LONG BEACH CITY COLLEGE

DIAGNOSTIC MEDICAL IMAGING PROGRAM

DMI STUDENT MANUAL

(And Syllabi for DMI 40A, 40B, 40C, 40D, 40F and 40E)

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By Radiologic Technology Faculty

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INTRODUCTION

The purpose of this LBCC DMI Student Clinical Manual is to guide the Radiologic Technology student through all aspects of their clinical education. It provides a framework, chronological objectives / requirements, and pertinent documentation. Upon completion of the LBCC DMI PROGRAM, students would have satisfied all didactic and clinical required components set forth by the CDPH-RHB, ASRT, and ARRT. The student would be eligible to take the ARRT national Certification exam in the primary discipline of Radiography.

The following pages contain program description, clinical standards, program policies, record keeping materials related to clinical education, and other pertinent information.

All information contained within is the specific responsibility of the Rad Tech student and will be used to direct the student through the clinical educational phase of the program and successful program completion. The ultimate goal of the DMI program is for our graduates to be a well-educated and employable Radiologic Technologist.

Prior to starting the clinical rotation at your assigned site

Every accepted applicant must provide a current criminal background check, complete vaccinations, obtain an AHA Healthcare Provider BLS CPR card, obtain HPSO liability insurance, complete a drug test, complete the health evaluation form, be able to perform essential physical functions, and complete a latex allergy form. Additional information regarding this is provided at program acceptance. The background check will include criminal offense, criminal history, sex offender check, and social security trace. (An unclear background may prevent the student from being accepted into one of our affiliated clinical facilities as well as completing clinical requirements.) Students are responsible for providing themselves with reliable transportation to our clinical affiliates. The LBCC DMI Program clinical sites are within 23 miles radius of the LBCC LAC Campus.

Clinical rotation days and times

Clinical experience starts as early as 6 am and end as late as 11 pm M-F and may include weekend assignments. Clinical rotations are approximately 24-32 hours per week. Total clinical experience is approximately 1968 hours.

Failure to comply with clinical requirements as outlined in this manual can result in program dismissal.

PROGRAM MISSION STATEMENT

The Medical Imaging Sciences at Long Beach City College includes the Diagnostic Medical Imaging Program (DMI), the Computerized Tomography Program (CT), and the Magnetic Resonance Imaging Program (MRI). The Medical Imaging Programs provide high-quality education and clinical practicum to qualified students. The LBCC Medical Imaging Programs are responsive to the diverse needs of the local medical community. The DMI program specializes in the education and training that leads to entry-level employment as a competent, ethical health care professional, and either a Radiology Associate of Science degree or Certificate of Achievement awarded. The DMI program emphasizes the necessity of professional development and life-long learning. The Medical Imaging Programs at Long Beach City College adheres to non-discriminatory policies and provides equal opportunities in educational programs and to all students enrolled in these programs, regardless of ethnic, sexual, or socioeconomic background.

Program Accreditation

The DMI program is approved by the California Department of Public Health – Radiologic Health Branch (CDPH-RHB). Each clinical facility affiliated with the DMI Program must maintain compliance with all regulatory requirements of the CDPH- RHB. Each facility must prominently display the CDPH-RHB CLINICAL AFFILATION NOTICE (CAN). The CT and MRI Programs provide post-primary education and clinical experience to qualified ARRT(R) registered technologists. The DMI, CT, and MRI programs are accredited by the Accrediting Commission of Community and Junior Colleges of the Western Association of Schools and Colleges. Graduates of all LBCC Imaging Programs qualify to sit for the American Registry of Radiologic Technology (ARRT) examinations in the specific modality. JRCERT Accreditation status for the DMI Program is "application in progress"

DMI PROGRAM GOALS:

1. Students will have the expertise and skills to competently and safety perform radiographic procedures.
2. Students will be able to demonstrate professional and ethical behaviors.
3. Students will develop the skills necessary to effectively communicate in a variety of healthcare settings.
4. Students will be able to demonstrate independent critical thinking and problem-solving skills.

DMI Program Student Learning Outcomes (PSLOs)

1. Diagram the photographic and digital process and define the technical factors utilized in medical image formation.
2. Distinguish the fundamental structure of matter, diagram the production of x-rays, and examine how different radiographic techniques effect the resulting image on a radiograph.
3. Assess how radiation effects body systems, differentiate between different types of radiation and their effects on human tissue, and formulate ways to decrease exposure.
4. Manage proper patient positioning of the skeletal system, cranium, and viscera to achieve industry standard radiograph.
5. Demonstrate ability to properly use all equipment required to produce a diagnostic radiograph; produce an industry standard and diagnostic radiograph.
6. Demonstrate understanding of the knowledge and skills necessary to function as professional, ethical, accurate, and reliable members of the Radiology health care team.

A STRONG WORK ETHIC

A strong work ethic is vital to your success. A work ethic is a set of moral principals an employee uses in his job. Certain factors come together to create a strong work ethic.

Integrity

Integrity stretches to all aspects of an employee's job. An employee with integrity fosters trusting relationships with patients, staff technologists, and the clinical instructor.

Sense of Responsibility

A strong sense of responsibility affects how an employee works and the amount of work they do. When the employee feels personally responsible for her job performance, they show up on time, put in their best effort and complete projects to the best of their ability.

Emphasis on Quality

Some employees do only the bare minimum, just enough to keep their job intact. Employees with a strong work ethic care about the quality of their work. They do their best to produce great work, not merely churn out what is needed. The employee's commitment to quality improves the company's overall quality.

Discipline

It takes a certain level of commitment to finish your tasks every day. An employee with good discipline stays focused on his goals and is determined to complete his assignments. These employees show a high level of dedication to the company, always ensuring they do their part.

Sense of Teamwork

Most employees have to work together to meet their objectives. An employee with a high sense of teamwork helps a team meet its goals and deliver quality work. These employees respect their peers and help where they can, making collaborations go smoother.

A guide to success in the DMI Program

Much of any radiography student's ability to be hired will be determined during the clinical rotation while in school.

Things that will get you in trouble, give you a bad reputation, and /or get you dismissed from the LBCC DMI PROGRAM (full list see DMI Program Policies):

- Argumentative dialogue
- Defensive when given constructive criticism
- Getting comfortable with the staff technologists
- Cherry picking exams to be done
- Elitists attitude
- A sense of entitlement.
- Poor retention
- Lack of improvement
- Poor customer service
- Any patient safety violation

Things to do consistently:

1 **Communication** – should be clear and concise. The first thing a technologist will note about a student is whether or not they can take instruction and utilize the knowledge given to them to consistently make improvements. Not every tech has the mindset to ambitiously share their knowledge teaching, so be a good listener and take any instruction given into practice. The ability to communicate with patients is just as important for high quality patient care. Remember that the way you correspond via phone, social media and e-mail and how you conduct yourself in person potentially indicate to an interviewer how you might communicate with patients and coworkers. Lastly, be humble when communicating.

2 **Initiative** – always keep busy. Find out where you can make the best contribution to the day's tasks. If the department is slow, make sure you are doing something like cleaning or stocking supplies, and keep your eyes open for exams and volunteer to perform them. Answer the phone when you can. You may not have the answers right away for questions being asked, but neither will a new technologist. Learn how to make maximum use of software like how to edit and cancel exams. Learn the workflow and how to send for patients. Get experience watching and performing quality control testing, how to check off crash carts, or any other daily duty you can think of which would be required of a staff technologist. Mastering the skills that would be expected of a new hire will give you a competitive edge.

3 **Progress in technical skills** – no one expects you to be super tech, but you should be making regular progress toward becoming competent in every procedure performed at your clinical site. Everyone has that one particular exam that seems difficult and we tend to shy away from those. Don't. Grab the bull by the horns and don't be afraid to learn other ways to attempt that exam from the variety of technologists who feel comfortable doing it. You may end up liking that particular procedure and helping a future student to succeed in that area. And I can't stress this enough; learn your way around a c-arm. It can be intimidating for any technologist with any level of experience to perform a surgical procedure with physicians you are unfamiliar with, but having the basic knowledge of equipment controls is more than 50% of the battle, so get as much as you can from your clinical internship in this area. There's something new to learn every day as a technologist… look for those opportunities.

4 **Good attitude** – technical skills can be taught for most people, but being professional and having a good attitude in general will win you many points with those you work with. Everyone has problems, life challenges and difficulties, but if you complain all day long or get easily distracted from your work regularly, no one will want you on their team. If you've ever worked any job, you can probably think of at least one person like this. There's an appropriate time and place for complaints, but be ready to present a solution and possess the willingness to take an active part in that solution.

5 **Keep an open mind** – most students hope they get hired by the site they're at for their clinical rotations, but this can't always happen, especially in the competitive job market of today. You may end up having to travel, work an undesired shift, or work without benefits for a period of time. This is why you need to network. It really is a "small world after all". Many radiologic technologists work a second job or know people at other hospitals, outpatient centers, or doctor's offices. It is extremely common for an employer to call on a fellow technologist for a reference check or ask if they know someone interested in a job. Another scenario, that happens often, is an employer will call a radiologic technologist where the applicant performed their clinical rotation and ask "how did they perform as a student radiographer". As they say "don't burn your bridges" Or in other words, you never know when you will need your previous coworker or place of employment, so don't create an irrevocable situation

The recommendation for a DMI student seeking employment as a radiologic technologist would include working hard to prove your value and worth to the team. Students should take pride in their work, and that your work will speak for yourself. They should strive to be punctual, to display a good attitude, and to practice excellent communication skills. To demonstrate integrity in all aspects of the profession is of utmost importance. Above all, displaying the willingness to always improve and learn is essential even after you pass your ARRT exam. A strong work ethic, professionalism, and outstanding character will lead to a many job opportunities, career advancements, and financial stability. Having a good reputation and practicing to the highest level of your skills makes you a great candidate for getting hired and maintaining a job.

Clinical Schedule

Semester	Competencies / ARRT Exam Review /Required Hours	Staff Evaluations
Winter 1st Year	Clinical Objectives, Patient Care Competencies (except for venipuncture)	2
Spring 1st Year	12 competencies	3
Summer 2nd year	10 competencies / Wednesdays ARRT review / Adaptive Quizzing **Level One**	2
Fall 2nd Year	15 competencies/ Wednesdays ARRT review / Adaptive Quizzing **Level Two** / HESI Mid-Program Simulated ARRT Registry Exam / DMI 222 - 10 venipuncture competencies	3
Winter 2nd Year	Adaptive Quizzing Assignments / Extended clinical throughout winter session 3 days per week	1
Spring 2nd Year	14 competencies and Adaptive Quizzing **Level Three** DMI 14 HESI Final Simulated ARRT Registry Exam	3

GRADING CRITERIA PER SEMESTER

DMI 40A	Staff Evaluations	*	60% (2@30%each)
	Competencies ++		10%
	Seminar reports		10%
	Objectives		10%
	Attendance		10%
DMI 40B	Staff Evaluations	*	60% (3@20%each)
	Competencies		20%
	Attendance		10%
	Seminar reports		10%
DMI 40C	Staff Evaluations	*	60% (2@ 30%each)
	Competencies		20%
	Attendance		10%
	Seminar reports		10%
DMI 40F	Staff Evaluations	*	80%
	Attendance		10%
	Seminar reports		10%
DMI 40D and E	Staff Evaluations	*	60% (3@20%each)
	Competencies **		20%
	Attendance		10%
	Seminar reports		10%

*Students must pass staff evaluations with a semester average of 75% or better to pass the course.
++ Patient care competencies
** Includes venipuncture competencies
(Mid-Semester self-evaluations due in DMI 40B, 40C, 40D, 40F, and 40E)

Clinical days are as follows:

1) First Year

- **DMI 40A – (120 hours clinical / plus critique)** DMI 40A – (120 hours clinical / 8 hours lecture) During the 5 week winter session, the student will work 24 clinical hours per week -actual shifts TBD by the clinical site / instructor. Students will meet twice on Wednesdays on campus for a clinical review course TBD.

- **DMI 40B (384 hours clinical / plus critique)** – During the 16 week spring semester, the student will work 24 clinical hours per week and attend a clinical review class on Wednesdays TBD. If a student misses a Wednesday critique, they must work an additional 4 hour shift. The shifts are usually Mondays , Wednesdays, and Fridays 8 hours each day - actual shifts TBD by the clinical site / instructor. All DMI 40B students are off on Friday and Monday of Presidents' Day weekend. DMI 40B students are also off Memorial Day Monday as well as any floating flex day that falls on a Monday, Wednesday, or Friday. Even though the student is off on holidays - they still must average 24 hours per week for a total of 384 hours for DMI 40B. Students may work on holidays, Sundays, or school break with the permission of the clinical instructor and the Program Director.

2) Second Year

- **DMI 40C (304 hours clinical / plus critique)** – During the 10 week summer session, the student must attend Wednesday Clinical review class TBD. The student must also work an average of 36 eight hour shifts during the 10 week summer session -actual shifts TBD by the clinical site / instructor. July 4th is a holiday. Students may work on holidays, Sundays, or school break with the permission of the clinical instructor and the Program Director. If a student misses a Wednesday critique, they must work an additional 4 hour shift during the 10 week summer session.

- **DMI 40D (512 hours clinical / plus critique)** –During the 16 week Fall semester, the student is scheduled Monday thru Saturday for a total of 32 hours/ week average - actual shifts on TBD by the clinical site / instructor.
  The student must attend a Clinical review class on Wednesdays TBD. If a student misses a Wednesday critique, they must work an additional 4 hour shift. at 3pm.
  Students will be off Labor Day, Veterans Day, Thanksgiving Day, and the Friday after Thanksgiving Day. In addition, students will be off on the Fall semester's FLEX day. Even though the student is off on holidays - they still must average 32 hours per week for a total of 512 hours for DMI 40D. Students may work on holidays, Sundays, or school break with the permission of the clinical instructor and the Program Director.

- **DMI 40F (136 hours clinical / plus critique) –** During the 5 week winter session, the student will work 24 clinical hours per week -actual shifts on TBD by the clinical site / instructor. Students will meet twice on Wednesdays on campus for a clinical review course TBD. Students may work on holidays, Sundays, or school break with the permission of the clinical instructor and the Program Director.

- **DMI 40E (512 hours clinical / plus critique)** ––During the 16 week Spring semester, the student is scheduled Monday thru Saturday for a total of 32 hours/ week average -actual shifts TBD by the clinical site / instructor. The student must attend a Clinical review class on Wednesdays TBD. If a student misses a Wednesday critique, they must work an additional 4 hour shift. Students will be off Spring Break, presidents day Friday/Mondy, and Memorial day. In addition, students will be off on the Spring semester's FLEX day.
  Even though the student is off on holidays - they still must average 32 hours per week for a total of 512 hours for DMI 40E. Students may work on holidays, Sundays, or school break with the permission of the clinical instructor and the Program Director.

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RADIOLOGY CLUB – Alpha Beta Gamma ABG XRAY

1. Each class level will choose 2 student representatives and one alternate who speak for the class at the various meetings and functions. The faculty club advisor is the Program Director.

2. Meetings should be student instigated but directed by the faculty club advisor and should be educational in nature and supplement the instructional program.

3. Fund-raising club functions should be promoted to provide funds for identified activities such as the graduation banquet.

SCHOLARSHIPS OR STUDENT GRANTS

1. The Radiologic Technology program scholarships available, specifically for Rad Tech students. Scholarship information and applications will be coordinated through LBCC office of grants and scholarships. It is the student's responsibility to submit completed applications within the designated deadlines.

2. Rad Tech students are also eligible for the following scholarships:

    1) General scholarships offered through LBCC foundation.
    2) Radiologic technology professional organizations such as American Society of Radiologic Technologists (ASRT). Call ASRT (800) 444-ASRT for further information.
    3) Other entities such as Kaiser Permanente.

JOB OPPORTUNITIES

Each instructor should assist students in finding jobs where possible and should share student need and placement with other staff.

LBCC Allied Health Imaging Programs

Standards of Student Conduct (from the LBCC Allied Health Website)

These standards of student conduct and disciplinary action for violation of rules were established by a student-college staff committee in compliance with section 22635 of the State Educational Code, printed and distributed for students' information and guidance. Students shall respect and obey civil and criminal law and shall be subject to the legal penalties for violation of the laws of the city, county, state and nation. Student conduct at Long Beach City College must conform to district policy and regulations and college procedures. Violations, for which students are subject to disciplinary action, include but are not limited to the following:

1. Willful disobedience to directions of college officials (including faculty) acting in the performance of their duties.
2. Violation of college rules and regulations, including those concerning student organizations, the use of college facilities or the time, place and manner of public expression or distribution of materials.
3. Dishonesty, such as cheating or knowingly furnishing false information to the college.
4. Forgery, alteration or misuses of college documents, records or identification.
5. Unauthorized entry to or use of the college facilities.
6. Obstruction or disruption of classes, administration, disciplinary procedures or authorized college activities.
7. Theft or damage to property belonging to the college, a member of the college community on campus or at a campus activity or a visitor to the campus.
8. Disorderly, lewd, indecent or obscene conduct, including profanity.
9. Conduct which disrupts orderly operation of the college, or which disrupts educational activities of individual members of the college community including, but not limited to, the harassment of another member of the college community based on race, religion, national origin, gender, sexual orientation or any other legally protected status.
10. Use, possession, distribution or being under the influence of alcoholic beverages, illicit drugs or other controlled substances while on campus or in connection with college activities.
11. Assault or battery, abuse or any threat of force or violence directed toward any member of the college community or campus visitor engaged in authorized activities.
12. Possession, while on the college campus or at a college sponsored function, of any weapons (except by persons given permission by the superintendent- president or members of law enforcement agencies, such as police officers acting in their capacity as officers).
13. Possession of any article, not usually designated as a weapon, when used to threaten bodily harm.
14. Misuse of any computer technology, including equipment, software, network or Internet access. This includes non-compliance with any policy, regulation, rule or guideline developed by any segment of the College which relates to computer technology.

Campus Rules

1. Smoking is prohibited in all buildings.

2. Eating and drinking are prohibited in all buildings except where food is sold or is part of an approved and scheduled activity.

3. Gambling on the campus is prohibited. Gaming is restricted to the PCC Student Lounge and the LAC Activities Room.
4. Animals not indigenous to the campus grounds are not allowed on campus. Exceptions shall be made for certified companion animals and those animals previously approved by college officials for specific educational purposes.
5. Literature to be distributed must be approved in the Office of Student Life.
6. Children are not allowed on campus unless under the supervision of a parent/guardian or are officially enrolled in an approved college program. Children may not attend classes with a parent/guardian unless the course is specifically designed to include children. Children must be supervised so educational activities are not interrupted and may not be left unattended in common areas, such as the library, computer labs, cafeterias, quads or lounges.
7. Unauthorized vehicles (vehicles without a parking permit) must use visitor parking or purchase a one-day parking permit.
8. Students are required to be fully attired, including shirts or blouses and footgear.
9. Skateboarding, skating and bike riding are prohibited on campus grounds, officers will cite any violations.
10. The use of radios, electronic recording devices, tape or compact disc players without headphones is prohibited on campus except in connection with approved campus/classroom activities.
11. Electronic recording devices may not be used in classrooms without the permission of the instructor

STANDARDS OF ETHICS OF THE
AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS

A: CODE OF ETHICS

This CODE shall serve as a guide by which Radiologic Technologists may evaluate their professional conduct as it relates to patients, colleagues, and other members of the medical care team, health care consumers and employers. The CODE is intended to assist radiologic technologists in maintaining a high level of ethical conduct.

1. The Radiologic Technologist conduct himself/herself in a professional manner, responds to **patient's needs,** and supports colleagues and associates in providing quality patient care.

2. The Radiologic Technologist acts to advance the principle objective of the profession to **provide services** to humanity with full respect for the dignity of mankind.

3. The Radiologic Technologist **delivers patient care** and service unrestricted by the concerns of personal attributes of the nature of the disease or illness, and without discrimination regardless of sex, race, creed, religion, or socioeconomic status.

4. The Radiologic Technologist practices technology founded upon theoretical knowledge and concepts, utilizes equipment and accessories consistent with the purpose for which they have been designed, and **employs procedures and techniques appropriately.**

5. The Radiologic Technologist assesses situations, exercises care, **discretion and judgment, assumes responsibility for professional decisions**, and acts in the best interest of the patient.

6. The Radiologic Technologist acts as an agent through **observation and communication** to obtain pertinent information for the physician to aid in diagnosis and treatment management of the patient, and recognizes that interpretation and diagnosis are **outside the scope of practice for the profession.**

7. The Radiologic Technologist utilizes equipment and accessories, employs techniques and procedures, performs services in accordance with an accepted standard of practice and **demonstrates in limiting the radiation exposure to the patient, self and other members of the health care team.**

8. The Radiologic Technologist **practices ethnical conduct** appropriate to the profession, **protects the patient's rights** to quality radiologic technology care.

9. The Radiologic Technologist **respects confidence entrusted** in the course of professional practice, respects the patient's right to privacy, and reveals confidential information only as required by law or to protect the welfare of the individual community.

10. The Radiologic Technologist continually strives to improve knowledge and skills by participating in educational and professional activities, sharing knowledge with colleagues and investigating new and innovative aspects of professional practice. One means available to improve knowledge and skill is through professional **continuing education.**

STANDARDS OF ETHICS OF THE
AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS

B: RULES OF ETHICS

The Rules of Ethics form the second part of the **Standard of Ethics.** They are mandatory and directive specific standards of minimally acceptable professional conduct for all present Registered Technologists and Applicants. Certification is a method of assuring the medical community and the public than an individual is competent to practice within the profession. Because the public relies on certificates and registration issued by the ARRT, it is essential that Registered Technologists and Applicants act consistently with these rules of Ethics. These Rules of Ethics are intended to promote the protection, safety and comfort of patients. **The Rules of Ethics are enforceable.**

1. **Compliance with State and Federal Law.**
   A Registered Technologist or Applicant shall abide by state and federal laws. A conviction of, or a plea of guilty to, or a plea of nolo contender to a crime which either is a felony or is a crime of moral turpitude is a violation of this rule.

2. **Maintenance of Valid State License or Registration.**
   A Registered Technologist or Applicant shall at all times maintain a valid sate license or registration to the extent required in the location(s) where the Registered Technologist or Applicant practices, and it shall be a violation of this Rule if the Registered Technologist's or Applicant's license or registration with any state is to any extent whatsoever revoked, suspended, conditioned, limited, qualified, subject to terms of probation, or restricted by a court, department, board, or administrative agency. A failure to comply with this Rule shall result in automatic denial of an Applicant's application for examination and certification by ARRT or in automatic revocation of the Registered Technologist's certification and registration with ARRT, as the case may be, unless the Registered Technologist or Applicant, by clear and convincing evidence, demonstrates that such denial or such revocation by ARRT would be clearly inappropriate. Decisions by ARRT are final.

3. **Duty to Submit Truthful Information to ARRT.**
   A Registered Technologist or Applicant shall not submit any false or misleading information to ARRT in connection with any application or other information submitted to ARRT.

4. **Appropriate Patient Care.**
   A Registered Technologist or Applicant shall provide appropriate patient care, and depending on the specific facts and circumstances of the allegedly standard or inappropriate care, the failure to do so may be a violation of this Rule.

5. **The Impaired Registered Technologist or Applicant.**
   A physically, mentally or emotionally impaired Registered Technologist or Applicant should withdraw from those aspects of practice affected by the impairment. If the Registered Technologist or Applicant does not withdraw, it is the duty of the other Registered Technologists or Applicants who know of the impairment to take action to assure withdrawal of the impaired Registered Technologist or Applicant.

PROGRAM COMPLETION REQUIREMENTS

The Rad Tech program is an associate degree program that requires the student to successfully complete **both** program requirements and general education requirements (minimum LBCC GE PLAN). **NO STUDENT WILL BE PERMITTED TO SIT FOR THE ARRT REGISTRY EXAM UNTIL BOTH OF THE ABOVE REQUIREMENTS HAVE BEEN MET. The graduation office determines eligibility for program completion and AS degree.** If the student is declared ineligible for program completion, the student will not be able to apply and/or sit for the ARRT exam until all deficiencies has been met.

To ensure eligibility, each student will have a pre-selection check prior to being eligible to enter the DMI program. Any deficiencies noted at that time must be addressed and resolved before the start of the DMI Program. Failure to comply with this policy will result in the student being declared ineligible for program selection.

Upon satisfactory program completion and verification of such, the appropriate program documents will be released. The state CRT license will be sent directly to the student from the Department of Public Health (Radiologic Health Branch), **only after** verification from the American Registry of Radiologic Technologists (ARRT) that the registry exam has been passed. Program completion documents are available at the end of the DMI program only upon verification of successful completion of all required program **and** AS courses. The associate degree will be sent to the student from the graduation office at the college. Release of these documents will be done in a timely manner, however, verification of program completion must be completed before any document release. The student should realize that **not all** documents will be available on last program day. **A three to six week delay** could occur. Students are advised not to accept employment until they have received their ARRT, state CRT license, and state Fluoroscopy permit. The Rad Tech program only has responsibility for verification of program completion. Final verification is the responsibility of the GRADUATION OFFICE.

_____	_____	
Student Name (please print)	Student Signature	Date

CREDENTIALING

CREDENTIALING of health manpower takes four forms - **accreditation** of educational programs, **certification/registration** of personnel by the profession, and **licensure** by a government agency. The three aspects are closely interrelated. State practice acts, establishing the procedures for licensing, usually contain educational requirements. Professional associations, too, usually require that the applicant satisfy certain educational qualifications. For purposes of clarity, the following definitions are presented:

* ***Accreditation*** - The process by which an agency or organization evaluates and recognizes an institution or program of study as meeting certain predetermined criteria or standards. Long Beach City College is accredited by the the Accrediting Commission of Community and Junior Colleges of the Western Association of Schools and Colleges and California Department of Health - Radiologic Health Branch.

* ***Licensure*** - The process by which a **government agency** permission to persons to engage in a given profession or occupation by certifying that those licensed have attained the minimal degree of competency necessary to ensure that the public health, safety, and welfare will be reasonably well protected. All practicing technologists and physicians are licensed by the California Dept. of Public Health, Radiologic Health Branch. In addition, all LBCC DMI Program affiliated clinical sites are also licensed by the CDPH-RHB.

* ***Certification*** - The process by which a **nongovernmental agency or association** grants recognition to an individual who has met certain predetermined qualifications specified by that agency or association. Such qualifications may include: (a) graduation from an accredited or approved program; (b) acceptable performance on a qualifying examination or series of examinations; and/or completion of a given amount of work experience. Graduates of accredited schools may apply to the **American Registry of Radiologic Technologists** for the opportunity to sit for their examination. This organization is jointly sponsored by the American Society of Radiologic Technologists and The American College of Radiology. Upon passing the ARRT exam, a person is a certified radiologic technologist (RT-R).

* ***Registration*** – This is the annual procedure **required by ARRT** to maintain initial certification. ARRT will continue to register the certification of individuals who meet the following three requirements: 1) agree to comply with the ARRT Rules and Regulations, 2) maintain the Standards of Ethics and, 3) meet the continuing education requirements of 24 hours in a two year cycle. **Only technologists who are registered** (renewed within the past year) may designate themselves as ARRT Registered Technologists and use the initials "RT" after their name.

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Successful A.R.R.T. applicants may apply for membership in The American Society of Radiologic Technologists (ASRT) and The California Society of Radiologic Technologists (CSRT). The true professional is a member of both.

APPLICATION PROCESS FOR POST PROGRAM EXAMS

Upon successful program completion, the student is eligible for the following:

1. **CRT** – Certified radiologic technologist. Certificate issued by California Department of Public Health - Radiologic Health Branch (CDPH-RHB), Sacramento
2. **Fluoroscopy** – specialized permit only recognized by California. Issued by CDPH-RHB.
3. **ARRT(R)** – National registration exam given by American Registry of Radiologic Technologists, Minnesota

The requirements for CRT and ARRT are:

1. Submit completed ARRT application signed by Program Director along with necessary fee, **prior** to program completion date. Completed application/fees **must be sent directly** to the ARRT.
2. Eligible applicant schedules ARRT exam date as directed by the ARRT. (the ARRT registry is a computer based exam). Test date, time and location is scheduled at the convenience of the student however, the ARRT **cannot be taken until all program requirements including clinical hours and AS degree have been completed.** The student has a 90-day window from program completion date within which to take the ARRT.
3. The ARRT will notify the student of their score. The student will then need to send a copy of the ARRT and CRT application (Form CDPH 8200) to the RHB. RHB will **mail directly** to the graduate the CRT license.
4. You will also need to complete the requirements for a Fluoroscopy Permit below.

The requirements for the state fluoroscopy permit are:

1. Submit completed Fluoroscopy application (Form CDPH 8228), fee, School Completion Certificate, copy of ARRT Certification, and a complete CRT (Form CDPH 8200) directly to RHB.
2. CDPH - RHB will take 4-6 weeks to process both CRT and Fluoroscopy permit applications.
3. The Graduate will need all three ARRT, CRT, and Fluoroscopy permit to leagally work in the state of California.

Note: 1. Before any exam results are released, the Program Director must sign verification of student's satisfactory completion of all program requirements. The Program Director must also sign exam applications as verification of achievement by each student.

2. Eligibility to set for the above noted post-program examination and issuance of said certifications and licensure is not the responsibility of the Program. The graduating student must meet the eligibility requirements set forth by the responsible entity.

_____	_____	_____
Student Name (please print)	Student Signature	Date

NOTE: At the end of each academic year the Program will submit an Approved School Students Report for both Radiologic Technology and Fluoroscopy to the CDPH-RHB as directed in CCR, title 17, section 30435.

Outcomes Upon completion of the course the student should be able to:

1. Demonstrate ability to properly use all equipment required to produce a diagnostic radiograph.
2. Assess a patient's information, formulate the proper technical factors required to produce a diagnostic image, and appraise the resultant image.
3. Assemble repeat competencies required competencies from the American Registry of Radiologic Technology.

Objectives : Upon completion of the course the student should be able to:

1. Identify the various equipment used in the Medical Imaging Department.
2. Relate the proper procedures for inputting Patient information.
3. Explain the process required to discharge patients form the Imaging Department upon completion of examination.
4. Demonstrate the proper use the equipment in the Medical Imaging Department.
5. Distinguish varying patient body habitus as it relates to the proper performance of a Radiographic exam.
6. Organize equipment needed and set up the Imaging suite for each exam.
7. Select the proper parameters to successfully create a diagnostic radiograph.
8. Illustrate the chain of command within the Imaging Department and the Clinical facility.
9. Discuss ways to work within an ever changing work environment and adapt to work load.
10. Demonstrate the interpersonal skills required to work with Radiologists and Clinical Staff.

OUTCOMES ASSESSMENT

Accreditation requires that the Program maintain a policy of constant outcomes assessment. There will be surveys for each didactic class you enroll in; including those with labs. Additionally, you will complete a survey about your clinical education and experiences.

During DMI 40 B, C, D, F, and E you will complete a Mid-Semester Evaluation. These can be found on the following page.

At the completion of the Program, you will need to complete the Graduate Exit Survey and return it with your clinical paperwork. This survey is at the end of this section.

In the Spring, after graduation, you will be asked to complete a 9 Month Follow-up Survey. This survey assesses the graduates opinions about the Program after they have been employed.

Should you have any questions regarding Outcomes Assessment fell free to talk the faculty about them.

Name:_____ Facility:_____

(SELF)
MID SEMESTER EVALUATION
(Circle one) DMI 40B 40C 40D 40F 40E

Directions: In narrative form, the student is to comment on their mid-semester clinical performance in the following areas:

1) Technical Skills –

2) Attitude and Professional Behavior –

3) Attendance and Dependability –

4) Professional Appearance –

Identify strengths:

Identify weaknesses :

List specific goals the YOU should achieve for the remaining eight weeks of the semester:

1.

2.

3.

(below this line to be completed by your clinical instructor)

Based upon the above comments and observation of student's clinical performance, the student is performing: below average / average / above average
This written clinical assessment should be placed into the student clinical notebook.

_____ _____
Clinical Educator's Signature Date

_____ _____
Student's Signature Date

CI's Comments:_____

Long Beach City College
DMI program

GRADUATE EXIT SURVEY **Date of Graduation:**_____

The purpose of this graduate exit survey is to assess the program's effectiveness in meeting our standards and goals by soliciting graduate's input.

Please answer the following questions about the program. The information provided will assist the faculty in determining how well the program has met your needs. All information will be kept confidential.

The Rad Tech faculty wishes you much success as you pursue your career!

1. Has the program adequately prepared you with the skills and knowledge to perform as a radiographer?

2. What specific Rad Tech courses do you think were successful in assisting you with your career goals?

3. What specific Rad Tech courses do you think need to be changed? Identify what changes should be made.

4. On a scale of 1 to 5 (five is best), rate your clinical educator:

5. Are any specific changes needed for clinical education experience?

6. Have you been offered employment? If yes, where?

7. Are you contemplating advanced training or education? Please identify specifics.

8. What suggestions do you have for program improvement?

MONTHLY ATTENDANCE RECORD

In order for you to complete the Radiologic Technology program, it is **required** that you document the number of hours in the clinical phase of your training. The attendance procedure is listed below.

1. At the beginning of each shift **YOU MUST SIGN IN** with the appropriate confirmation / signature..

2. At the end of each shift , **YOU MUST SIGN OUT** with the appropriate confirmation / signature.

3. Report directly to the supervisor for your specific work assignment. Although these are posted in monthly increments, they are subject to change as the workload changes.

4. **Failure to sign in and out will result in being marked absent for that clinical day.**

5. If you are unable to report for duty for reasons of illness or emergency, you are required to call in at least 30 minutes before the start of your assignment. Arrange for make-up duty with the clinical educator following the DMI Program Policies and Procedures. **All make-up time must be in writing**. Make-up days must be completed before semester end.

6. Any variation in your clinical schedule must be **submitted in writing** and approved by the clinical educator **before** the schedule change can occur.

7. Excessive absences may result in a lower grade and potentially program dismissal. (This does not apply to documented illness or emergency situations.) Should this occur, students may pursue the grievance process as stated in the college catalog.

8. In addition, per program policy, students must make up time missed arriving late to clinical.

9. The clinical educator and or school faculty are responsible for verifying the hours and makes an evaluation of your progress. The recording and verificatio/signature of your daily and total hours are the responsibility of the student.

10. Students are required to complete the CDPH-RHB 1850 hour required minimum clinical training. At LBCC we have a total of 1936 required hours plus lab and plus critique. Only "real Clinical hours are valid toward the state and program requirement.

11. Failure to follow the above policy will result in a critical incident to be filed.

12. The monthly attendance record is considered the permanent documentation of the number of clinical hours you have completed. Falsifying these records is grounds for **automatic dismissal** from the Diagnostic Medical Imaging program. These records are used during state and accreditation audits.

_____ _____

Student signature Date

DAILY CLINICAL CASE RECORD

It is **required** that you keep a record of the kinds and numbers of examinations you perform during your clinical training. Some cases you will perform independently, some with a varying amount of supervision, and in some instances, you will perform as a technologist team member. It is vital that you have a broad and varied clinical training experience. By keeping a day-to-day, month-to- month accounting of your experiences, you will be able to readily identify any voids in your clinical practicum.

1. Students should record exams on a paper or a small spiral note book (recommended). Keep one in your pocket and check off each case you perform or participate in.
2. On a daily or weekly basis, transfer the day slip information onto the provided indirect or direct supervision log sheets in this student manual.
3. Although your hospital attempts to provide you with learning experiences that are compatible with the objectives for each clinical course, your personal record keeping will reveal to you whether or not you are experiencing a well-rounded education.
4. Each student must assess his/her progress, identify voids, and aggressively assert himself/herself when the case assignments are made.
5. The student SHOULD NOT hand record cases that were observed ONLY.
6. ***If the student performed 75% or more of the procedure, the student may record the case on the Log Sheets under DIRECT Supervision***
7. ***If the Student performs an exam in which they have a competency recorded AND perform 75% or more, the student may record the case on the Log Sheets under INDIRECT Supervision***
8. *Additional documentation on the clinical case record may include the exam case number and/or repeat reason with Direct supervision Technologists initials.*
9. All repeat radiographs must be verified by the technologist who directly supervised the repeat film. Their initials are written next to the number of repeated films needed to be taken.

CLINICAL EDUCATION – RADIOGRAPHIC PROCEDURES

The following are the CDPH-RHB recommendations regarding clinical education and number of procedures performed.

1. It is understood that most, but no necessarily all, of the procedures listed below will be carried out in medical health care facilities.

2. Each student **shall keep adequate records** of procedures assisted and performed.

3. The total number of procedures assisted or performed by each student should be as indicated below.

4. "Each phase of clinical procedures" means each position or procedure listed below that requires specific and distinct positioning or selection of technique.

Categories	Procedures	Number of Procedures	
		Minimum	Optimum
Chest	Lungs, Heart	200	400
Musculo-Skeletal	Upper extremities including shoulder girdle (80), lower extremities (60), spine including pelvis and hips (90), rib cage and sternum (20)	250	450
Skull	Skull, sinuses, facial and nasal bones, mandible, mastoids, TMJ	175	250
Gastro-Intestinal	Esophagus, upper gastrointestinal tract, small bowel, colon, cholecystography	110	200
Genito-Urinary	Urography (excretory, retrograde), KUB cystogram urethrogram	85	150
Vascular Studies	Angiography, aortography, arteriography, venography, lymphangiography	10	50
Contrast Studies	Myelography, bronchography sialography, hysterosalpinography, arthrography	20	100

Categories	Procedures		Number of Procedures Minimum	Optimum
Special Studies	Tomography, eye foreign body localization, cineradiography, mammography		30	100
Surgical procedures			20	50
Portable (emergency) procedures			50	100
		Total	950	1,850

RECOMMENDED NUMBER OF EXAMS
PERFORMED BY THE STUDENT THROUGH THE TOTAL PROGRAM

Region	Minimum Recommended # of Examinations	Total Recommended # of Examinations
UPPER EXTREMITIES		100
Finger or thumb	10	
Hand	10	
Wrist	10	
Forearm	10	
Elbow	10	
Humerus	10	
SHOULDER		40
Shoulder joint	10	
Acromioclavicular joint	5	
Scapula	10	
Clavicle	10	
Sternoclavicular joint	5	

RECOMMENDED NUMBER OF EXAMS - continued

Region	Minimum Recommended # of Examinations	Total Recommended # of Examinations
LOWER EXTREMITY		100
Toes	5	
Foot	5	
Calcaneus	5	
Ankle	10	
Leg	10	
Knee	10	
Patella	10	
Femur (lower 2/3)	10	
PELVIC GIRDLE		40
Pelvis	10	
Sacroiliac joints	5	
Hip joint	10	
Upper femur	5	
VERTEBRAL COLUMN		100
Cervical spine	15	
Thoracic spine	15	
Lumbar spine	15	
Sacrum	5	
Coccyx	5	
Scoliosis series	10	
THORACIC CAGE		250
Sternum	5	
Ribs	15	
Lungs	200	
Cardiac series	10	

ARRT Clinical Competency Requirements pg 28 and pg 29

Radiography-Specific Requirements
As part of the education program, candidates must demonstrate competence in the clinical procedures identified below. These clinical procedures are listed in more detail in the following sections:

- Ten mandatory general patient care procedures;
- 36 mandatory imaging procedures;
- 15 elective imaging procedures selected from a list of 34 procedures;
- One of the 15 elective imaging procedures must be selected from the head section; and
- Two of the 15 elective imaging procedures must be selected from the fluoroscopy studies section.

Student:_____

Radiographic Imaging Procedures	Mandatory or Elective		Eligible for	Patient or	Date	Competence
	Mandatory	Elective	Simulation	simulation	Completed	Verified By
Chest and Thorax						
Chest Routine	x			P		
Chest AP (Wheelchair or Stretcher)	x			P		
Ribs	x		x	P S		
Chest Lateral Decubitus		x	x	P S		
Sternum		x	x	P S		
Upper Airway (Soft-Tissue Neck)		x	x	P S		
Sternoclavicular Joints		x	x	P S		
Upper Extremity						
Thumb or Finger	x			P		
Hand	x			P		
Wrist	x			P		
Forearm	x			P		
Elbow	x			P		
Humerous	x		x	P S		
Shoulder	x			P		
Clavicle	x		x	P S		
Scapula		x	x	P S		
AC Joints		x	x	P S		
Trauma: Shoulder or Humerus (Scapular Y, Transthoracic or Axial)*	x			P		
Trauma: Upper Extremity (Non-Shoulder)*	x			P		
Lower Extremity						
Toes		x	x	P S		
Foot	x			P		
Ankle	x			P		
Knee	x			P		
Tibia-Fibula	x		x	P S		
Femur	x		x	P S		
Patella		x	x	P S		
Calcaneus		x	x	P S		
Trauma: Lower Extremity*	x			P		
Head – Candidates must select at least one elective procedure from this section						
Skull		x	x	P S		
Facial Bones		x	x	P S		
Mandible		x	x	P S		
Temporomandibular Joints		x	x	P S		
Nasal Bones		x	x	P S		
Orbits		x	x	P S		
Paranasal Sinuses		x	x	P S		
Spine and Pelvis						
Cervical Spine	x			P		
Thoracic Spine	x		x	P S		
Lumbar Spine	x			P		
Cross-Table (Horizontal Beam) Lateral Spine (Patient Recumbent)	x		x	P S		
Pelvis	x			P		
Hip	x			P		
Cross-Table (Horizontal Beam) Lateral Hip (Patient Recumbent)	x			P		

LONG BEACH CITY COLLEGE DMI PROGRAM
EXAM TERMINAL COMPETENCIES, COMPLETION SIGN-OFF

Student:_____

Radiographic Imaging Procedures	Mandatory or Elective		Eligible for	Patient or	Date	Competence
	Mandatory	Elective	Simulation	simulation	Completed	Verified By
Spine and Pelvis - Continued						
Sacrum and/or Coccyx		x	x	P S		
Scoliosis Series		x	x	P S		
Sacroiliac Joints		x	x	P S		
Abdomen						
Abdomen Supine	x			P		
Abdomen Upright	x		x	P S		
Abdomen Decubitus		x	x	P S		
Intravenous Urography		x		P		
Fluoroscopy Studies – Candidates must select two procedures from this						
Upper GI Series, Single or Double Contrast		x		P		
Contrast Enema, Single or Double Contrast		x		P		
Small Bowel Series		x		P		
Esophagus (NOT Swallowing Dysfunction Study)		x		P		
Cystography/Cystourethrography		x		P		
ERCP		x		P		
Myelography		x		P		
Arthrography		x		P		
Hysterosalpingography		x		P		
Mobile C-Arm Studies						
C-Arm Procedure (Requiring Manipulation to Obtain More Than One Projection)	x		x	P S		
Surgical C-Arm Procedure (Requiring Manipulation Around a Sterile Field)	x		x	P S		
Mobile Radiographic Studies						
Chest	x			P		
Abdomen	x			P		
Upper or lower extremity	x			P		
Pediatric Patient (Age 6 or Younger)						
Chest Routine	x		x	P S		
Upper or lower extremity		x	x	P S		
Abdomen		x	x	P S		
Mobile study		x	x	P S		
Geriatric Patient (At Least 65 Years Old and Physically or Cognitively Impaired as a Result of Aging)						
Chest Routine	x			P		
Upper or Lower Extremity	x			P		
Hip or Spine		x		P		
Subtotal						
Total Mandatory exams required	36					
Total Elective exams required		15				
Total number of simulations allowed			10			

* Trauma requires modifications in positioning due to injury with monitoring of the patient's condition.

_____ _____ _____ _____

Student Signature | Clinical Instructor Signature | Program Director Signature | Date

LONG BEACH CITY COLLEGE

DMI PROGRAM
TERMINAL COMPETENCIES

Patient Care Skills

Student:

Clinical Facility:

Each student is required to demonstrate competency in the following Patient Care areas. Proof of certification is acceptable (i.e. CPR certification). Items 1through 7, 9, and 10 must be completed in DMI 40A. Item 8 must be completed in DMI 222 prior to completion of the program.

General Patient Care Procedures	Date Completed	Competence Verified By
1.CPR Certified Provider:_____ Expiration Date:_____		
2. Vital Signs – Blood Pressure		
3. Vital Signs – Temperature		
4. Vital Signs – Pulse		
5. Vital Signs – Respiration		
6. Vital Signs – Pulse Oximetry		
7. Sterile and Medical Aseptic Technique		
8. Venipuncture (DMI 222)		
9. Assisted Patient Transfer		
10. Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)		

The above named student has achieved competency in all 10 Patient Care Skills areas.

_____ _____
Clinical Coordinator Signature Date

_____ _____
Program Director Signature Date

LONG BEACH CITY COLLEGE

Daily Clinical Log [Direct Supervision]

Name:_____ Clinical Site: _____

X-Ray Examination	exam Number	Supervision Required Initials of supervising staff	# Of Repeats	Repeat Reason 1 = position error 2 = **motion** 3 = artifact 4 = other (explain)	Tech Init. for Repeats	Total Films Used

LBCC DMI PROGRAM
Daily Clinical Log [In-Direct Supervision]

Name:_____ Clinical Site: _____

X-Ray Examination	Exam Number	# Of Repeats	Repeat Reason 1 = position error 2 = motion 3 = artifact 4 = other (explain)	Tech Initials for Repeats	Total Films Used

REPEAT FILM LOG SHEET

REPEAT ANALYSIS

Directions:

Every film that is taken must be documented. For example, a chest x-ray takes two films. If a student did only a chest x-ray that day, then in the first block under 1st week-daily, he should write in a "2." If he repeated one of those films, then under repeats-daily block write in "1." Do the same for the next day, week and month.

At the end of the month, count up all the films taken and how many repeats done. Divide the total number of monthly repeats **by** the total monthly films and place in last block marked percentage of repeats. This person would have a 50% repeat rate (see examples below). Complete the entries for the reminder of the month. The idea is to keep track of repeats and keep percentages low.

Repeat analysis helps the student to identify weak areas that need to be strengthened. Program requirements are no more than a 6% repeat rate that decreases to 3% repeat at program completion.

Repeat rate will be calculated as follows:

$$\frac{\text{Number of repeat IMAGES}}{\text{Number of exams multiplied by 4}} \times 100 = \text{Repeat Percentage}$$

Example # 1:

$$\frac{\text{24 repeats}}{\text{100 exams X 4}} = \frac{24}{400} = \times 100 = 6\%$$

LONG BEACH CITY COLEGE – DMI PROGRAM REPEAT LOG

Student:_____ Facility:_____

FIRST YEAR										SECOND YEAR									
	Number of Exams				Number of Repeats				% Of Repeats		Number of Exams				Number of Repeats				% Of Repeats
Week			3	4			3	4		Week				4				4	
Oct										Aug									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
Nov										Sep									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
Dec										Oct									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
Jan										Nov									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
Feb										Dec									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
Mar										Jan									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
Apr										Feb									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
May										Mar									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
JUNE										Apr									
Week	1	2	3	4	1	2	3	4		Week	1	2	3	4	1	2	3	4	
JULY										May _____ JUNE	__	__ XX	__ XX	__ XX	__	__ XX	__ XX	__ XX	_____

CLINICAL EVALUATION INSTRUCTIONS

Evaluation of the student's clinical progress is essential to his/her development as a Radiologic Technologist and should be looked upon as a positive learning tool. By identifying student strengths and building upon them, the student can better overcome potential weaknesses.

Evaluation, within any given clinical course, should occur in the following manner:

1. **Staff Evaluations**

   There are 14 staff evaluations of each DMI student throughout the program. The clinical educator will evaluate your progress during that program per your clinical schedule on page 8.

2. **Competency Practicum**

   For each proficiency exam signed off, the student must first complete a minimum of three examinations of a body area prior to procedure evaluation. – see procedure evaluation form for specific directions. The student is initially evaluated under direct supervision. After student demonstrates proficiency under direct supervision of a given radiographic procedure (as documented by signature on competency practicum), the student may perform that procedure under indirect supervision. Students are required to re-demonstrate their proficiency if a clinical instructor determines that the student has not performed to the level to maintain competency in that exam.

3. **Mid Semester Evaluation**

   During DMI 40 B, 40C, 40D, 40F, and 40E you will complete a mid- semester evaluation on yourself he purpose of this evaluation is to provide feedback to the student regarding clinical progress to date and a grade indicator. Specific goals for the remaining eight weeks will be formulated at this time. The student will also have an opportunity for discussing the results with the clinical educators.

4. **ARRT Terminal Competencies**

   For successful program completion and to meet ARRT exam eligibility requirements, student must demonstrate terminal competencies as stated on the ARRT and PT Care Skills required radiographic procedures.

A terminal competency evaluation form **must** be used to document the proficiency. This evaluation cannot be completed until the Student has completed direct and indirect procedure evaluations for the exam. Verification of the proficiency is done by signature on the terminal competencies form. If a student fails to complete these terminal competencies by the end of the last clinical course, successful program completion has not been achieved. **Clinical training will be extended and the student will be ineligible to set for the External Exam(s).**

5. **Student Evaluation of Radiology Department**

All evaluation forms are due at semester's end along with other required documentation during clinical final exam. If the college fails to receive the required clinical records, **an unsatisfactory grade is assigned**, which will bar you from program continuation.

LBCC
DIAGNOSTIC MEDICAL IMAGING PROGRAM
CLINICAL COMPETENCY EVALUATION

Student_____ Course (**Circle One)** DMI 40 B C D E Date _____

Category_____ Examination_____ ❑ Mandatory
❑ Elective

Directions: Each objective must be met (with no prompting) to achieve competency. A check signifies that the objective has been met.

I. Evaluation of Requisition and Patient Assessment

- ❑ Verifies physician order in chart or prescription.
- ❑ Evaluates appropriateness (diagnosis) for examination ordered.
- ❑ Confirms patient identification by name band or addresses patient by name.
- ❑ Reviews patient history, allergies, consent and assesses patient's condition.
- ❑ Explains procedure, confirms understanding.
- ❑ Documents and conveys pertinent information.
- ❑ Communicates post-examination instructions.

II. Room Readiness

- ❑ Prepares equipment and supplies to be used for examination.

III. Patient Care and Management

- ❑ Evaluates patient's specific needs; physical, motor sensory adaptation, cognitive and psychosocial.
- ❑ Insures patient safety, uses side rails, locks transport devices, assumes responsibility for patient's care and comfort.
- ❑ Instills confidence and establishes communication with the patient.

IV. Equipment Operation & Technique Selection

- ❑ Demonstrates working knowledge of table/tube locks, movements and button functions.
- ❑ Accurately measures anatomical part.
- ❑ Selects adequate mAs and kVp using technique chart/digital selector.
- ❑ Selects correct CR / digital selector.
- ❑ Selects technique that will optimize contrast & density for examination & patient.
- ❑ Uses proper SID/digital selector.

V. Positioning Skills

- ❑ Places patient in correct orientation.
- ❑ Properly positions anatomical part for examination requested.
- ❑ Aligns CR to part and IR/bucky.
- ❑ Assures that all unnecessary parts or artifacts are removed from field.
- ❑ Proper use of sponges, pillows, sandbags and other positioning aids.
- ❑ Places ID / orientation marker out of the area of interest.

VI. Radiation Protection: Patient, Self & Others

- ❑ Applies proper radiation protection devices.
- ❑ Uses proper beam restriction devices (collimates to the area of clinical interest).
- ❑ Selects minimal radiation technique.
- ❑ Checks for pregnancy where applicable.
- ❑ Wears personal monitoring device and uses proper personal protection devices.
- ❑ Makes exposure while observing patient.

VII. Image Evaluation

- ❑ Understands purpose of examination.
- ❑ Identify anatomy, pathology and correlates with appropriate order.
- ❑ Visible collimation to area of interest.
- ❑ Markers present and correctly represented on film.
- ❑ Appropriate radiographic digital index or S number.
- ❑ IMAGE free from artifacts and motion.

Evaluator's Comments _____

_____

_____

_____

_____

Please check the correct response: ❑ The student **<u>has achieved</u>** competency in this examination.
❑ The student **<u>has not achieved</u>** competency in this examination.

Student Comments _____

Student's Signature_____ Evaluator's Signature _____

Long Beach City College Diagnostic
Medical Imaging Program

RT 40 B-E FOR CATEGORY COMPETENCY SIGN OFF

STUDENT : _____ DATE : _____EXAMINATION : _____

The student must complete the following questions before attempting a category competency sign-off.

1. List the routine views required for this examination>

2. List any optional views that might be required to complete the examination.

3. List the cassette sizes and types required for this examination.

4. List any supplies that might / will be needed.

5. List anatomical structures/ criteria that this examination should demonstrate.

View:_____ __	View:_____	View:_____	View:_____

6. If examination requires the assistance of a Radiologist, list their preferences as to supplies views, etc.

7. Please indicate where and suggestive technique you will use.

Room: _____ (suggestive technique)	KV _____	MAS _____	DIST _____
Portable # : _____	KV _____	MAS _____	DIST _____
GRID : Yes [ ] No [ ]	KV _____	MAS _____	DIST _____

On the basis of the answers to the above questions, the student WILL / WILL NOT be allowed to sign-off on this examination. (*Additional comments are requuired if student is not allowed to do the procedure*.)

EVALUATOR'S SIGNATURE : _____

LONG BEACH CITY COLLEGE

DIAGNOSTIC MEDICAL IMAGING

CLINICAL SITE PATIENT CARE COMPETENCIES

Student_____Date _____

Clinical Affiliate _____ **Clinical course DMI 40A**

Directions: Using this checklist, evaluate student's performance in demonstrating, under direct supervision, the skills listed.

Grading Criteria: **A**=Acceptable **B**=Improvement Needed **C**=Unacceptable

Please place a check under the appropriate letter for each criteria.

	A	**B**	**C**
1. Oxygen Tanks (O_2)			
Connection to Wall Outlet	_____	_____	_____
Patient Application with mask or nasal cannula	_____	_____	_____
Off/On & Flow Rate	_____	_____	_____
2. IV Knowledge of:			
Rate of Flow (gravity), IV	_____	_____	_____
pump/fluid protocol during	_____	_____	_____
patient transportation and radiographic procedures	_____	_____	_____
3. Isolation Technique			
Portable Exams (2 man technique)	_____	_____	_____
Patient transfer	_____	_____	_____
4. Adherence to Standard Precautions			
Utilization of Supplies	_____	_____	_____
Hand washing	_____	_____	_____
5. Foley Catheter Care during patient transportation and radiographic procedures	_____	_____	_____
6. Department Emergency Codes			
Code Blue Code	_____	_____	_____
Red	_____	_____	_____
Miscellaneous Codes (please list)			
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
7. Sterile Procedures			
Gloving	_____	_____	_____
Procedure Tray Set-up	_____	_____	_____
Maintaining a Sterile Field	_____	_____	_____
Proper Disposal of Contaminated Materials	_____	_____	_____
8. Suction Equipment			
Setup and Utilization	_____	_____	_____
	A	**B**	**C**

	A	B	C
9. Body Mechanics			
Equipment-related			
Patient Transfer			
10. Crash Cart			
Location			
Purpose			
Knowledge of Contents			
11. Patient Education			
Exam Information			
Procedure Explanation			
Preps/Follow-Ups			
12. Location of Supplies			
Contrast Agents			
Housekeeping Supplies			
Linen, including Correct Disposal			
13. Radiographic Contrast Agents			
Identification of Ionic vs. Non-ionic			
Contraindications			
Adverse Reactions			
Radiology Drug Box/Emergency Kit			
14. Patient Care			
Physical and Psychological Care of Patient Confidentiality			
Adherence to HIPPA req.			

Summarize Performance: noted areas of strength and needed improvement

_____

_____

_____

_____

Scoring Criteria:

Signature of Evaluator **Date**

_____ _____

Signature of Student Date

Note: Items checked as <u>Unacceptable</u> must be retested.

Long Beach City College

RADIOLOGIC TECHNOLOGY PROGRAM

DMI 40A QUALITY CONTROL CHECK- OFF

*** must demonstrate competency during DMI 40A**

Student_____Clinical Affiliate _____

Quality control is an integral part of a Diagnostic Imaging department. High quality films are not only a result of exposure technique and positioning, but, also of accurate equipment calibration and film processor operation. The goal of a quality control program is to minimize variables in hardware performance.

Directions: Using this checklist, evaluate student's performance in demonstrating, under supervision, the skills listed.

Grading Criteria: **A**=Acceptable **B**=Improvement Needed **C**=Unacceptable

Please place a check (one) under the appropriate letter for each criteria.

	A	B	C
1. X-ray Tube Warm-up	_____	_____	_____
2. Fluoro tube Warm-up	_____	_____	_____
3. Radiographic Room Preparation	_____	_____	_____
4. Fluoro Equipment Quality Control			
Performs Required Checks	_____	_____	_____
Charts Data	_____	_____	_____
4. Quality Control/Assurance			
Phantom Analysis	_____	_____	_____
Charts Data	_____	_____	_____
Corrective Measures	_____	_____	_____
Troubleshooting	_____	_____	_____
Artifact Identification	_____	_____	_____
5. Required Equipment Quality Control/ Preventive Maintenance	_____	_____	_____
6. Repeat Film Rate			
Monthly	_____	_____	_____

Summarize Performance: note areas of strength and concern

_____

_____

_____

Signature of Evaluator Date

_____ _____

Signature of Student Date

Note: Items checked as <u>Unacceptable</u> must be retested

LONG BEACH CITY COLLEGE

DMI PROGRAM RADIOGRAPHIC ROOM / MOBILE UNIT ASSESSMENT RT40A-E

(Students MUST document acceptable performance in **EVERY** stationary or mobile radiographic apparatus that the student uses at their clinical facility)

Student_____Date _____

Clinical Affiliat_____Room #_____ Serial #_____ Type _____

Grading Criteria: **A**=Acceptable **B**=Improvement Needed **C**=Unacceptable

Directions: ***Please place a check (one) under the appropriate letter for each criteria.***

	A	**B**	**C**	**N/A**
1. Machine				
On/Off				
KV Controls MA Controls				
Time Controls MAS				
Controls				
2. Phototimers				
Chambers Density				
3. Tube Locks				
Vertical Horizontal				
Longitudinal Angulation				
Rotation Detent				
4. Bucky Locks				
Film Holder Bucky				
5. Tube Head				
Field Light Collimator Knobs				
Collimator Scale Manual				
Collimator Automatic Collimator				
6. Alignment				
Tube to Table Tube to				
Bucky				
SID (Horizontal & Vertical)				
7. Table Motion				
Vertical Longitudinal				
Lateral				
8. Other Accessories				

Evaluator's Signature_____**Date** _____

Note: Items checked as <u>Unacceptable</u> must be retested

LONG BEACH CITY COLLEGE
DIAGNOSTIC MEDICAL IMAGING PROGRAM
DMI 40A STUDENT ORIENTATION TO CLINICAL FACILITY

NAME_____ CLINICAL SITE_____

RATIONAL:
All students must be oriented to the affiliate where clinical experience is to be provided. Each student is to complete the following orientation with the assistance of the clinical educator or assigned individual.

DIRECTIONS:
As you feel you have met the statements, place a check mark in the space provided. This form must be completed and placed in the student clinical manual within 30 days from the beginning of the new rotation.

1. Parking Regulations:
   a. [ ] Includes both day time and evening rules.

2. Cafeteria Procedures:
   a. [ ] Times and duration of meals and coffee breaks.
   b. [ ] Provisions for students carrying lunches.

3. Washroom Facilities:
   a. [ ] Both male and female.

4. Locker Facilities:
   a. [ ] To include proper location for books, outer clothing, purses, and valuables storage.

5. Safety and Emergency Procedures:
   a. [ ] Fire regulations
   b. [ ] Codes (resuscitation team)
   c. [ ] Security guard services
   d. [ ] Reporting accidents and incidents
   e. [ ] Disaster plan
   f. [ ] MSDS data sheets

6. Absences or Tardiness in the Clinical Area:
   a. [ ] When to notify
   b. [ ] Where to notify
   c. [ ] How to notify

7. Location of Student Assignment:
   a. [ ] Where posted, specific objectives, etc.

8. Learning Resource Materials:
   a. [ ] Library: rules and privileges.

Student Orientation to Clinical Facility – continued

9. Orientation to Department:
   a. [ ] Review of routine views for procedures.
   b. [ ] Patient transportation procedures to and from department.
   c. [ ] Mobile unites: c-arm and portables.
   d. [ ] Location of equipment and supplies:
      [ ] Cassettes and grids
      [ ] Contrast media
      [ ] Immobilization aides
      [ ] Lead protective devices
      [ ] Lead markers
      [ ] Emergency cart/supplies
      [ ] Linens
      [ ] Other accessory items: needles, syringes, tourniquets, I.V. tubing, emesis basins, bandaging materials.
   e. [ ] Operation of special equipment:
      [ ] Monitors, I.V.'s, Oxygen, etc.

10. Introduction to Key Personnel:
   a. [ ] Radiologist(s)
   b. [ ] Chief Technologist
   c. [ ] Staff Radiologic Technologist(s)
   d. [ ] Key Ancillary Staff

11. Conference Facilities:
   a. [ ] Location of rooms

12. Communications During Clinical Assignment:
   a. [ ] Contact in case of emergency
   b. [ ] Making outside phone calls
   c. [ ] Visiting patients
   d. [ ] Contacting other students

13. Information about Hospital:
   a. [ ] History
   b. [ ] Bed capacity
   c. [ ] Administrative personnel

14. Telephone Protocol:
   a. [ ] How to answer phone

My signature below indicates that I have reviewed and understand each statement above. Should I have questions regarding any of the above, I will be sure to ask the clinical educator, department head, or other appropriate personnel for clarification prior to signature.

_____ _____ _____

Student's Signature Clinical Educator's Signature Date

DMI PROGRAM POLICIES

Long Beach City College
SCHOOL OF HEALTH AND SCIENCE

MEDICAL IMAGING SCIENCES

GENERAL POLICIES FOR THE DMI PROGRAM

PROGRAM MISSION STATEMENT

The Medical Imaging Sciences at Long Beach City College includes the Diagnostic Medical Imaging Program (DMI), the Computerized Tomography Program (CT), and the Magnetic Resonance Imaging Program (MRI). The Medical Imaging Programs provide high-quality education and clinical practicum to qualified students. The LBCC Medical Imaging Programs are responsive to the diverse needs of the local medical community. The DMI program specializes in the education and training that leads to entry-level employment as a competent, ethical health care professional, and either a Radiology Associate of Science degree or Certificate of Achievement awarded. The DMI program emphasizes the necessity of professional development and life-long learning. The Medical Imaging Programs at Long Beach City College adheres to non-discriminatory policies and provides equal opportunities in educational programs and to all students enrolled in these programs, regardless of ethnic, sexual, or socioeconomic background

Accreditation

The DMI program is approved by the California Department of Public Health – Radiologic Health Branch (CDPH-RHB). Each clinical facility affiliated with the DMI Program must maintain compliance with all regulatory requirements of the CDPH- RHB. Each facility must prominently display the CDPH-RHB CLINICAL AFFILATION NOTICE (CAN). The CT and MRI Programs provide post-primary education and clinical experience to qualified ARRT(R) registered technologists. The DMI, CT, and MRI programs are accredited by the Accrediting Commission of Community and Junior Colleges of the Western Association of Schools and Colleges. Graduates of all LBCC Imaging Programs qualify to sit for the American Registry of Radiologic Technology (ARRT) examinations in the specific modality. JRCERT Accreditation status for the DMI Program is "application in progress"

DMI PROGRAM GOALS:

1. Students will have the expertise and skills to competently and safety perform radiographic procedures.
2. Students will be able to demonstrate professional and ethical behaviors.
3. Students will develop the skills necessary to effectively communicate in a variety of healthcare settings.
4. Students will be able to demonstrate independent critical thinking and problem-solving skills.

DMI PROGRAM STUSENT LEARNING OUTCOMES (PSLOs):

1. Diagram the photographic and digital process and define the technical factors utilized in medical image formation.
2. Distinguish the fundamental structure of matter, diagram the production of x-rays, and examine how different radiographic techniques effect the resulting image on a radiograph.
3. Assess how radiation effects body systems, differentiate between different types of radiation and their effects on human tissue, and formulate ways to decrease exposure.
4. Manage proper patient positioning of the skeletal system, cranium, and viscera to achieve industry standard radiograph.
5. Demonstrate ability to properly use all equipment required to produce a diagnostic radiograph; produce an industry standard and diagnostic radiograph.
6. Demonstrate understanding of the knowledge and skills necessary to function as professional, ethical, accurate, and reliable members of the Radiology health care team.

RADIOLOGIC TECHNOLOGY PROGRAM STANDARDS

No applicant shall be admitted who has not met the academic, physical/mental health, and immunization requirements outlined in the college catalog or as determined by the program.

Applicant must not be under the treatment for substance abuse currently, nor within the six months prior to the date of application. It is the intention of the Long Beach City College DMI Program to provide an environment that maximizes academic achievement and personal growth. The District recognizes that alcohol and other drug use or abuse poses a significant threat to the health, safety and well-being of users and the people around them. LBCC is committed to a drug- free campus so that students and staff can work in a drug-free environment. There are state laws and the College Code of Conduct, which specifically prohibit the use, possession, distribution, or sale of drugs or alcohol on college property or any **college sponsored activity or event**. District policy prohibits the use of alcohol and other drugs on District property regardless of its location. The use of tobacco is also prohibited in all District buildings and vehicles.

The College and program also have a zero tolerance policy regarding the possession or use of any weapon while on campus or during clinical assignments.

Applicant must be able to perform the specific physical manipulative and/or sensory functions as required by the Radiologic Technology program.

Read carefully the following statements identifying the standards appropriate to the profession of Radiologic Technology and sign at the bottom. Your signature certifies your ability to comply with these standards. Failure to comply with these standards can result in program dismissal.

STUDENT RADIOLOGIC TECHNOLOGIST

POSITION SUMMARY: The student radiologic technologist learns how to accurately demonstrate body structures on a radiograph or other receptor by determining proper exposure factors, manipulating medical imaging equipment, evaluating the radiographic image/quality, and providing for patient protection, safety, and comfort during radiographic procedures. The student technologist also assists the physician team member in specialized procedures, which often require the administration of chemical mixtures to the patient for enhanced viewing of the anatomy and physiology of body system.

ESSENTIAL TECHNICAL STANDARDS AND/OR FUNCTIONS FOR RADIOLOGIC TECHNOLOGY STUDENTS

PHYSICAL DEMANDS

In order to ensure student and patient safety and welfare, the radiologic technology student must be able to:

1. **Stand and/or Walk** in an erect posture for up to 8 hours per day.
2. **Lift** a minimum of 35 pounds from floor level to waist level.
3. **Lift** a minimum of 10 pounds from waist level to shoulder level.
4. **Carry** a minimum of 20 pounds directly on the arms or hands while walking a distance of 100 feet.
5. **Bend or Flex** the upper trunk forward up to 45 degrees, and **Flex** the lower torso into a squatting position.
6. **Rotate** the upper trunk up to 30 degrees to the right or left from a neutral position while standing or sitting.
7. **Reach** a maximum of 72 inches above floor level and/or a full-arms reach.
8. **Push and/or Pull** objects and equipment weighing up to 250 lbs.; i.e., portable x-ray machine.
9. **Manipulate** radiographic and medical equipment and accessories utilizing fingering and/or reaching, pulling, extending.
10. Utilize the sense of **Hearing and/or Lip Reading** to effectively communicate with the patient and health care team.
11. Utilize the sense of **Vision** in all levels of the radiology department or hospital lighting, which varies from low levels of illumination to amber/red lighting to bright light levels.

NON-PHYSICAL DEMANDS

1. **Respond** quickly and appropriately to emergency situations.
2. **Communicate** effectively at all times (both verbally and in writing) with physicians and patients and staff using the English language.
3. **Tolerate** strong, unpleasant odors.
4. **Handle** stressful situations related to technical and procedural standards and patient care situations, so that job performance is not compromised.
5. **Provide** physical and emotional support to the patient during radiographic procedures.
6. **Conduct oneself** in a professional manner, be on time for required clinical assignments, adhere to dress codes, and always maintain a neat and well-groomed appearance, free of body odors, maintaining appropriate hygiene, in both the clinical and classroom settings
7. Adhere to all medico-legal policies related to the administration of radiologic technology

INTELLECTUAL CAPACITY

1.The radiography student must demonstrate the intellectual capacity to learn by retaining and recalling critical
concepts and performing examinations both on campus and in clinical within the time constraints according to clinical objectives and community standard of care while administering safe patient care as outlined in the LBCC DMI Program Policies. (Extra time is not allowed)

2. The radiography student must demonstrate critical thinking - the ability to use ethically sound professional reasoning in making justifiable decisions in relation to examinations, diagnosis, and management of the patient within the time constraints according to clinical objectives and community standard of care (Extra time is not allowed)

3. Assessing patient status for performing certain types of radiological examinations, and communicate findings to the appropriate supervisor.

4. Responding appropriately in new and emergency situations.

5. Adhere to all medico-legal policies related to the administration of radiologic technology

SPECIFIC PHYSICAL NEEDS

The radiography student must possess the following capabilities:

1. **Self-mobility** with the ability of propelling wheelchairs, stretchers, etc, alone or with assistance as available. The student must be ambulatory and able to maintain a center of gravity when met with opposing force as in lifting, supporting, and transporting a patient. The student must be able to transport patients within the department and in the clinical education center at large.
2. **Visual acuity** that allows the student to (a) distinguish whether the x- ray beam is perpendicular, horizontal, or angled through the anatomical area being examined, (b) perform the required radiography procedures that involve the preparation of contrast agents for introduction into anatomic structures such as syringes or IV bottles, (c) determine the correct dosage of contrast according to product labels, (d) identify the correct patient by reading patient identification arm bands and/or charts, (e) correctly set the x-ray generator controls to obtain optimum diagnostic quality radiographs, (f) perform data entry tasks using digital and computer terminals, and (g) view and evaluate the recorded images for the purpose of identifying proper patient identification, positioning, radiographic technique, And radiographic quality.
3. **Hearing acuity and/or Lip Reading** that is sufficient to communicate with the patients and the health care team. The student must be able to hear and respond to patient questions and directions from department and hospital staff.
4. **Manual dexterity** that allows the student to grasp and manipulate small objects required to perform radiographic procedures and operate radiographic equipment such as locks, beam limiting devices, radiation protection devices, vials, syringes, intravenous systems, catheters, dressings and sterile trays. The student must also be able to properly handle Radiographic equipment and process radiographic images
5. Orally communicate in English in a voice that is clear and loud enough to be understood by a person in the radiology department in surgery, in the clinical education center at large, or on the telephone.

LBCC General education and Institutional Student Learning Outcomes (ISLOs)

Students who earn an Associate in Arts (AA) degree, an Associate in Science (AS) degree, or an Associate Degree for Transfer (ADT) complete their general educations and attain LBCC's Institutional Student Learning Outcomes (ISLOs).

1. **Aesthetic Responsiveness:** Value and interpret a range of cultural expression in the arts and humanities to generate useful and original ideas.
2. **Communication Skills:** Apply skills to effectively communicate with, and respond to, varied audiences in written, spoken, signed, or artistic forms.
3. **Critical Thinking, Problem Solving, and Information Literacy:** Demonstrate critical thinking, problem-solving, and diagnostics skills with an understanding of research, science, information literacy and/or quantitative reasoning.
4. **Global Awareness:** Display critical and ethical engagement in global and local issues with sensitivity to the diversity of individuals, groups, and cultures.
5. **Professional and Personal Skills:** Demonstrate the skills required to successfully enter and advance in the workforce, fulfill one's educational goals, and make lifestyle choices that promote personal well-being

I. ADMISSION TO THE DMI PROGRAM (new student):

Any student who is 18 years of age or older by the beginning of the Spring Semester

and who meets the following criteria, may be admitted to the DMI program:

a. Has a overall college GPA of 2.5 or higher
b. Has been accepted as a student, with a complete file to LBCC;
c. Has a high school diploma or equivalent;
d. Achieves fully matriculated into the college according to the current college catalog;
e. Has completed Prerequisites Anat41, AH60 Medical Terminology, and AH61 – Integration of Patient Care, (or DMI Program approved prerequisite equivalents) with a letter grade of "C" or better within 5 years of application date.
f. Pass a basic essential academic skill exam Proctored "in person" with a score of 62% or higher -TEAS. (Online TEAS exam scores are not accepted) within one year of the application date.
g. Completed LBCC GE plan courses or posses an associate degree or higher from an accredited US college or equivalent prior to application submission.
h. Has completed DMI program Online application in the month of September;
i. Demonstrates evidence of physical and emotional fitness by health evaluation;

Selection Process: The following is considered in the selection process each November for the following Spring DMIP class*:

1. Total Score on DMI Point System Application
2. Provisionally accepted students must attend the MANDATORY DMI advisory meeting prior to the DMI program starting in the spring semester in order to progress in the DMI program.

* Due to their service to our country and time away from public life, up to 2 veterans per year are given immediate placement into the next available DMIP class upon completion of admission and selection requirements.

Information Session

The Diagnostic Medical Imaging Program (DMIP) holds monthly information sessions from September to June (EXCEPT JANUARY). Please contact the Allied Health Office, DMIP director, Allied Health Coordinator, or the counseling office for times, days, and location.

1. Students MUST attend one of the DMIP information sessions before their DMIP application is accepted.
2. Students who need additional information about the Diagnostic Medical Imaging Program are invited to attend the DMIP monthly information sessions

LBCC College Application Procedures

Applications are accepted on a continuous basis.

1. Apply for admission to the college and complete full matriculation through the Admissions Office (applications are available online at http://www.lbcc.edu/admissions.)
2. Submit transcripts from high school and previous college work to the Admissions Office and the School of Allied Health and Science.
3. Complete the Diagnostic Medical Imaging Program application form and bring the completed application form and documentation to the School of Allied Health and Science, Room C100.
4. All applicants will be notified by e-mail regarding the status of their applications.

Transfer of Radiology Courses / credits:

1. The DMI Program does not accept transfer credits of any Radiology courses from other Colleges or private schools.
2. The LBCC DMI program does not accept transfer students with advanced standing. All applicants are subject to the same admissions process.
3. LBCC maintains a matriculation agreement with the California State University system. Our students have been successful in continuing their education at Cal State Dominguez Hills in their B.S. and M.S. Health Science: Radiology

Program cost: The Radiologic Technology program costs approximately Approximately $5,500 includes Tuition, books , lab fees, uniforms, ARRT exam prep software packages, ARRT exam fees, and California State certificate fees. Students must also provide reliable transportation to their assigned clinical facility.

Program Length: 5 semesters including 2 summer and 2 winter intersessions

Program Starts: each spring semester

II. ADMISSION TO THE CT OR MRI PROGRAMS

see separate program policies for CT and MRI Programs.

III. GRADING

A letter grade of "C" or better is required in all DMI and related courses in order to continue in the program. Related courses include AP 41, AH 60, and AH61. An overall GPA of at least 2.5 must be maintained throughout the program.

Grades will be determined using the following scale:

A 93-100%
B 84-92%
C 75-83%
Below 75% is not passing

*** STUDENTS MUST SCORE 75% OR HIGHER IN ANY DMI PROGRAM COURSE FINAL EXAM IN ORDER TO PASS THE COURSE.** Even if a student, at the time the final exam is administered, is passing the course with an "A", "B", or a "C", the student must pass that course's final exam with a 75% to receive a passing semester grade and to progress in the DMI program. If the Instructor allows, a student may remediate a final exam once per didactic course, but for a total of 2 times total for the DMI program. If a student fails a third didactic course final, the student will be dismissed from the program and may re-apply only once to re-take the DMI program.

Explanation of Grade Symbols:

A = EXCELLENT Performance of the student has demonstrated the highest level of competence, showing sustained superiority in meeting all stated course objectives and responsibilities, and exhibiting an exceptional high degree of intellectual initiative.

B = VERY GOOD Performance of the student has demonstrated a high level of competence showing above average facility in meeting all stated course objectives and responsibilities, and exhibiting a high degree of intellectual initiative.

C = SATISFACTORY Performance of the student has demonstrated a satisfactory level of competence, showing a adequate level of understanding of course objectives, responsibilities and comprehension of course content.

D=UNSATISFACTORY Performance of the student has been unsatisfactory, showing inadequacy in meeting basic course objectives, responsibilities, and comprehension of course content.

Tests will be graded on Scantron forms or Canvas. These forms are scanned optically and require the use of a #2 pencil. Marks in any location on the form other than the intended "bubble" may be read as two answers and will be marked as an

incorrect answer. The faculty will not grade forms by hand or give credit for incorrectly marked scantron forms.

IV. ATTENDANCE:

The attendance policy for didactic classes is printed in the college catalog. A separate policy is used for "Clinical Practicum" courses and is found later in this document.

STANDARDS OF CONDUCT AND CAMPUS RULES:

The school policies are printed in the college catalog and schedule of classes. The policies must be adhered to in all classes. The school policy regarding acceptable classroom behavior, "Creating a Collegiate Environment", is included in this document. In addition, there is a Professional Conduct Policy for the School of health and Science that must be followed. Each student must submit a Background Check, drug screen, and provide other information such as vaccinations, cpr card, health evaluation etc. prior to starting their hospital clinical education (DMI 40A). Students are required to purchase individual malpractice and liability insurance also prior to starting DMI 40A Students who do not have a "clear" background may be ineligible for the clinical practicum or may be required to be evaluated by the Program Director.

V. CELL PHONE AND ELECTRONIC DEVICE POLICY

Any student whose electronic device (cell phone, tablets, IPODs, IPADs) causes a disturbance in the class or clinical practicum will be required to leave the class or clinical site. Unless otherwise authorized, personal cell phones and other personal electronic devices must be in the silent or vibration mode at all times, in all classrooms, laboratories, and patient care areas especially while interacting with patients and clinical staff.

Electronic devices MAY NOT be answered or accessed during the class or clinical assignment. The use of personal electronic device may present a hazard or distraction to the user, co-workers, patients, and visitors. This policy is meant to ensure that the use of these devices will not disrupt clinical or didactic education and supports patient safety.

Individual Clinical Sites have the right to have students place their cell phones in storage during their clinical rotations.

While incidental personal use is allowed, it must be limited to break and lunch periods in non-patient care areas whenever possible.

In addition to telephone services, many cell phones or personal electronic device

providers offer additional functions and/or services including, but not limited to text messaging, web browsing, digital photography, audio-visual, and television. Students should not use any of these services in the clinical setting except during breaks and lunches and in non-patient care areas. On campus, these activities will be addressed by individual faculty.

Student use of a cell phone camera/video recording, any other digital electronic device camera/video recorder, or any other analog camera/video recording device may never be used for patient photography, photographs of acquired images, or any use that violates

HIPPA / patient confidentiality. This constitutes a violation of the DMI program policy - dismissible offenses, if used as described above.

VI. STUDENT GRIEVANCE POLICY (DMI Program Step 1-3):

At any time, a student may:

Step 1. Make an appointment with the Diagnostic Medical Imaging Program Director to discuss his/her status in the program.

Step 2. Make an appointment with the Allied Health Department Chair for further input and/or information.

Step 3. Make an appointment with the Dean of the School of Health and Science for review and information regarding program status or matters not resolved in the step 1 and/or 2.

Step 4. LBCC Institutional Student Grievance Process (matters not resolved by steps 1-3) The Associated Student Body grievance policy is printed in the college catalog. Any incident involving the student and potential program dismissal will adhere to the concept of due process. LBCC Student complaint and Grievance policy and process - https://www.lbcc.edu/post/student-complaints-grievances. All DMI faculty, AH Department chair, and the Dean of Allied Health are excluded from this process. *LBCC Student Grievance Link*

VII. RADIATION and MR SAFETY

Guidelines for Student Radiologic Technologists.

A. All facilities utilized in the program have been approved by the California Department of Public Health, Radiologic Health Branch, as meeting the requirements of Title V of the California Administrative Code, Chapter 5, Subchapter 4, Radiation Control Standards.

B. Students are given instruction in radiation protection methods and must pass a safety test before they are permitted to use radiation-producing equipment.

C. Radiation detection devices are provided for students. The badges are to be worn at all times when the student is assigned to DMI labs on campus and when on duty at the clinical facilities. Students who fail to wear their film badges to either clinical or laboratory assignments, will be denied access and will be marked absent.

D. Students are required to always adhere to radiation safety rules. Students are responsible for their safety as well as the safety of their patients.

E. Students receive instruction in MR Safety practices and complete an MR Safety Checklist prior to starting clinical with the understanding they are required to notify the program if their status regarding MR safety changes.

F. Records of all "student personal radiation exposure histories," are provided to the college by the dosimetry badge supplier and shall be kept on file by program officials. **Dosimetry reports are kept by the Program indefinitely.**

G. **Individual student personal radiation exposure histories are available online on demand at any time. students received electronic access by the dosimetry company upon receiving their first dosimetry badge.**

H. Students must not hold image receptors during any radiographic procedure and should not hold patients during any radiographic procedure.

I. If a student has lost a dosimetry badge, the student will be issued a pocket dosimeter by the program. The pocket dosimeter must be worn during all laboratory and clinical assignments. Daily readings must be recorded on the appropriate form (see next page). Students losing a dosimetry badge will be required to purchase a new one.

J. The program will adhere to the NCRP recommendations from report 91, which states that radiation exposure as part of an educational experience, should not exceed 100 mR annually (1 mSv annually or 200 mR for the total program).

K. Monitoring will be documented by bi-monthly dosimetry badge readings. Any reading in excess of 30 mR in reporting period will be investigated and the student receiving such will be counseled regarding correct radiation safety practices.

L. PREGNANCY – All female students will receive a copy of the program pregnancy policy and must sign a statement indicating receipt of the policy (see the last page of this document). The policy is intended to assure that all students are given the same clinical experience. Pregnancy may prevent assignment to areas not suggested by state regulations for pregnant individuals, which may increase the length of the clinical assignments to obtain program completion. A fetal badge will be assigned once a pregnancy has been declared in writing.

DEPARTMENT: **LONG BEACH CITY COLLEGE DMI PROGRAM**
POLICY/PROCEDURE: **DAILY DOSIMETER READINGS**

MONTH/YEAR_____

Day 1:____rems
Day 2:____rems
Day 3:____rems
Day 4:____rems
Day 5:____rems
Day 6:____rems
Day 7:____rems
Day 8:____rems
Day 9:____rems
Day 10:___rems
Day 11:___rems

Day 12:____rems
Day 13:____rems
Day 14:____rems
Day 15:____rems
Day 16:____rems
Day 17:____rems
Day 18:____rems
Day 19:____rems
Day 20:____rems
Day 21:____rems
Day 22:____rems

Day 23:___rems
Day 24:___rems
Day 25:___rems
Day 26:___rems
Day 27:___rems
Day 28:___rems
Day 29:___rems
Day 30:___rems
Day 31:___rems

TOTAL:_____

Note: This is a master form.
Make a copy of this form when needed.

VIII. DMI LAB POLICIES:

The Medical Imaging laboratory is different from other labs on campus and the following special rules apply:

A. Attendance is especially important since the ability to function depends on team effort. It is necessary to phone the faculty when absence or tardiness is expected.

B. Dress must be appropriate to the work assigned. Shoes must be worn to provide protection (open toe shoes or high heels are not appropriate). ALL STUDENTS ARE REQUIRED TO WEAR THEIR SCHOOL EMBROIDERED SCRUBS PRIMARILY. SHORTS OR PANTS IN AN EMERGENCY MAY BE WORN– NO SKIRTS OR DRESSES DURING ON CAMPUS LAB

C. Radiation detection devices MUST be worn or the student will not be permitted to attend the lab.

IX. EVALUATIONS:

It is the philosophy of the Medical Imaging faculty that objective evaluation of the effectiveness of courses, instructors, and the program can best be accomplished as a joint endeavor of instructors and students, and when behavioral objectives are clearly stated and understood. The objective of all evaluation is to strengthen curriculum, improve teaching methods, provide guidance when indicated, and to establish a sound base for personal growth.

A. Testing: Written examinations will consist of multiple choice, matching, true/false, and/or short answer questions. Quizzes, mid-term and final examinations will be used when indicated. The requirements for research papers will be explained by the instructor. Lab courses will consist of practical examinations and experiments.

B. Textbooks, Instructors, Clinical Instructors, and Program Evaluations: Students will be expected to perform written evaluations of the textbooks used, the effectiveness of courses and instructors, and the clinical facilities. Program evaluation is required at program completion/clearing. Student anonymity is provided on all these evaluations.

X. DISCIPLINARY COMMITTEE:

This committee will be made up of the following members:

A. Diagnostic Medical Imaging Program director, as Chairperson, to pose questions for consideration, advise the committee on school policies, and take the matter under consideration for a timely decision on the discipline to be administered;

B. One Program Coordinator/Instructor;

C. One Clinical education Instructor (this is to be an alphabetically rotating position and is to be an instructor from a site other than the practicum site of the 'disciplinee');

D Two students (one first year class representative and one second year representative. The students may disqualify themselves due to friendship with the 'disciplinee'.);

E. The 'disciplinee' may request one student to speak on his/her behalf.

The objectives of the committee meetings will include:

1. Assessment and consideration of the problem(s).
2. Discussion of methods for resolving the problem(s).
3. Recommendation for change in program status.

The committee is scheduled to meet before or after the regularly scheduled Clinical Education Coordination Sub-Committee, only if there is a matter to be considered. Matters that will NOT be considered by the Disciplinary Committee may be found at the end of this document under "XII. DISMISSAL OFFENSES".

XI. PROGRAM STATUS:

A. REGULAR = A student who is in good standing with no contingencies for retention or completion of the program. All students who meet entrance requirements, maintain no less than a 2.0 overall GPA and who achieve no less than a letter grade of 'C' in all DMI and related courses (AH 60, AH 61, ANAT 41), comply with program policies, and maintain satisfactory clinical progress (as substantiated by competency and staff evaluations) are considered to be REGULAR STUDENTS.

B. PROBATION CONTRACT = A student whose retention in the program is contingent upon specific conditions for improvement within a definite period of time as agreed to in a 'Contract', required because of unsatisfactory performance or infraction of program policy. A report of progress must be submitted by the Clinical Instructor to the Disciplinary Committee by the end of the contract period for consideration of a change in program status.

C. SUSPENSION = A student may be suspended from Clinical Practicum for a specified period as a disciplinary action for breaking a contract or for a serious infraction of a program policy. All time lost due to suspension must be made up at the end of the program. The student will be given a 'D' or 'F' for the Clinical Practicum course enrolled in at the time of suspension, will not be certified for graduation, will not be authorized to the National Board (ARRT) until the time lost is made up and the unsatisfactory grade has been changed.

D. EXPULSION = A student who has been on probation contract and has failed to meet the contingencies specified in the probation contract will be expelled from the program. The student may not re-enter the program.

CLINICAL PRACTICUM POLICIES FOR THE DMI Program
DMI 40 A.B.C.D. & E.

XII. PHILOSOPHY:

The Diagnostic Medical Imaging Faculty believes that objective evaluation of progress in clinical education courses can best be accomplished as a joint effort of students and Clinical Instructors when behavioral objectives are clearly outlined and understood.

Self-evaluation as well as objective evaluation by Clinical Instructors and technologist supervisors is vital in the assessment of progress, facilities, guidance, and provides motivation for students and teachers alike.

The assignment of values to the progress the student demonstrates is necessary to effective evaluation based on the practical application of learned principles.

Student evaluation of clinical education courses is also vital in the assessment of program effectiveness, accomplishment of goals, and identification of areas needing improvement.

It must be stressed that the clinical facility is a work environment. Students are evaluated on their performance not only as interns, but also as prospective employees. Attendance, Professional Behavior, Patient Care and the students' ability to function in the work force are all important attributes to be evaluated and strengthened. At the discretion of the Clinical Instructor or Designated Alternate, a student may be sent home from the clinical facility for the following reasons: illness, family emergency, non-adherence to program and/or hospital policies, placing staff and/or patients at risk, suspicion of being under the influence of alcohol/illegal drugs/medications, insubordination, and disruption of the work environment. Students must notify program faculty within 24 hours of occurrence. Failure to comply with the above may result in disciplinary rotation to another clinical facility, or program expulsion.

Students must remember that their clinical practicum will be their sole reference as entry-level Radiographers or Medical Imaging Technologists.

XIV: DRESS AND GROOMING:

Students are required to wear the Program scrubs in ROYAL BLUE with the program patch sewn to the left shoulder area and a name badge that meets hospital requirements while on duty at the clinical facility. All hospital requirements must be adhered to (body/facial piercing, fingernail polish, hair length, etc. are included). Students who report to clinical assignment in an unacceptable uniform will be sent home. Any time missed must be made up. Clogs and cloth athletic shoes are not satisfactory and are not to be worn with the uniform. Duty shoes must have enclosed heels and toes. All students must maintain acceptable personal hygiene standards, especially in the clinical setting. Excessive fragrances must be avoided. In the event of unacceptable body odor or halitosis, the student will be counseled and required to remedy the situation

before continuing in the clinical and didactic courses. Hair is to be clean, controlled, net, and manageable. Long hair must be tied back so as not to fall on the patients while working over them. Fingernails must be clean and short so as not to interfere with clinical assignments. Nail length must not exceed ¼" past fingertips. Solid color nail polish in pinks or corals may be worn. Nails must be well maintained. Artificial nail enhancements are NOT acceptable. Anything that is applied to natural nails other than polish is considered to be an enhancement. This includes: artificial nails, tips, wraps, appliqués, acrylics, gels and any additional items applied to the nail surface. Dangling jewelry is not acceptable as it poses a safety hazard.

Radiation detection badges MUST BE WORN AT ALL TIMES WHILE ON DUTY. If the student reports to duty without a film badge, or if the badge is not for the current monitoring period, he/she will be sent to obtain the badge. Any time missed must be made up.

XV: CLINCICAL EVALUATION PROCEDURES:

Students will be evaluated using the following criteria: Staff Evaluations, Clinical Competencies and Attendance. The forms necessary will be included in the Student Program Syllabus (purchased at the LBCC bookstore) will be filed in the Student Clinical workbook at the assigned clinical facility.

Students are prohibited from discussing their clinical grades with anyone other than Program officials. A student found discussing his/her clinical grade will receive a written warning and a reduction in clinical grade by one letter. If the student discusses another student's grade, all students involved will receive a written warning and a reduction of one letter grade. A second incident of discussing grades will result in program dismissal.

All competencies, paper work, documentation, etc. are due on the Tuesday before the CECSC meetings. Work submitted after that date will not be counted toward that grading period. NO EXCEPTIONS WILL BE MADE.

Students are required to complete a daily clinical log that indicates a patient identifier, the examination/procedure performed, the date, and whether the examination was done under Direct or Indirect Supervision

Students may NEVER perform a Repeat examination without Direct Supervision. Every Repeat examination must be indicated on the Daily Radiology Log.

A. STAFF EVALUATIONS:

These evaluations will take place according to the printed evaluation schedule. They are to be a composite average of evaluations done by clinical staff technologists who have worked with the student during the evaluation period. The Clinical Instructor will solicit input from the technical staff regarding student performance/progress in general for this evaluation.

GRADE EXPLANATION OF STAFF EVALUATIONS
4 = Above satisfactory

3 = Satisfactory
2 = Needs improvement
1 = Unsatisfactory

Any grade other than a 3 or 4 requires comment from the evaluator on the evaluation form. Students who receive an overall marginal Staff Evaluation (defined as less than 60%) will be referred to the Disciplinary Committee.

B.CLINICAL COMPETENCIES:

There are 61 areas of Clinical Competency (per ARRT requirements) divided into Mandatory and Elective Imaging Procedures, and 10 Patient Care Competencies. Students must demonstrate competency in all 36 Mandatory Imaging Procedures and all 10 Patient Care Competencies. Up to 10 procedures may be simulated if demonstration on patients is not feasible. The Clinical Instructor determines when simulations may be substituted for actual patient procedures. Students must also demonstrate competency in at least 15 of the 34 elective Imaging Procedures. Electives should be performed on patients. However, electives may be simulated if demonstration is not feasible. This totals a minimum of 61 mandatory, elective, and patient care competencies.

Clinical Competencies are to be completed by the Clinical Instructor or designated evaluator. In the event that a Competency Evaluation is submitted that does not meet the Program criteria, a verbal warning will be issued at the first offense. The second occurrence will warrant a written warning and a 2 day suspension from the clinical site. Missed time must be made up. The third occurrence will result in program dismissal. Competencies are based on the student's ability to perform an examination/ procedure with no errors. Each requirement of the evaluation is in a Pass or Fail format. If any requirement is not completed satisfactorily, the competency cannot be awarded. It should be understood that students are not expected to be competent on their first attempt at an examination/procedure. ALL attempted Clinical Competencies (Passed or Failed) will remain in the Student's Clinical workbook. There is not penalty for the number of attempts required for a student to complete a given competency.

Students will be required to complete a prescribed minimum of competencies each semester (refer to E.). a portion of their semester grade will be based on the timely completion of these competencies.

C. ATTENDANCE

1. Students are responsible for providing themselves with reliable transportation to their assigned clinical site. Sites are within a 23 mile radius of the LBCC LA Campus.

2. Clinical experience starts as early as 6 am and end as late as 11 pm M-F and may include weekend assignments. Clinical rotations are from 24-32 hours per week. Total clinical experience is approximately 1,968 hours.

3. The individual students will record clinical daily attendance with the proper CI or staff Verification (signature/initials). A percentage of the clinical grade will be based on attendance.

D. CLINICAL SEMINAR

Students are required to attend a Clinical Seminar held at the college. During the seminar, each student will be required to present case studies to the class. Each presentation must include: the patient's history, the examination/procedure performed, the diagnosis, planned treatment, and the prognosis. All patient identifying information must be removed from the films prior to class presentation and must be accompanied by a film file envelope. If the presentation is not complete, the student is required to obtain further information to be presented at the following scheduled seminar.

E. SEMESTER EVALUATION REQUIREMENTS (minimums)

Semester	Competencies	Staff Evaluations
Winter 1st Year	Clinical Objectives, ARRT Patient Care Competencies (except venipuncture comp to be done in DMI 222 Fall of 2nd year)	2
Spring 1st Year	12 competencies	3
Summer 2nd year	10 competencies	2
Fall 2nd Year	15 competencies / 10 venipuncture competencies (DMI 222)	3
Winter 2nd Year	3 days extended clinical per week	1
Spring 2nd Year	14 competencies	3

All competencies must be completed before graduation. If a student is unable to fulfill this obligation, additional clinical practicum must be completed until all competencies are satisfied. No student will be considered eligible to sit for the ARRT examination until all competencies are met.

Competencies completed after the grading period will NOT count toward the student's clinical semester grade. Each grading period is approximately 6 weeks in length.

GRADING CRITERIA PER SEMESTER
DMI 40A

Staff Evaluations *	60% (2@30%each)
Competencies ++	10%
Seminar reports	10%
Objectives	10%
Attendance	10%

DMI 40B	Staff Evaluations *	60% (3@20%each)
	Competencies	20%
	Attendance	10%
	Seminar reports	10%
	Mid Semester Evaluation	P/NP
DMI 40C	Staff Evaluations *	60% (2@ 30%each)
	Competencies	20%
	Attendance	10%
	Seminar reports	10%
	Mid Semester Evaluation	P/NP
DMI 40F	Staff Evaluations	80%
	Attendance	10%
	seminar report	10%
	Mid Semester Evaluation	P/NP
DMI 40D and E	Staff Evaluations *	60% (3@20%each)
	Competencies **	20%
	Attendance	10%
	Seminar reports	10%
	Mid Semester Evaluation	P/NP

*Students must pass staff evaluations with a semester average of 75% or better to pass the clinical course. In addition, Students must pass 2 staff evaluations per semester with a 75% or higher in order to pass the clinical course.
++ includes patient care competencies
** includes venipuncture competencies

F. CLINICAL OBJECTIVES

1. Demonstrate ability to properly use all equipment required to produce a diagnostic radiograph.

2. Assess a patient's information, formulate the proper technical factors required to produce a diagnostic image, and appraise the resultant image.

3. Identify the various equipment used in the Medical Imaging Department.

4. Relate the proper procedures for inputting Patient information.

5. Explain the process required to discharge patients form the Imaging Department upon completion of examination.

6. Demonstrate the proper use the equipment in the Medical Imaging Department.

7. Distinguish varying patient body habitus as it relates to the proper performance of a Radiographic exam.

8. Organize equipment needed and set up the Imaging suite for each exam.

9. Select the proper parameters to successfully create a diagnostic radiograph.

10. Illustrate the chain of command within the Imaging Department and the Clinical facility.

11. Discuss ways to work within an ever-changing work environment and adapt to work load.

12. Demonstrate the interpersonal skills required to work with Radiologists and Clinical Staff.

13. Demonstrate the capability to perform all radiographic and fluoroscopic exams independently.

14. Demonstrate the ability to follow direction, rules, and regulations of the assigned clinical facility.

15. Must adhere to assigned clinical site policies including parking at assigned areas, dress / apparel, grooming standards, confidentiality, and safety / security rules.

*The DMIP require students to **TRANSITION**, when performing exams, from dependent to independent capability during the DMI 40C and 40D clinical courses. In addition, students **MUST** possess the capability of performing exam independently during the DMI 40E clinical course. ***Inability to work independent is considered failure of clinical competence and a patient safety risk due to need of a chaperone/staff member to watch student.***

G. PATIENT CARE COMPETENCIES

Candidates must be CPR certified and demonstrate competence in the remaining nine patient care activities listed below. The activities should be performed on patients whenever possible, but simulation is acceptable.

General Patient Care Procedures	Date Completed	Competence Verified By
CPR Certified		
Vital Signs – Blood Pressure		
Vital Signs – Temperature		
Vital Signs – Pulse		
Vital Signs – Respiration		
Vital Signs – Pulse Oximetry		
Sterile and Medical Aseptic Technique		
Venipuncture		
Transfer of Patient		
Care of Patient Medical Equipment (e.g., Oxygen Tank, IV Tubing)		

H. CLINICAL PROCEDURE COMPETENCY

Candidates must demonstrate competence in all 36 procedures identified as mandatory by the ARRT radiography discipline. Procedures should be performed on patients whenever possible, but up to eight mandatory procedures may be simulated if demonstration on patients is not feasible.

Candidates must demonstrate competence in 15 of the 34 elective procedures identified within the ARRT radiography discipline. Candidates must select at least one of the 15 elective procedures from the head section. Candidates must select either upper GI or contrast enema plus one other elective from the fluoroscopy section as part of the 15 electives. Elective procedures should be performed on patients whenever possible, but electives may be simulated if demonstration on patients is not feasible.

Institutional protocol will determine the positions and projections used for each procedure.

Demonstration of competence must include:

- patient identity verification
- examination order verification
- patient assessment
- room preparation
- patient management

- equipment operation
- technique selection
- patient positioning
- radiation safety
- imaging processing
- image evaluation.

XVI. VENIPUNCTURE POLICY

These objectives address student, clinical, and college needs regarding the ARRT competency requirements and the California State Department of health services, Radiologic Health Branch, SB 571 and SB 1199. ARRT requires the program director verification of competency in venipuncture. SB571 allows an RT (Radiologic Technologist) to perform venipuncture to administer contrast media provided the RT has completed didactic and clinical training as specified in SB 571. LBCC DMI students, who complete and pass DMI 222, have satisfied SB571 didactic education requirement. SB 1199 states that 10 venipunctures may be performed by students on a human or a mannequin under personal supervision. We encourage students to perform "live" sticks during DMI 222 to complete the SB571 clinical requirements. Venipuncture at the clinical facility is no longer required. Starting in 2012, upon employment at each facility, radiologic technologists must perform an additional 10 supervised documented venipuncture sticks to officially perform venipuncture independently at their place of employment.

XVII. GENERAL CLINICAL ATTENDANCE POLICIES & CRITERIA:

Attendance is the student's responsibility. All students must complete 2072 hours of clinical practicum (1936 clinical site hours). In the event of excessive absences (as stated in section H), the student shall be automatically dropped from the program. Such student may be reinstated at the discretion of the Program Director for extenuating circumstances. Extenuating circumstances shall be defined as reasons for absence beyond the control of the student. Typical examples are extended illness, hospitalization, court appearances, and death in the immediate family, verified accidents, or military assignment.

The clinical site / instructor may schedule the student any day or shift to complete the require weekly hours when the school is open. The school is typically open Monday through Saturday 630am to 1030pm. **Students may work on school holidays or Sundays with permission of the clinical instructor during DMI 40A-F**. The following policies are **strictly** adhered to:

A. Clinical days are as follows:

DMI 40A – 2.5 units -120 hours clinical (2.22u) / 5 hours critique/lecture (.28u)

During the 5-week winter session, the student will work an average of 24 clinical hours per week - actual shifts TBD by the clinical site / instructor. Students will meet on two scheduled for a critique course on campus. If a student misses a critique class, they must work an additional 4 - hour shift.

Clinical days continued are as follows:

Spring 3rd semester - DMI 40B 7.5 units -384 hours clinical (7.11 units)/ 7 hours critique/lecture (.39 units)

– During the 16-week spring semester, the student will work an average of 24 clinical hours per week and attend a clinical review class on Wednesdays as follows:

a) Mondays, Wednesdays and Fridays 8 hours each day - actual shifts TBD by the clinical site / instructor.

b) Once per month students will attend their scheduled mandatory critique class. If a student misses a critique class, they must work an additional 4 -hour shift.

c) All DMI 40B students are off on Friday and Monday of Presidents' Day weekend. DMI 40B students are also off Memorial Day Monday as well as any floating flex day that falls on a scheduled clinical shift. **Students may work on school holidays or Sundays with permission of the clinical instructor.**

Summer Session #2 **DMI 40C** 6 units -304 hours clinical (5.63 units) / 7 hours critique/lecture (.37 units)– During the summer session, the student is required to work an average of 36 eight hour shifts - actual shifts TBD by the clinical site / instructor. The student must attend the three scheduled summer critique class. Juneteenth and July 4th are credited holidays. If a student misses a critique class, they must work an additional 4 - hour shift. **Students may work on school holidays or Sundays with permission of the clinical instructor.**

Fall 4th Semester - DMI 40D 10 units -512 hours clinical (9.48units) / 9 hours critique/lecture (.52units) –During the 16-week Fall semester, the student is scheduled Monday through Saturday for a total of 32 hours average / week.

1) Most shifts Monday through Saturday are eight-hour shifts - actual shifts TBD by the clinical site / instructor.

2) Once per month students will attend their scheduled mandatory critique class. If a student misses a critique class, they must work an additional 4 -hour shift. **Students may work on school holidays or Sundays with permission of the clinical instructor**

Winter Session #2 DMI 40F 3 units -136 hours clinical (2.52 units) / 9 hours critique/lecture (.48units) 2nd year students will be scheduled during the winter 5-week session 27 hours average per week - actual shifts TBD by the clinical site / instructor. Students will meet on two scheduled for a critique course on campus. If a student misses a critique class, they must work an additional 4 - hour shift. **Students may work on school holidays or Sundays with permission of the clinical instructor**

Spring 5th and Final Semester - DMI 40E 10 units -512 hours clinical (9.48units) / 9 hours critique/lecture (.52units) –During the 16-week Fall semester, the student is scheduled Monday through Saturday for a total of 32 hours average / week.

DMI 40E Continued
Once per month students will attend their scheduled mandatory critique class. If a student misses a critique class, they must work an additional 4 - hour shift.

Students will be off on Friday and Monday of Presidents' Day weekend. In addition, students will be off on Memorial Day and the semester's FLEX day

Students may work on school holidays or Sundays with permission of the clinical instructor

Total LBCC DMI Program Clinical Hours:
120 (DMI 40A) + 384 (DMI 40B) + 304 (DMI 40C) + 512 (DMI 40D) + DMI 40F (136)+ 512(DMI 40E) = 1968 clinical site hours

Total LBCC DMI Program clinical and lab hours: 10 (DMI 61 fluoroscopy LAB) + 46 (DMI 40A-F critique lab hours) + 24 (Intensive DMI 30 lab) = 80 lab hours

Total LBCC DMI Program Clinical and Lab Practicum = 2048 hours

B. If, for any reason, a student cannot report to the clinic on a regularly scheduled day, he/she must call and report to the Clinical Instructor or Designated Alternate (1st and 2nd year DMI students CAN NOT be designated Alternates). Calls not received by 60 minutes into the start of the scheduled shift will be considered "NO CALLS". A student who does not call by 60 minutes into the scheduled shift AND who does not arrive at the clinical site is considered a NO-CALL NO-SHOW student. For grading purposes, this is equivalent to three absences and will result in a permanent semester grade reduction of one letter grade. The student must make-up 16 hours.

C. Students who report for clinical assignments after their scheduled time will be considered TARDY. Students must make up ALL accumulated tardy time at the following rate:

05 minutes to 15 minutes tardy = make up 30 minutes
16 minutes to 1 hour tardy = make up 1 hour
61 minutes to 2 hours tardy = make up 2 hours
121 minutes to 3 hours tardy = make up 3 hours
over 3 hours tardy = must make up 8 hours
No Call = must make up 16 hours

**** A student who is a NO-CALL, TARDY must make-up 8 hours plus the time missed.

D. Students who accumulate 3 TARDIES will be considered to have the equivalent of 1 ABSENCE for the purpose of grading;

E. Students who do not report for clinical assignment of scheduled dates and have not made previous arrangements (at least 24 hours in advance) or have not been granted medical/personal leave by the program director (defined as verified reason for deferred practicum) will be considered

ABSENT. Students who miss 3 or more consecutive clinical days must contact their clinical instructor or program faculty. The student shall provide reasons and/or documentation for extended absence. The student shall provide verification of reason and/or physician release before returning to the clinical practicum. Extraordinary circumstances are those situations that are beyond the normal control of a student and would result in the student missing clinical days. Examples include extended illness (more than 5 days); extended hospitalization due to extraordinary circumstances will be allowed to make up days without penalty;

F. ALL ABSENCES AND TARDIES MUST BE MADE UP within 4 weeks (8 weeks for RT 40C). Students who do not complete the make-up time within these requirements will have their semester grade permanently reduced one letter grade. If a student is absent on a schedule MAKE UP day, the student must make up 2 additional days;

G. Students who have 3 or more absences in any 1 semester (other than medical/personal leave granted by the program director) will have their semester grade permanently reduced by one letter grade for each multiple of 3 (3=-1 grade, 6=-2 grades);

H. Any student whose semester grade is reduced due to absence to less than a 'C' must repeat the entire course in order to change the grade to a 'C".

I. Any student who accumulates 5 absences during the program will be given a verbal warning. At the 7th accumulated absence, a written warning is given with a copy forwarded to the college. At the 10th accumulated absence, the student is dropped from the program. This does not apply to catastrophic illness, medical/personal leave granted by the program director, or emergency situations;

J. Compensation time or 'COMP TIME' When students are requested to remain on duty beyond their assigned hours by their instructor or designate, the students will be given 'comp' time at the rate of time and one-half. Students are NOT obligated to stay past their assigned shift; staying past their assigned shift at the request of the clinical facility is voluntary. Students who decide on their own to remain on duty after their assigned time do not receive **'comp' time;** instead they receive bank hours (see section "O" below). Students should only be asked to remain on duty for emergency situations. Any student who stays past their scheduled shift to complete an examination has earned 'comp' time. In addition, student representatives receive 40 hours of 'comp' time by attending the CECSC meetings that do not expire and may be carried from semester to semester but under the usage rules in section "O".

K. Bereavement Leave: Students who experience death in their immediate family will be granted up to three days off (without penalty) from

their clinical assignments. The Program Director or Clinical Coordinator can grant additional time due to individual circumstances. Although the clinical hours do not need to be made up, all competencies require for that grading period must be completed. Immediate family includes spouse, parents, grandparents, children, grandchildren, or siblings. It is the responsibility of the student to notify the Program director, Clinical Coordinator, and Clinical Instructor of a family death as soon as possible.

L. Family Leave: Students may be granted a maximum of one week of Family Leave in the event of the birth of adoption of a child. The time does not need to be made up. Although the clinical hours do not need to be made up, all competencies require for that grading period must be completed.

M. Medical Leave: If during a clinical education course, a medical leave becomes necessary, the student must provide written notification to the program. This notification should state the estimated length of requested leave and a physician's verification. Return to the program and clinical assignment requires a written physician's release and must state "**with no restrictions**". No student will be permitted to return to a clinical assignment unless he/she can resume full-unrestricted duties. Returning students must meet with program officials to determine status for re-entry. If it is determined that too much time has passed or that there is not enough time in that semester to make up clinical and didactic requirements, the student will re-enter the following year at the start of the semester when the medical leave began.

N. Clinical breaks and lunches: Students are given one 15-minute break for a 4-hour shift and two 15-minute breaks for a 6-hour shift. All students MUST take a lunch period for any shift that extends past 6 hours. Students receive two 15-minute breaks and a 30-minute lunch period for an 8-hour shift. (Lunch periods may be extended at the discretion of the clinical instructor or designee). ALL breaks are to be taken on the campus of the clinical site. Students may leave their clinical site's campus during their lunch period as long as they inform their clinical instructor or designee. Students, returning from their lunch period, who report for clinical assignments after their scheduled return time will be considered TARDY (see sections C thru I under XVII. GENERAL CLINICAL ATTENDANCE POLICIES & CRITERIA)

O. EXTRA HOURS - Bank Hours, Comp time, and perfect attendance reward: Bank hours are hours a student may accumulate by the student requesting to work extra clinical hours with the permission of the clinical instructor. Comp hours are explained under "J" above. If a student has perfect clinical attendance during the semester/ session, they will be rewarded 8 comp hours that must be used the following semester/session or the hours will be forfeited. The rules for accumulating extra hours are as follows:

- A maximum total of banked hours and comp time are capped at 40

hours per semester/session.

- Banked hours and comp time must be used during that same semester/session except for the 8 hours given for perfect attendance. (perfect attendance hours must be used the following semester/session once awarded)
- Student reps for their service are given 40 comp time hours that may be used throughout the program /do not expire except for the last two weeks:
- Any bank hours or comp time cannot be used during the last two weeks of DMI 40E.

XVIII. COMMUNICABLE DISEASES:

A. The Diagnostic Medical Imaging Program policy on the reporting of "Communicable Diseases" is identical with the California State Regulations quoted from **A Manual for the CONTROL OF COMMUNICABLE DISEASE:**

"…the statues or regulations…require reporting by hospital, householder, or other person having knowledge of a case of a reportable disease."

Section 2508 – reporting by Schools states:

"…to report…the presence or suspected presence of any of the communicable diseases."

A copy of this information and an official list of "Reportable Diseases and Conditions" are on file in the Program Director's office.

B.Students should use protective gloves for all procedures in which there may be contact with body fluids (blood, urine, excreta, saliva, etc.). Most contacts will be on patients who have not as yet been diagnosed and therefore, precautionary procedure of wearing protective gloves is most important. Students may use strict isolation technique if the patient has been diagnosed as having a contagious disease (examples: AIDS, HIV+, Hepatitis B, TB, etc.) Students may not refuse to perform radiological services for any patients.

XIX. CARDIOPULMONARY RESUSCITATION CERTIFICATION

All students must be in possession of a current American Heart Association CPR for Health Care Providers - Basic Life Support card prior to beginning the Clinical Practicum courses (DMI 40A-F). This certification must be maintained though out the entire program clinical assignment. If a CPR certification expires before the end of the program, the student must obtain re-certification in order to complete the clinical courses

XX. Professional Liability Insurance

All students are required to purchase professional liability insurance through Healthcare Providers Service Organization (HPSO) as a radiological technologist with additional coverage - a radiology student rider. Minimum limits are $2,000,000/claim and $5,000,000 aggregate. (some hospitals may require higher limits)

XXI. CLINICAL SUPERVISION

The program has specific policies regarding student supervision while performing medical imaging procedures at the clinical education centers. There are two tiers of supervision:

1.Direct supervision: During all procedures until competency is achieved; a qualified radiographer is physically present during a procedure to review the order, evaluate the patient, oversee the student, and approve the final work. **A qualified radiographer is a CERTIFIED ARRT, CRT and Fluoroscopy permit holder with at least 2 years of experience to supervise the DMI students indirectly or directly**;

2.Indirect supervision: Once a student has achieved competency in a specific procedure, indirect or general supervision is adequate (**see #4 below for exceptions**). This means a qualified radiographer is immediately available to assist the student if needed;

3.ALL REPEATS ARE TO BE PERFORMED ONLY IN THE PRESENCE OF A REGISTERED TECHNOLOGIST. All student repeats will be performed under DIRECT supervision regardless of the type of examination being done. The technologist must be physically present in the room and/or control booth during the repeat procedure regardless of the reason for the repeat. California Radiation Control Regulations, Title 17, expressly forbids students to perform repeat radiographs independently. **Students who knowingly repeat an exposure without a registered technologist in the room during the repeat procedure will be subject to disciplinary action. Failure to follow this policy may result in immediate EXPULSION. This policy is in effect during the entire program.**

4.Students must be directly supervised during surgical and all mobile, including mobile fluoroscopy, procedures regardless of the level of competency. JRCERT Objective 5.4

XXII: SAFETY MANAGEMENT POLICY/PROGRAM

The purpose of this policy is to assure a physical environment in which students, staff, patients, visitors, and associates are protected from accident or injury and to reduce or control environmental hazards and risks. The Program Director acts as the Safety Officer, who is responsible for the overall management of the safety program including program design, implementation and assessment, identification and control of risks, and student and staff education. Each Clinical Instructor is responsible for ensuring a safe and healthy environment for their students. This includes the identification of risks, staff training, and investigation of all injuries and illness. Each Clinical Instructor will provide documentation of

any adverse situation to the college faculty. **In the event of an emergency situation, the Clinical Instructor and/or the Safety Officer is/are authorized to take any and all actions necessary to abate the situation.** For minor injuries that do not necessitate immediate medical care, the Clinical Instructor and the student will inform the Safety Officer within 12 hours. The safety officer will provide the student with the schools procedure and process for any workplace injury. The OSHA Injury / Illness Prevention Plan will be adhered to during every clinical experience.

Each student:

a. will not engage in any job function that he/she has not received the training and education necessary to perform said function;

b. will not operate any equipment in the performance of job functions unless he/she has received the necessary education and training to operate said equipment;

c. will seek assistance and/or utilize assistive devices for the performance of a job function when such assistance is necessary to avoid injury;

d. will report any unsafe work practice or hazardous condition to their supervisor/ clinical instructor/college faculty or the Safety Officer immediately or within 24 hours;

e. will take every possible precaution to ensure the safety and welfare of each patient to prevent injury or excessive radiation exposure.

XXIII. PROGRAM READMISSION and RE-ENTRY

XXIV. The DMI Program for courses DMI 40A-F guarantees initial clinical assignment/placement for accepted candidates.

XXV. Any student who fails any DMI Clinical course or fails any course after re-entry under "C" is not eligible for re-entry or to re-apply to the program.

XXVI. During the DMI program, any student, who fails a single didactic course and as long as they are not failing any other didactic or clinical courses and their original clinical site approves of their return the following program sequence, may re-enter the next academic year. Any student who fails a Didactic course **is NOT guaranteed clinical placement**. If the original clinical site does not approve the student's return the next academic year, **IT IS THE STUDENT"S REPONSIBILITY to seek acceptance at another affiliated LBCC DMI Program clinical sites.** A student who is unable to obtain clinical placement may NOT re-enter the DMI Program.

XXVII. Voluntary withdrawal by a student requires that the student must be *passing all clinical and didactic courses at the time of withdrawal* to be

considered for program re-entry. The student must re-enter in the Program sequence the following calendar year.

E. Any student that does not re-enter the DMI Program within 1 calendar year (next academic DMI Program sequence) after voluntary withdrawal or failure of a didactic course must reapply to the DMI Program to re-enter.

F. Any student who reenters the Program must submit a recent health evaluation and background check. In addition, the student must update all required program documentation such as cpr card, tb test, vaccinations, etc.

G. A student may be accepted and enter the DMI program only twice in their academic career at Long Beach City College this includes Advance Placement as well.

H. Any student re-entering the DMI Program must adhere to the College policy on course repetition found in the LBCC College Catalog.

XXIV. DISMISSAL OFFENSES

A student will be dismissed/expelled from the Program with a failing grade in any practicum and/or didactic course, and will be ineligible for re-entry, for any but not limited to the following offenses:

1. Breech of patient confidentiality (HIPPA Standards);
2. Patient, staff, faculty, or classmate's defamation of character/slander;
3. One incidence of gross negligence that could have or did result in patient harm;
4. Two incidences of mildly negligent patient care that caused no harm to the patient;
5. Willful harm to the patient, patient's family, a clinical employee, a fellow student, or a faculty member;
6. Theft of hospital property or goods;
7. Abusive, disrespectful behavior towards patients and their family members, hospital employees, LBCC faculty or classmates;
8. False documentation;
9. Refusal to comply with the Program dress code.
10. Inappropriate / harassing / violent social media or chat postings.

XXV. DMI PROGRAM RECOMMENDATIONS

A. The DMIP recommends that students do not work more than 20 hours a week. The DMIP is an intense program in which success is directly related to the amount of time dedicated to completing the program course and clinical requirements.

B. The DMIP recommends live no more than 30 miles from campus and/or clinical site. Spending too much time driving to and from the school and the clinical site has a direct correlation to student success rates.

C. The DMIP recommends that students have reliable transportation.

D. The DMIP recommends that from the onset of the program, students exchange contact information and form study groups

E. The DMIP recommends that students must be careful before palpating patients for position. We live in a PURITAN society. We recommend students COMPLETELY explain to the patients what the exam is about and how the student palpates the patient for correct positioning. We strongly recommend maintaining patient modesty and communicating each step of the radiographic process.

XXVI. DMI PROGRAM GRADUATION REQUIREMENTS

A. Students must complete LBCC GE plan or possess an associate degree or higher from a US accredited college or equivalent,
B. Students must pass the TEAS exam with a score of 62% or higher,
C. Students must complete three prerequisites (Ah60, AH61, Anat 41) or equivalent with a letter grade of C or higher (pass/no pass is not accepted),
D. Students must complete with a grade of C or higher all DMI Program courses (Pass / no pass is not accepted),
E. The DMIP require students to **TRANSITION**, when performing exams, from dependent to independent capability during the DMI 40C and 40D clinical courses. In addition, students **MUST** possess the capability of performing exam independently during the DMI 40E clinical course. ***Inability to work independent is considered failure of clinical competence and a patient safety risk due to need of a chaperon/staff member to watch student.***

F. During MAY of the final spring semester of the LBCC DMIP, students in DMI 14 must take and pass their final exam – a simulated ARRT board registry exam (HESI) with a score of 850 or a scaled score of 80% or higher in order for the student to pass the course and for the program director to sign/ verify the students' ARRT APPLICATION. Without the program's director's signature or electronic ARRT verification, the student will not be eligible to take the ARRT exam. One remediation of the ARRT simulated board exam (HESI) is allowed within 2 weeks of the initial score. If a student does not pass the second remediation, the student will be given a "D" or "F" for DMI 14. If a student wishes to attempt the DMIP again, the student may re-apply to the DMIP, if eligible.

XXVII. AMERICAN REGISTRY OF RADIOLOGIC TECHNOLOGISTS (ARRT)

Exam Eligibility:

A. The LBCC DMIP is an ARRT recognized educational program accredited by CCJC of the WASC, an ARRT recognized accrediting agency by the national council of education(NCE). By successfully completing the LBCC DMIP, students will have completed all ARRT didactic and clinical requirements as well as the California Department of Public Health – Radiologic Health Branch (CDPH-RHB) requirements for a radiologic technologist approved curriculum.

B. The ARRT administers the national Radiology technology certification exam in which qualified applicants have 3 attempts within two years of graduation to pass the ARRT exam with a 75% or better.

LBCC DMI/CT/& MRI Programs - Student Declaration of Pregnancy Status

Name: _____ Clinical Site:_____

In signing this form, it is acknowledge that:

The Program officials provided me information regarding fetal radiation exposure. I was given the opportunity to ask questions, which were satisfactorily answered. I understand the total fetal dose **must not exceed** 500 millirem (5mSv). I agree to wear the fetal radiation detection device at the clinical site and during on-campus labs.

I understand the Radiologic Technology Program and my Clinical Affiliate will take such precautions deemed necessary to protect me and the fetus safely from excess radiation exposure during my pregnancy. **I undertand that it is my responsibility to take appropriate precautions while in clinical training**.

I understand that pregnancy is not a reason for program dismissal, but may require an extension of clinical and/or didactic courses for reasons of radiation safety.

Declaration:

I **voluntarily declare** that I am approximately_____ months pregnant. Estimated due date is _____. Written proof of pregnancy, including any special considerations required by my physician has been provided to both program director and current clinical educator. **Student Options:**

1. Clinical schedules and rotational assignments shall remain unchanged.

2. Written request by student for modified clinical assignment or schedule. Modifications to the **clinical schedule or rotational assignments shall be voluntary.**

3. Voluntarily withdraw from the program and return following pregnancy.

I understand that option #2 may require additional clinical time following my pregnancy. I understand that option #3 may well be conditional on time away from the program and clinical space available.

If I am in the program when my pregnancy has terminated, I shall notify program officials by completing the bottom portion of this form. **State option selected** (see list above).

Student Name (Print)_____ Option Selected_____

Student Signature_____ Date_____

********** This is to advise the program that I am **no longer** pregnant and no longer need special radiation safety considerations.

Student Name (print please) _____

Student Signature_____ Date_____

LONG BEACH CITY COLLEGE
DIAGNOSTIC MEDICAL IMAGING PROGRAM
PREGNANCY POLICY

The Code of Federal Regulations in 10CFR, Part 19, "Notices, Instructions, and Reports to Workers: Inspections and Investigations" and in Section 19.12, "Instructions to Workers" requires instruction in the "health protection problems associated with exposure to radiation and/or radioactive material, in precautions and procedures to minimize exposure, and in the purposes and functions of protective devices employed". The instructions must be "commensurate with potential radiologic health protection problems in the workplace".
The following policy has been adopted for the radiation protection of the fetus of the expectant female student while assigned to the clinical and laboratory portion of their education. The program will take all practical steps to reduce the radiation exposure to female students during the course of their pregnancy. Pregnant students have the right to declare or not declare their pregnancy. Pregnant students have the right to continue in the program if all the following guidelines are met:

1. Female students should immediately notify the Program Director and/or the Clinical Coordinator, **in writing**, in case of suspected or known pregnancy;
2. Pregnant students should provide to program officials, within two weeks of notification of pregnancy, a written physician statement verifying pregnancy with an expected date or delivery, physical capabilities and if any physical restrictions are necessary. Any change in the physical capabilities of the student during the pregnancy requires written physician verification;
3. The Program Director has available written information explaining potential risks of radiation exposure during pregnancy and methods for reducing these risks. The student will provide written verification of reviewing these materials within two weeks of notifying the program director;
4. During the entire gestation period, the maximum permissible dose equivalent to the fetus from occupational exposure of the expectant mother shall not exceed 0.5 rem (5mSv). A pregnant student must wear two radiation detection devices while in the clinical education center or campus laboratory. One must be worn at the collar, and one must be worn at the mid-abdominal level. Exposures exceeding 0.5 rem (5mSv) will require temporary leave of absence and program extension in order to complete the clinical practicum. The fetal badge will be provided after the pregnancy is declared. In 10CFR 20.1502, "Conditions Requiring Individual Monitoring of External and Internal Occupational Dose", licenses are required to monitor the occupational dose to a declared pregnant woman, using an individual monitoring device if it is likely that the declared pregnant woman will receive…a deep dose equivalent in excess of 0.1rem (1mSv);
5. A pregnant student MAY NEVER hold a patient during radiologic procedures;
6. The Clinical Coordinator, Clinical Instructor, and student will review the pregnant student's rotational schedule to reduce procedures with potentially

high radiation exposure (e.g. portables, fluoroscopy, special procedures, cath lab);
7. At the termination of the pregnancy, the student shall provide a written statement to program officials stating she is no longer pregnant. Each student will be individually assessed to make arrangements for completing didactic or clinical courses that may have been affected by the pregnancy;
8. Students who have temporarily exited the program due to pregnancy are expected to resume the program within one year or less. Students who do not re-enter the program within one year will have to re-apply to the DMI program.

LONG BEACH CITY COLLEGE
DIAGNOSTIC MEDICAL IMAGING PROGRAM
PREGNANCY POLICY

I acknowledge that I have received a copy of the program pregnancy policy and agree to notify the program officials, in writing, in case of suspected or known pregnancy. In addition, I agree to notify the program officials when my pregnancy has terminated by completing the bottom portion of this form. I understand that pregnancy is not a reason for dismissal from the program, but may require an extension of clinical and/or didactic courses for reasons of radiation safety.

_____
Student Name (please print)

_____
Student Signature

_____
Date

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Compliance statement for LBCC DMI Program clinical standards, policies, and procedures

I declare that I have read all the information contained within the Student Clinical Handbook and will comply with all program standards, policies, and procedures. I also certify that I have no physical or emotional conditions that would prevent me from performing the above listed standards, policies, or procedures. I will adhere to the above standards, policies, and procedures, and furthermore, I fully understand that **non-compliance in any one area will result in disciplinary action including program dismissal**. I have the right to pursue the college due process grievance procedure.

_____ _____ _____

Student Name (print please) Student Signature Date

In accordance with the Americans With Disabilities Act, (ADA) Public Law 101-336, the Long Beach City College Diagnostic Medical Imaging Program makes every effort to make reasonable accommodation to any qualified individual with a disability. All accommodation requirements will be coordinated with DSPS on campus. The program will not discriminate against any individual because of age, gender, ethnic background, sexual orientation, political affiliation, or disability.

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LONG BEACH CITY COLLEGE
DIAGNOSTIC MEDICAL IMAGING, COMPUTERIZED TOMOGRAPHY, AND MAGNETIC RESONANCE IMAGING PROGRAMS

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CONFIDENTIALITY STATEMENT

The undersigned hereby acknowledges his/her responsibility under applicable federal law, state law, and the agreement between LONG BEACH COMMUNITY COLLEGE DISTRICT ("college") and any affiliated clinical facility below ("Hospital or Imaging Center"), to keep **confidential** any information regarding Hospital or Imaging Center patients and proprietary information of the Hospital or Imaging Center. The undersigned agrees, under penalty of law, not to reveal to any person or persons, except authorized clinical staff and associated personnel, any specific information regarding any patient, and further agrees not to reveal to any third party any confidential information of Hospital or Imaging Center, except as authorized by law or as authorized by Hospital or Imaging Center. The undersigned agrees to comply with any patient information privacy policies and procedures of the College, Hospital, and/or Imaging Center.

Dated this _____ day of _____, 20__

Student Name:_____

Student Signature:_____

Clinical Facilities:

Hospitals and Imaging Centers

UCI Health - Lakewood
UCI Health - Los Alamitos
UCI J+Health - Placentcia-Linda
Long Beach Memorial Medical Center
Long Beach Veterans Affairs Medical Center
St. Mary Medical Center
Total Care Imaging
Miller's Children's Hospital
St. Francis Medical Center
Orange Coast Memorial Medical Center
Providence Health care
UCI Health - Medical Center
Wave Imaging
Shin Imaging

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LONG BEACH CITY COLLEGE
DIAGNOSTIC MEDICAL IMAGING PROGRAM

DMI Program Acknowledgement

The undersigned hereby acknowledges his/her understanding and compliance with the following information:

1. An overall GPA of at least 2.5 must be maintained throughout the program. Grades will be determined using the following scale:
   - A 93-100% * below 75% is NOT passing
   - B 84-92%
   - C 75-83%
2. 75% or higher required on all DMI courses and final exams to progress.
3. During any clinical course, students must pass staff evaluations with a semester average of 75% or better to pass the clinical course. In addition, Students must pass 2 staff evaluations per semester with a 75% or higher in order to pass the clinical course.
4. If the DMIP instructor allows, a student may remediate a final exam once per didactic course, but for a total of 2 times total for the DMI program. If a student fails a third didactic course final, the student will be dismissed from the program.
5. Students must pass the HESI ARRT registry simulation exam during the final semester of the DMIP with a 750 (75%) or higher in order for the program director to sign/verify their ARRT application
6. The DMI Program for courses DMI 40A-F guarantees initial clinical assignment/placement for accepted candidates.
7. During the DMI program, any student, who fails a single didactic course and as long as they are not failing any other didactic or clinical courses and their original clinical site approves of their return the following program sequence, may re-enter the next academic year. Any student who fails a Didactic course is NOT guaranteed clinical placement. If the original clinical site does not approve the student's return the next academic year, **IT IS THE STUDENT'S REPONSIBILITY to seek acceptance at another affiliated LBCC DMI Program clinical sites.** A student who is unable to obtain clinical placement may NOT re-enter the DMI Program.
8. Any student who fails any DMI Clinical course or fails any didactic course after re-entry into the program **is not eligible for re-entry or to re-apply to the program.**
9. The DMIP require students to transition from dependent to independent capability during the summer, fall, and spring semester. Inability to work independent is considered failure of clinical competence and a patient safety risk due to need of a chaperone/staff member to watch student.
10. The DMIP recommends that students do not work more than 20 hours a week.
11. The DMIP recommends live no more than 30 miles from campus and/or clinical site.
12 The DMIP recommends that students have reliable transportation.
13. The DMIP recommends that students must be careful before palpating patients for position.
14. Students acknowledge that faculty is available by appointment or office hours for help.
15. Students acknowledge that they must act professional at the school and clinical sites per student rules of conduct and DMIP policies.
16. Students acknowledge that they must adhere to rules and regulations of the clinical site.
17. Student use of a cell phone camera/video recording, any other digital electronic device camera/video recorder, or any other analog camera/video recording device may never be used for patient photography, photographs of acquired images, or any use that violates HIPPA / patient confidentiality. This constitutes a violation of the DMI program policy - dismissable offenses, if used as described above. Individual Clinical Sites have the right to have students place their cell phones in storage during their clinical rotations. While incidental personal use is allowed, it must be limited to break and lunch periods in non-patient care areas whenever possible.
18. Students are responsible for the content of their social media postings. Any posting deemed inappropriate / harmful / or violent in any nature will result in discipline including possible dismissal from the DMI program.

Dated this _____ day of _____, 20

Student's Name:_____

Student Signature:_____

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"SCOPE OF PRACTICE"
Compliance statement
Diagnostic Medical Imaging (DMI) Program

I declare that I will not perform any procedure or action that will violate my scope of practice as a LBCC DMI STUDENT. I may perform only DMI program approved Radiographic procedures at my assigned clinical site during my DMI Program clinical shift. Even though, I may possess a certification or licensure in another allied health or nursing discipline, I may not perform any laboratory tests, patient exams or procedures other than radiographic imaging exams as outlined in the DMI program policies at my assigned site as an LBCC DMI program student. I understand that I am not authorized to perform venipuncture as a DMI student even if I completed the DMI 222 Venipuncture course. If I am employed at my DMI Program clinical site, I may NOT perform any patient exams, tests, or procedures within my employment scope of practice anytime during my DMI program clinical shifts. Also, if I am employed at my clinical site, I will not access any patient or employee electronic portal such as Electronic Medical Records or a "PACS" system unless I have been given a separate electronic access as a LBCC DMI program student. In addition, I will adhere to the above standards, policies, and procedures, and furthermore, I fully understand that **non-compliance in any one area will result in disciplinary action including program dismissal**. I have the right to pursue the college due process grievance procedure.

_____	_____	_____
Student Name (print please)	Student Signature	Date

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JRCERT Standards for an Accredited Educational Program in Radiography and the avenue to pursue allegations of noncompliance with the Standards.

Any individual associated with the program has the right to submit allegations against a JRCERT-accredited program if there is reason to believe that the program has acted contrary to JRCERT accreditation standards and/or JRCERT policies. Additionally, an individual has the right to submit allegations against the program if the student believes that conditions at the program appear to jeopardize the quality of instruction or the general welfare of its students.

The Joint Review Committee on Education in Radiologic Technology (JRCERT) sets accreditation standards for educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. Students can access the official standards and reach the agency directly via their contact details and physical address.

JRCERT Contact Information

- **Phone Number:** (312) 704-5300
- **Email:** mail@jrcert.org
- **Physical Address:** 20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182
- **Website:** JRCERT Official Website
- **Support Hours:** 8:30 AM – 3:00 PM (Monday – Thursday), Central Time

Compliance statement for LBCC DMI Program clinical standards, policies, and procedures

I declare that I have received and read the information on this page regarding the Joint Review Committee on Education in Radiologic Technology (JRCERT). I will adhere to the above standards, policies, and procedures.

_____	_____	_____
Student Name (print please)	Student Signature	Date

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Program Hour Summary

Name:_____ Clinical Site_____

DMI 40A Critique date_____ date_____
Initials_____ Initials_____

Dmi 40A (120)

total DMI 40A clinical hours #_____

DMI 40B Critique date_____ date_____ date_____ date_____
Initials_____ Initials_____ Initials_____ Initials_____

DMI 40B (384)

total DMI 40B clinical hours #_____

DMI 40C Critique date_____ date_____ date_____
Initials_____ Initials_____ Initials_____

Dmi 40C (304)

total DMI 40C clinical hours #_____

DMI 40D Critique date_____ date_____ date_____ date_____
Initials_____ Initials_____ Initials_____ Initials_____

DMI 40D (512)

total DMI 40D clinical hours #_____

DMI 40F Critique date_____ date_____
Initials_____ Initials_____ Initials_____

DMI 40F (136)

total DMI 40W clinical hours #_____

DMI 40E Critique date_____ date_____ date_____ date_____
Initials_____ Initials_____ Initials_____ Initials_____

DMI 40E (512)

total DMI 40E clinical hours #_____

total DMI Program clinical hours needed 1968 #_____

LBCC DMI PROGRAM
DMI 222 - VENIPUNCTURE
Venipuncture Log

Student Name (Print):_____

For partial completion of the requirements of California Health and Safety Code § 106985, a total of 10 venipunctures need to be performed by students on a human or a mannequin under personal supervision.

	Date	Mannequin	Live	Initials
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Student Signature: _____

Evaluator Name:_____ Date:_____

Evaluator Signature: _____

Long Beach City College
DIAGNOSTIC MEDICAL IMAGING PROGRAM

2026-2027 PROGRAM CALENDAR

Advisory Committee Meeting:

June 2nd 2027, 12:00 p.m. on campus

Clinical Education Coordination Sub-Committee (CECSC)

Schedule: All meetings are at **NOON** on campus -Room D107 or noon off campus TBD

6/03/26 - on campus
7/16/26 – DMI Preliminary Selection Meeting-on campus 12 noon
7/22/26 – **Clinical selection/CECSC - off campus no student reps**
09/16/26 – on campus
11/4/26 – on campus
12/16/26 – **off campus student reps ok**
02/03/27 – on campus
04/14/27 – on campus
06/2/27 – on campus

Recess Periods: (students may still attend clinical during break)

Summer '26 August 12, 2026 through August 30, 2026
Winter Break '27 December 21, 2026 through January 3, 2027
Spring Break '27 April 5, 2027 through April 11, 2027

06/3/26 CECSC Meeting, 12:00 p.m., room D107
2nd Year pre program Clearance 3pm-6pm

06/04/26 Critique D107 3pm -5pm DMI 40C
DMI Program information Meeting 5pm D107

6/6/26 Saturday graduation banquet 5pm

06/10/26 **PROGRAM COMPLETION/CLEARING 1pm-4pm**
Spring Semester ends

06/15/26 Summer Session 6/15/26 through 8/20/26
DMI 40C CLINICAL – ***Starts Monday June 15th***
Students 304 hours total or 38- 8 hour shifts (This does not include –critique class hours).

06/19/26 SCHOOL OBSERVED Juneteenth Holiday – classes. Students are off but may go to clinical.

07/03/26 SCHOOL OBSERVED Fourth of July Holiday – classes. Students are off but may go to clinical.

07/16/26 Pre-Selection meeting 12 noon (Meet and greet lunch provided) on campus room D107
Critique D107 3pm -5pm DMI 40C
DMI Program information Meeting 5pm D107

07/22/26 Selection Meeting OFF CAMPUS TBD 11:00.
no student reps

08/6/26 Critique D107 3pm -5pm DMI 40C
DMI Program information Meeting 5pm D107

08/20/26 Summer Sessions ends

08/31/26 **FALL SEMESTER BEGINS**: 8/31/26 through 12/20/26
DMI 40D – 512 total hours not including critique hours or an average of 32 hours/week throughout the semester.

09/07/26 Holiday, Labor day – Students off but may work

09/10/26 **DMI Program information Meeting** 5pm D107

09/16/26 CECSC Meeting 12noon On Campus room D107
Critique D107 4pm DMI 40D

09/22/26 FLEX DAY – Students off but may work

10/8/26 **DMI Program information Meeting** 5pm D107

11/4/26 CECSC Meeting 12noon On Campus room D107
Critique D107 4pm DMI 40D
2nd years apply for graduation make counseling appts

11/5/26 **DMI Program information Meeting** 5pm D107

11/11/26 Holiday, Veteran's Day

11/12/26 **HESI EXAM #1 - 12 noon - 4pm**
Allied health computer lab building C room 308

11/26/26-11/28/26 Thanksgiving Holiday Students off but may work

12/03/26 **DMI Program information Meeting** 5pm D107

12/16/26 CECSC Meeting, 12 noon, OFF CAMPUS TBD
Critique D107 4pm DMI 40D

12/20/26 **Fall semester ends** – Students off but may Work during winter break

1/2/27 2nd years to apply for ARRT student account

01/04/27 WINTER INTERSESSION 1/4/27 through 2/6/27
DMI 40A - 120 hours total 1st years
DMI 40F - 2nd years - 136 hours total

01/7/27 Critique **1st** years 3pm-5pm DMI 40A
DMI Program information Meeting 5pm D107

1/18/27 Holiday MLK Day - Students off but may work

02/3/27 CECSC Meeting, 12:00 p.m., room D107
Critique **1st** years 230-4pm DMI 40A
Critique **2nd** years 4pm DMI 40F

02/4/27 **DMI Program information Meeting** 5pm D107

02/8/27 - 06/9/27 SPRING SEMESTER BEGINS:
DMI 40B 384 hours total –average 24 hours/week Monday/Wednesday/Friday
DMI 40E – 512 total hours or ave 32 hours/ week.

2/8/27- 4/1/27 DMI 61 Fluoroscopy lecture and lab 1st years

2/12/27 Holiday Lincoln Day - Students off but may work

2/15/27 Holiday Washington Day - Students off but may work

2/24/27 Critique D107 4pm DMI 40E 2nd years

03/4/27 Critique 1st years 330pm DMI 40B
DMI Program information Meeting 5pm D107

3/10/27 2nd years 1st day to complete ARRT application and payment

03/31/27 Cesar Chavez Day - no classes Students off but may work

04/1/27 Critique 1st years 330pm DMI 40B
DMI Program information Meeting 5pm D107

04/14/27 CECSC Meeting, 12:00 p.m., room D107
Critique class 4pm 2nd years

4/5/27 – 4/11/27 **SPRING BREAK RECESS** - no classes Students off but may work

04/22/27 FLEX DAY - no classes Students off but may work

05/06/27 12 noon **HESI EXAM #2 –Final for DMI 14**
Critique 1st years 330pm DMI 40B
DMI Program information Meeting 5pm D107

05/31/27 Holiday, Memorial Day - no classes Students off but may work

06/02/27 CECSC Meeting, 12:00 p.m., Room D107
ADVISORY COMMITTEE MEETING, 12:00 p.m D107
Critique class 4pm 2nd years
2nd years - pre program clearing 6pm

06/03/27 Critique 1st years 330pm DMI 40B
DMI Program information Meeting 5pm D107

6/5/27 graduation banquet ?? TBD

06/9/27 **PROGRAM COMPLETION/CLEARING 1pm-4pm**
Spring Semester ends

06/10/27 COLLEGE COMMENCEMENT CEREMONY

06/14/27 Summer Session 6/14/27 through 8/19/27
DMI 40C CLINICAL – ***Starts Monday June 14th***
Students 304 ours total or 38- 8 hour shifts (This does not include –critique class hours).

Revised Oct 24, 2026