational organization dedicated to improving the quality of education among collegiate Radiologic Technology programs ensuring high quality patient care and the growth of the Radiologic Technology profession. Membership fee is \$35.00 annually. https://acert.org/

# ASSOCIATION OF EDUCATORS IN IMAGING AND RADIOLOGIC SCIENCES, INC. (AEIRS)

goal is to increase networking for educators and clinical instructors with up-to –date information and support. Individuals must hold current registration with the American Registry of Radiologic Technologists, the American Registry of Diagnostic Medical Sonographers, the Nuclear Medicine Technology Certification Board, the Medical Dosimetrist Certification Board, or equivalent credentials. Associate Membership Fee is \$80.00 annually. http://www.aeirs.org/

SOCIETY OF DIAGNOSTIC MEDICAL SONOGRAPHERS (SDMS) promotes, advances, and educates its members and the medical community in the Science of Diagnostic Medical Sonography in all specialty areas. SDMS provides CME opportunities, career resources, journals, educator, and student resources, and more. Membership fees range from students' membership at \$45.00 annually to standard member at \$160.00 annually. https://www.sdms.org/

AMERICAN COLLEGE OF HEALTHCARE EXECUTIVES (ACHE) is an international professional society of healthcare executives who lead hospitals, healthcare systems and other healthcare organizations. It was established to further advance healthcare management excellence through education and research. http://www.ache.org/

MAGNETIC RESONANCE MANAGERS SOCIETY (MRMS) an educational and networking group for MRI managers was dissolved in 2010 due to low membership.

# INTERNATIONAL ORGANIZATIONS

INTERNATIONAL SOCIETY OF RADIOGRAPHERS AND RADIOLOGICAL TECHNOLOGISTS (ISRRT) is the voice of radiography and therapy radiation professional, worldwide. The mission is to improve the standards of delivery and practice of medical imaging and radiation therapy throughout the

world by acting as the international liaison organization for medical radiation technology by promoting quality patient care, education, and research in the ration medicine sciences.

INTERNATIONAL SOCIETY FOR MAGNETIC RESONANCE IN MEDICINE (ISMRM) is a multidisciplinary nonprofit association that promotes innovation, development, and application of magnetic resonance techniques in medicine and biology throughout the world made up of Clinicians, Physicists, Engineers, Biochemists, and Technologists.

SECTION FOR MAGNETIC RESONANCE TECHNOLOGISTS (SMRT) is a Society of MRI Radiographers and Technologists, a section of ISMRM that provides a forum for education, information, and research in magnetic resonance throughout the world.

#### RELATED ORGANIZATIONS AND ASSOCIATIONS

AMERICAN BOARD OF RADIOLOGY (ABR) is one of 24 independent national boards that are member of the American Board of Medical Specialists. https://www.theabr.org/

AMERICAN COLLEGE OF RADIOLOGY (ACR) is a nonprofit professional society of Radiologists, Medical Physicists and Radiation Oncologists. The ACR Core Purpose is to serve patients and society by empowering members to advance the practice, science and professions of radiological care. https://www.acr.org/

RADIOLOGIC SOCIETY OF NORTH AMERICA (RSNA) is an international Society of Radiologists, Medical Physicists, and other medical professionals. RSNA hosts the world's premier radiology forum and publishes two top peer-reviewed journals Radiology and Radiographic. The Society also develops and offers informatics-based software solutions in support of a universal electronic health record, sponsors research to advance quantitative imaging biomarkers, and conducts outreach to enhance education in developing nations. http://www.rsna.org/

AMERICAN MEDICAL ASSOCIATION (AMA) an organization of American physicians whose mission is to promote the art and science of medicine and the betterment of public health. https://www.ama-assn.org/

INTERSOCIETAL ACCREDITATION COMMISSION (IAC) provides accreditation for imaging facilities and hospitals for Vascular testing, Echocardiography, Nuclear/PT, MRI, Diagnostics, CT, Dental CT, Carotid Stenting, Vein Treatment and Management, Cardiac Electrophysiology, and Cardiovascular Catheterization. It is a means by which facilities can evaluate and demonstrate the level of patient care provided. <a href="http://www.intersocietal.org/">http://www.intersocietal.org/</a>

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# **ACKNOWLEDGEMENT OF RECEIPT**

# **Magnetic Resonance Imaging Student Handbook**

Magnetic Resonance Imaging students are responsible for reading and complying with the information which appears in the current Casa Loma College Catalog and the Magnetic Resonance Imaging Student Handbook. It is the intent of this handbook to ensure patient safety and professional, ethical, and legal conduct of all Magnetic Resonance Imaging students. Failure to comply with College and Magnetic Resonance Imaging program policies will lead to a review of student behavior and possible disciplinary action, including dismissal from the Program.

The Magnetic Resonance Imaging Program reserves the right to modify any statement in the handbook. Changes will be given to students through an MRI Student Handbook Addendum.
I acknowledge
receiving and reading the Magnetic Resonance Imaging Program Student Handbook. I have read the standards and procedures of the MRI Program. I agree to comply with the policies and standards stated within this handbook. I acknowledge that prior to signing I have been provided the opportunity to seek further clarification. I understand that this statement will be placed in my student record
I agree to abide by these policies, rules, and regulations.
Student Signature:
Student Name (printed):
Date:
Class ID:

Please sign one copy and return to your instructor. This will be placed in your academic file.

The other copy remains in the handbook for your reference.

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