

DIAGNOSTIC MEDICAL IMAGING SCIENCES

(Radiologic Technology)

LONG BEACH CITY COLLEGE

Curriculum Guide for Academic Year 2010-2011

Associate in Science and/or Certificate of Achievement or Certificate of Accomplishment

ALL INFORMATION CONTAINED HEREIN IS SUBJECT TO CHANGE WITHOUT NOTICE.

For possible updates to this guide please refer to the following website: <http://osca.lbcc.edu>

PROGRAM MISSION STATEMENT

The Diagnostic Medical Imaging Program at Long Beach City College is dedicated to providing high-quality education and clinical practicum to qualified students. It is responsive to the diverse needs of the local medical community. It specializes in the education and training that lead to entry-level employment as a competent, ethical health care professional, and an Associate of Science Degree. The program emphasizes the necessity of professional development and life-long learning.

CAREER OPPORTUNITIES

This field of concentration is designed to prepare the student for Certification by the State Department of Health Services, Radiological Health Section, and Registration by the American Registry of Radiological Technologists after testing. The AART is the national testing/registration body (www.ARRT.org) The end objective is to prepare students for employment as practicing medical imaging professionals in Acute Care Hospitals, Medical Clinics and/or private offices.

NOTE: An applicant should contact the ARRT to determine if he or she will be disqualified due to the conviction of a felony or misdemeanor.

DEPARTMENTAL ADMISSION REQUIREMENT

Applications will not be accepted until the following prerequisites have been met:

1. Graduation from an accredited high school or the equivalent.
2. Before students may begin the program, the following proficiencies must be met:

READING:

- a. A passing score on the reading section of the Long Beach City College assessment test, **or**
- b. Completion of † READ 82 or 83 at Long Beach City College with a grade of "C" or better, **or**
- c. A qualifying score on a reading competency examination administered to eligible students at the completion of † English 182AB **or**
- d. Documentation from LBCC Counseling stating proficiency has been met.

MATHEMATICS:

- a. A passing score on the Elementary Algebra Diagnostic test (part of the Long Beach City College assessment test) **or**
 - b. Successful completion of a math course at the level of intermediate algebra (Math 130A or 130) or higher **or**
 - c. Documentation from LBCC Counseling stating proficiency has been met
3. High school grade point average or current college GPA is considered.
 4. Completion of AH 60, AH 61, and ANAT 41 within five years with a letter grade of "C" or better.
 5. C.P.R. for Health Care Providers certification is required before the practicum phase, which begins 1st Fall semester.
 6. Evidence of physical and emotional fitness by medical examination and personal interview. This is submitted in the Summer of the 1st year in DMI 20.

Selection Process

The following will be considered in the selection process:

1. Date of application
2. Number of program required science and general education courses taken.
(ENGL 1, Psychology 1, Speech 10, 20, or 30, Humanities, Anatomy 41, AH 60, AH 61)
3. Applicant responses to required application procedure (i.e. attending advisement session).
4. It is suggested that applicants complete as many of the General Education courses as possible prior to admission to the program.
5. Current college grade point average (a minimum cumulative GPA of 2.0 or better is required for program admission).

NOTE: Students MUST keep the Admissions and Records Office AND the School of Health and Science advised of their current address and telephone number. Please keep both offices informed if you change your name. Any changes MUST be submitted in writing.

Information Session

Students who need additional information are invited to attend an information session, held on the first Tuesday of every month from September to May (EXCEPT JANUARY) at 11:15 a.m. in Room C100. For additional information, please call (562) 938-4169.

Application Procedures

Applications are accepted on a continuous basis.

1. Apply for admission to the college through the Admissions Office.
2. Make an appointment to take the college assessment test.
3. Submit transcripts from high school and previous college work to the Admissions Office and the School of Health and Science.
4. Complete the Diagnostic Medical Imaging Program Application form and bring the completed application form and documentation with a self-addressed stamped, legal size envelope (4 and 1/8 X 9 and 1/2 inches, available in the Bookstore) to the School of Health and Science, Room C100.
5. All applicants will be notified by mail (see #4 regarding required envelope) regarding the status of their applications. Applicants will be invited to an Advisement Session which they MUST attend. Only those applicants who are qualified and who have attended an Advisement Session (different from an Information Session) will be considered for admission into the program.

REQUIRED COURSES

UNITS In Progress Completed Grade

Prerequisite Courses

The following courses must be completed within five years prior to the first Spring Semester of the program:

* ANAT 41	Anatomy & Physiology (F, SP, S)	5		
AH 60	Medical Terminology (F, SP, S)	3		
AH 61	Integration of Patient Care (F, SP)	2		
TOTAL UNITS		10		

FIRST YEAR

Spring Semester

† DMI 10	Intro. to Radiologic Technology	3		
Subtotal Units		3		

Summer Session**

† DMI 20	Intro. to Radiologic Physics	3		
Subtotal Units		3		

Fall Semester

*# General Ed. Course	(see explanation in footnote)	3		
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Computer Class - Any class which satisfies computer portion of Information Competency requirement for graduation. Recommended course: COMIS 1		1-4		
For complete listing see General Education Course Pattern Guide.				
† DMI 11	Radiographic Techniques	1		
† DMI 12	Contrast Fluoroscope & Radiographic Procedures.	3		
† DMI 21	Applied Radiological Physics	2		
† DMI 30	Positioning for General Diagnostic Radiography	3		
† DMI 40A	Clinical Radiology	2.5		
Subtotal Units		18.5-21.5		

Spring Semester

†* DMI 60	Radiologic Pathology	3		
† DMI 24	Radiation: Biology & Protection	3		
† DMI 31	Positioning for Cranial Radiography	3		
† DMI 40B	Clinical Radiology	6		
Subtotal Units		15		

REQUIRED COURSES

UNITS In Progress Completed Grade

SECOND YEAR

Summer Session**

† DMI 40C	Clinical Radiology	6		
Subtotal Units		6		

Fall Semester

*# General Ed. Course	(see explanation in footnote)	3		
† DMI 222	Venipuncture	1		
† DMI 15	Computer Applications in Radiology	3		
† DMI 40D	Clinical Radiology	11		
Subtotal Units		18		

Spring Semester

*# General Ed. Course	(see explanation in footnote)	3		
† DMI 14	Trends & Self-Assessment. in Rad. Tech.	3		
† DMI 40E	Clinical Radiology	11		
† DMI 61	Fluoroscopy	2		
Subtotal Units		19		
TOTAL UNITS (IN PROGRAM)		82.5-85.5		
TOTAL UNITS (INCLUDING PREREQUISITE COURSES)		92.5-95.5		

RECOMMENDED courses but not required:

† DMI 62	Mammography	3.5		
LEARN 11	Learning and Academic Strategies	2		

A letter grade of "C" or better is required in all DMI, Allied Health, & Anatomy courses.

In general, "double-counting" is not allowed. That is, one course may not be used to fulfill both a field of concentration requirement and to fulfill a general education requirement.

LEGEND

† This course has a prerequisite; prerequisite courses must be completed with a letter grade of "C" or better (see catalog or schedule of classes).

Specific General Education courses required: † ENGL 1 or 105 or ESL 34X, Speech 10, 20, or 30, Psychology 1, Humanities (any course that meets the Associate Degree requirement) and 1 unit of Physical Education (two half-unit (.5) P.E. courses).

* This course is an exception to the "double-counting" rule; it may be double-counted.

(SP = Spring) (S = Summer) (F = Fall) (INF = Infrequently) = Represents general frequency of course offering •

** A summer session may not be offered due to budget constraints. If it is not, the program will resume in the fall and courses will be shifted accordingly.

GRADUATION REQUIREMENTS

For **CERTIFICATE OF ACHIEVEMENT:**

This certificate is a one to two year program in occupational/technical areas at Long Beach City College which provides training in job skills and employment opportunities. Complete the required units with a minimum cumulative grade point average of 2.0 ("C" average).

A Diagnostic Medical Imaging Sciences student must obtain a minimum of an Associate Degree but degree may be from another accredited institution. Student must have official transcripts on file in the Admissions and Records Office.

For **ASSOCIATE DEGREE:**

NOTE: Effective Fall 2009, Title 5, section 55063 (a) (2) requires that students must complete each course counted toward the major or area of emphasis with a grade of "C" or better or "P" if the course is taken on a "Pass/No Pass" basis.

The Associate Degree is a two-year college degree awarded by Long Beach City College which includes general education courses and a major. Complete the required units. In addition, refer to the catalog for residency requirements. The requirements for general education/proficiency and the field of concentration need to be from the

same catalog year. This catalog year may be any year between the year of initial enrollment to the present, provided continuous enrollment is maintained throughout (see the catalog for definition of "continuous enrollment"). Fifty per cent (50%) or more of the unit requirements for this field of concentration must be completed in residence (credit earned by exam, where applicable, may be included).

NOTE: To receive a certificate or degree you must submit completed application forms in the Admissions and Records Office during your final semester of course work.

PROGRAM INFORMATION

Clinical Education

The following modern medical centers in the community are used as extension campuses for the Clinical Education courses:

- | | |
|------------------------------------|----------------------------------|
| Lakewood Regional Medical Center | Lakewood Regional Medical Center |
| Los Alamitos Medical Center | Saint Francis Medical Center |
| Lakewood Regional Medical Center | Saint Mary Medical Center |
| Long Beach Memorial Medical Center | Veterans Affairs Medical Center |

Cost of Program

Students purchase their own books and uniforms and pay a student body fee. The college has no dormitory facilities; students must provide for their own living expenses and transportation. Limited educational grants and loan funds are available. ESTIMATED expenses for the two year program:

Books and supplies	\$750	C.S.R.T. Membership (optional)	\$50
Student body fees	20 per semester	Parking fees	25 per semester
Uniforms	300	ARRT Exam	\$200
Graduation Expenses	500	CRT Exam	\$350
Enrollment Fees: 1 unit =	26 / semester	Health Fee	14 per semester
Background Check 75 (Prior to beginning the clinical practicum (DMI 40A), ALL students must submit a recent background check which is obtained at their own expense)			
A.S.R.T. Membership (optional)	75	Malpractice Insurance (optional)	15 /semester

Accreditation

Long Beach City College is fully accredited by the Western Association of Schools and Colleges. The program is approved by the California State Department of Health, Radiological Health Branch.

For any additional program information call (562) 938-4678.

CERTIFICATES OF ACCOMPLISHMENT

FOR OFFICE USE ONLY: 4040

**Name of Certificate: Radiologic Technology Fluoroscopy Permit
(Must be licensed CRT or in Second Year of Diagnostic Medical Imaging Program)**

REQUIRED COURSE		UNITS	In	
			Progress	Completed Grade
†	DMI 61 Fluoroscopy	2		
TOTAL UNITS		2		

FOR OFFICE USE ONLY: 4043

**Name of Certificate: Mammography
(Must be licensed CRT or in Second Year of Diagnostic Medical Imaging Program)**

REQUIRED COURSE		UNITS	In	
			Progress	Completed Grade
†	DMI 62 Mammography	3.5		
TOTAL UNITS		3.5		

CERTIFICATES OF ACCOMPLISHMENT

FOR OFFICE USE ONLY: 4612

Name of Certificate: Magnetic Resonance Imaging Technologist

REQUIRED COURSE			UNITS	In Progress	Completed Grade
†	DMI 401	Physical Principles of Magnetic Resonance Imaging	3		
†	DMI 402	MR Imaging Procedures	3		
†	DMI 403	Cross-sectional Anatomy	3		
†	DMI 404	MRI Pathology	3		
†	DMI 405AB	MRI Clinical Practicum	2.5		
TOTAL UNITS			14.5		

NOTE: All courses must be completed within three (3) years of starting the program.

LEGEND
† This course has a prerequisite; prerequisite courses must be completed with a letter grade of "C" or better (see catalog or schedule of classes). (SP = Spring) (S = Summer) (F = Fall) (INF = Infrequently) = represents general frequency of course offering

CERTIFICATE OF ACCOMPLISHMENT REQUIREMENTS

For CERTIFICATE OF ACCOMPLISHMENT:

This certificate certifies a competency in a given area and requires less than 18 units. Complete the required unit(s) at Long Beach City College with a minimum grade of "C" in each course. Please submit a completed application for the Certificate of Accomplishment in the Admissions and Records Office following completion of required unit(s).

Students interested in transferring to a university to continue their study in this field of concentration or other majors are strongly advised to consult an LBCC academic counselor and refer to the ASSIST website (www.assist.org) for major preparation information. Counselors can clarify the different major and admissions requirements at a university. Students may visit the Student Success/Transfer Services Center to access further educational resources. If you would like to set up an appointment to see a counselor or schedule the SOAR Test, call LAC (562)938-4561 or PCC (562)938-3920.