



UNIVERSIDAD CENTRAL DEL CARIBE

Program Effectiveness Report

Medical Images Technology Program

2011-2012

The following report is made public in response to a requirement of the Medical Images Technology Program's accrediting agency: Joint Review Committee on Education in Radiologic Technology. This report includes data relevant to our Program's Goals and based on Student performance. The areas included in this report are: Academic characteristics of the admitted students; program completion rates; graduation rates; professional credentials exam results (ARRT and PREBRT), and employment rates.

Goal 1

To provide the opportunity to every qualified individual, regardless of race, creed, national origin and gender to acquire the experiences, competencies, challenges, and knowledge that is required of a Medical Images Technologist.

Admission Profile for All Offerings

Average High School GPA for Radiography students of the Associate Degree admitted students have been well over the expected 2.00, even going over the 3.00 threshold in the last three years. The lowest average was 2.79 in 2007 while the highest was 3.50 in 2011. CEEB results for Associate Degree “first time admitees” has been over the expected “2000”. University GPA has maintained its level well over the 2.5 required for all programs, with the exception in 2008, for the associate degree were the GPA was 2.33.

For the Associate Degree program, even though the Program has done its best efforts to promote and recruit the highest qualified student, there has been a wide range of numbers in the applicant pool with a steep decreased in 2008. This is contrasted with the record 98 applicants in 2010. This we presume was a result of the hiring of a full time recruitment officer which engaged in an aggressive promotional campaign within local high schools. In 2011, the applicant pool returned to its usual numbers. We consider this change to be a result of the establishment of three new programs in Puerto Rico in institutions with aggressive promotion and recruitment services and open admission policies.

Admissions to the rest of the offerings are varied, while the CT and MR certificates admissions are always over the expected limits, Mammography certificate admissions reach 83% in 2008 and increase to 117% for 2009 and 2011.

In the Post-Associate Degree Certificate in Diagnostic Ultrasound, its admission numbers has fluctuated from 7 (2007) to 22 (2011) students per year.

The Bachelor in Science in Diagnostic Images, the youngest of our offerings has fluctuated a bit over its five years from 4 students in 2007 to 28 in 2010. The growth in the number of applicants in these offering is mainly due to the requisites established in 2010 by the Examination Board of a Bachelor degree to apply for a specialized modality (CT, MR, Mammo, Densitometry, Cardiovascular) certification.

Table 1 Characteristics of Matriculants by Entering Class: Associate degree in Radiologic Technology

Characteristics of Matriculants by Entering Class						
	2006	2007	2008	2009	2010	2011
High School GPA	3.08	2.79	2.89	3.21	3.07	3.50
University GPA (Transfers Students)	2.52	2.81	2.33	3.30	3.33	2.80
College Entrance Examination Board Test (CEEB)	2219	2033	2120	2241	2245	2324
Number of applicants	51	55	44	57	98	56
Number of admissions						
High School	20	23	16	12	11	18
Transfers Students	13	9	12	14	24	14
Percentage of expected admission goal (n=35)	94 %	91 %	80 %	74 %	100 %	91 %

Table 2 Characteristics of Matriculants by Entering Class: Post-Associate Degree Certificate in Diagnostic Ultrasound

Characteristics of Matriculants by Entering Class						
	2006	2007	2008	2009	2010	2011
University GPA	2.94	3.12	3.11	3.45	3.68	2.99
Total Number of applicants	12	10	13	7	12	22
UCC Applicants	[11]	[11]	[1]	[3]	[0]	[19]
Number of admissions	8	8	8	7	12	22
Percentage of expected admission goal (n=12)	67 %	67 %	67 %	58 %	100 %	183 %

Table 3 Characteristics of Matriculants by Entering Class: Post-Associate Degree Certificate in Mammography

Characteristics of Matriculants by Entering Class						
	2006	2007	2008	2009	2010	2011
University GPA	2.84	3.00	3.01	3.10	3.21	3.30
Total Number of applicants	13	5	11	14	8	9
UCC Applicants	[11]	[0]	[2]	[10]	[2]	[5]
Number of admissions	6	4	10	14	10	14
Percentage of expected admission goal (n=12)	50 %	33 %	83 %	117 %	83 %	117 %

Table 4 Characteristics of Matriculants by Entering Class: Post-Associate Certificate in Computerized Tomography

Characteristics of Matriculants by Entering Class						
	2006	2007	2008	2009	2010	2011
University GPA	3.23	3.14	3.02	3.16	3.15	3.05
Number of applicants	39	24	45	42	35	37
UCC Applicants	[17]	[13]	[13]	[22]	[2]	[18]
Number of admissions	31	16	44	38	32	36
Percentage of expected admission goal (n=30)	103 %	53 %	147 %	121 %	107 %	120 %

Table 5 Characteristics of Matriculants by Entering Class: Post-Associate Certificate in Magnetic Resonance

Characteristics of Matriculants by Entering Class						
	2006	2007	2008	2009	2010	2011
University GPA	3.17	3.20	3.10	3.17	3.24	3.08
Total Number of applicants	34	39	35	38	37	33
UCC Applicants	[18]	[4]	[5]	[33]	[16]	[22]
Number of admissions	20	31	33	36	32	31
Percentage of expected admission goal (n=30)	67 %	103 %	110 %	120 %	107 %	120 %

Table 6 Characteristics of Matriculants by Entering Class: Bachelor in Sciences in Diagnostic Images

Characteristics of Matriculants by Entering Class						
	2006	2007	2008	2009	2010	2011
University GPA	3.11	3.24	3.20	3.13	3.16	3.02
Total Number of applicants	20	4	22	29	60	16
UCC Applicants	[10]	[1]	[0]	[14]	[1]	[16]
Number of admissions	12	1	14	24	28	16
Percentage of expected admission goal (n=12)	60.0 %	5.0 %	70.0 %	120.0 %	233 %	133 %

Goal 2

To provide students with broad experiences and academic support in the didactic and clinical aspects to allow them to develop and integrate knowledge, and develop competencies and attitudes needed for the optimum performance of his/her skills

Passing Rate

Since it is estimated that 97% of our graduates practice in Puerto Rico, and they do not sit for the ARRT, the 75% passing rate required by JRCERT should be substituted by the passing rate in the Puerto Rico licensure exam. According to the 2010 Graduates Survey, over 73% of the graduates have taken the PR test, while only a little over 4% take the ARRT, 13% have taken both tests and 9% inform not having taken any of the licensing examinations. This responds to the fact that the Registry is not required to practice in PR and the barrier English language constitute for most students.

Since 2003, ARRT results include regular Associate Degree graduates and participants in the Review and Recertification for the ARRT Program. Even though Faculty members have been promoting that students sit for the ARRT so as to be able to be registered and get the Puerto Rico's license convalidated, there has been no significant increase in the number of ARRT applicants per year. This numbers ranges from 7 (2009) to 19 (2006), with an average of 9 graduates and review participants per year. As Reported by ARRT passing rates for first time takers in the last four years are: 2007 (25 %); 2008 (50 %); 2009 (43 5%); 2010 (33 %); and 2011 (27 %). These numbers includes recent UCC graduates and participants in the Review and Recertification Program.

As Reported by PRRTEB passing rates for first time takers are: 2007 (50 %); 2008 (71 %); 2009 (64 %); 2010 (83 %); 2011 (41 %). We have no explanation for the sudden drop in our graduate's outcome in this licensing examination. In the three previous years we were seeing a tendency towards more graduates passing the examination board test and suddenly there is this drop. We are still waiting for more information from the Examination Board as to what possible situations might have triggered this action including the change in the examination question bank..

Graduates self-reported (Alumni Survey) passing rates are: 75% in the PR Licensing Examination and 100% in the Registry. Of those reporting having pass the Puerto Rico Examination Board, 60% pass it on the first time, 31% on the second attempt and 9% on the third or later time.

A response to the Alumni Survey shows that most of those passing the ARRT licensing exam were able to do this in the second or third occasion.

Figure 1 ARRT Passing Rate for First Time Takers Universidad Central del Caribe, Medical Images Technology Program: 2007-2011

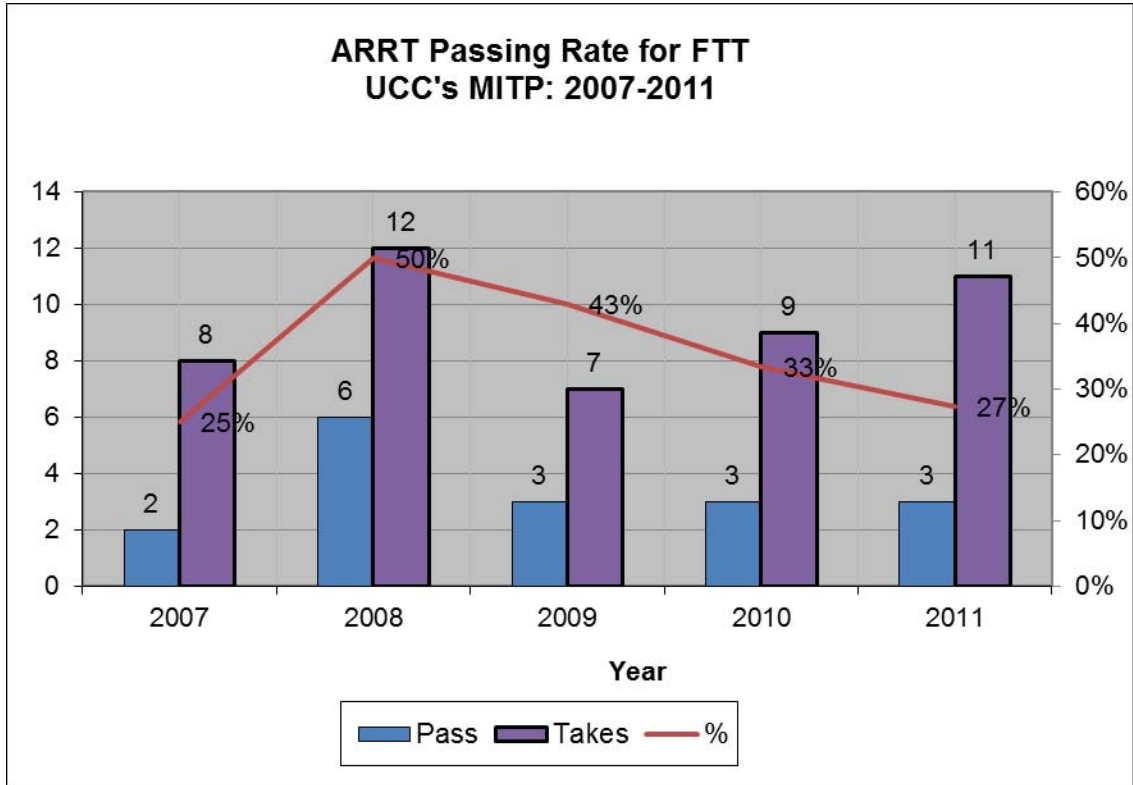


Figure 2 ARRT Content Area Scores

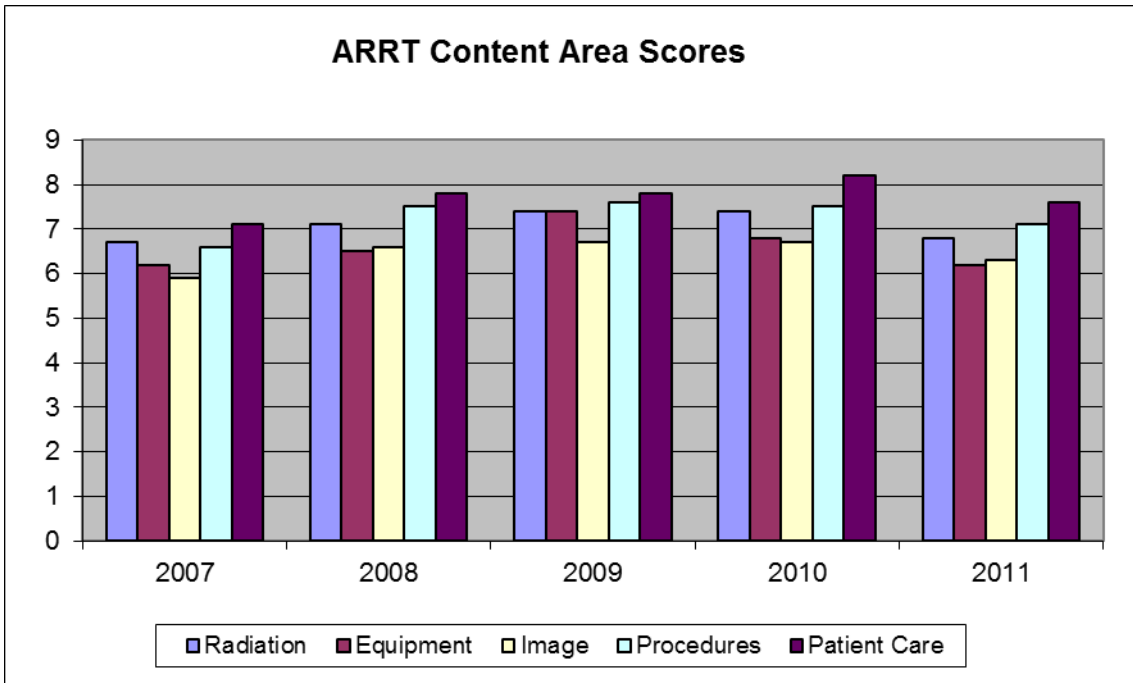


Figure 3 PRRTEB Examinations Results: 2005-2010

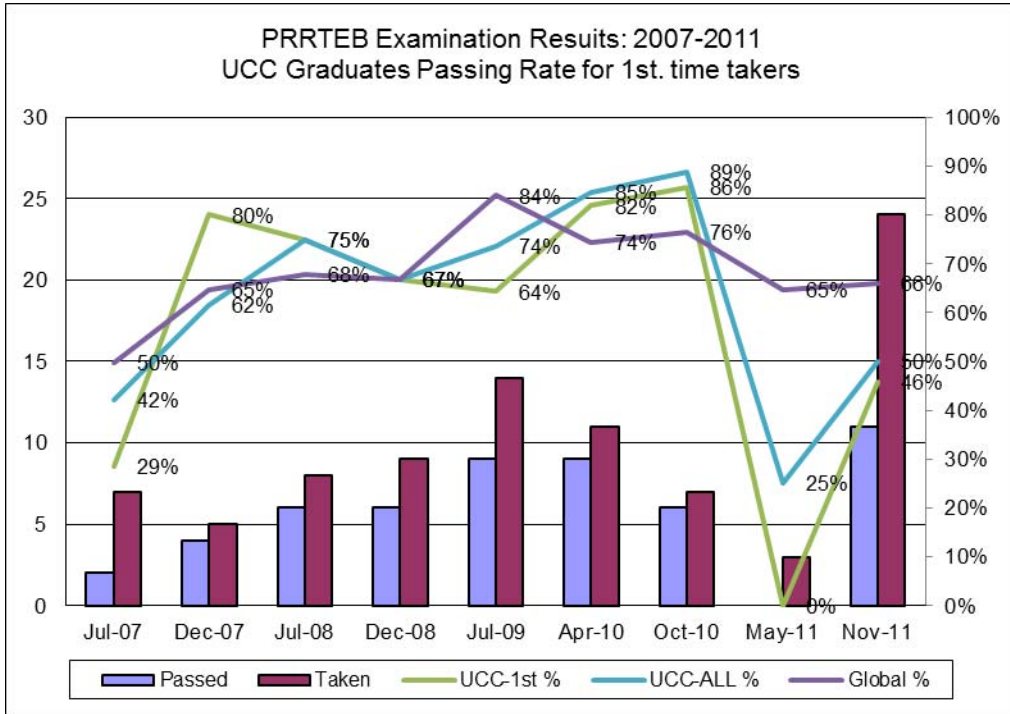
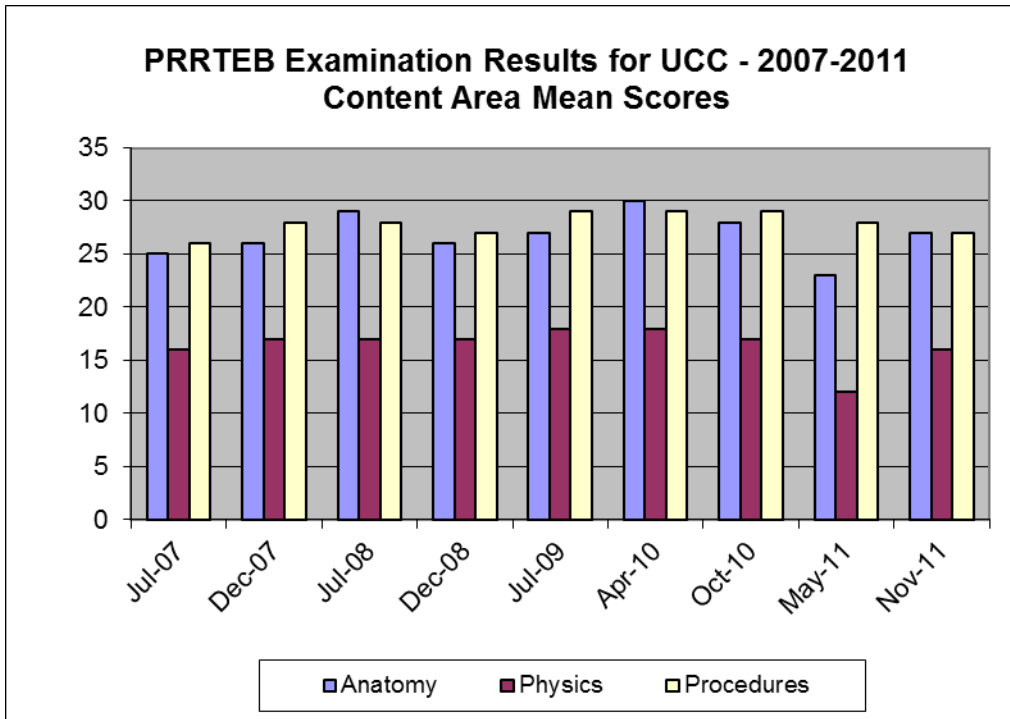


Figure 4 Examinations Results: 2007-2010 Content Area



Program Retention Rates

Academic success of students, measured as the degree completion rate or retention rate in our Program is high. In the Associate Degree Program the retention rates has been fluctuating in the last five years due primary to the number of students who withdraw from the program and those who are awarded academic sanctions. The reason for this drop in retention during might be the lower pool of applicants in some years as a result of the fierce recruitment and admission process of competing programs established in those years. This is also observable in the higher number of years needed to complete the degree.

Even through, the average overall of 75% for the 2007-2010 periods is considered a high retention rate compared with similar programs.

Retention rates in the other offerings of the Program is extremely high with over 90% retention rate in Ultrasound, Mammography, Computerized Tomography and Magnetic Resonance post Associate Degree Certificates. This might be due to that this are specialization programs, the smaller groups, the direct faculty – student interaction, and the fact that its students are mainly mature working professionals looking for an improvement in their job positions or professional advancement

Table 7: Overall Retention for All Medical Images Technology Programs

PROGRAM	ACADEMIC YEAR ADMISSION	E	SE	W	U W	S	AD	LOA	G	R	AVERAGE RETENTION
BS	2006-2007	12	0	0	0	0	0	0	12	100%	83 %
	2007-2008	11	3	0	0	0	0	0	8	100%	
	2008-2009	14	0	0	0	0	0	0	14	100%	
	2009-2010	13	3	0	1	0	1	0	8	85%	
	2010-2011	19	10	0	0	0	0	0	9	100%	
	2011-2012	15	11	0	0	0	0	0	4	80%	
Associate Degree	2006-2007	33	10	2	1	0	0	0	20	91%	80 %
	2007-2008	34	2	5	4	0	2	0	21	68%	
	2008-2009	38	12	1	2	8	0	0	15	71%	
	2009-2010	40	17	2	3	0	1	0	17	85%	
	2010-2011	36	4	7	5	0	0	0	20	67%	
	2011-2012	39	32	5	1	0	1	0	0	96%	
Diagnostic Medical Sonography	2006-2007	6	0	0	0	0	0	0	6	100%	99 %
	2007-2008	8	0	0	0	0	0	0	8	100%	
	2008-2009	8	0	0	0	0	0	0	8	100%	
	2009-2010	7	0	0	0	0	0	0	7	100%	
	2010-2011	17	2	0	0	0	0	0	15	100%	
	2011-2012	22	0	1	0	0	0	0	21	95%	
Mammography	2006-2007	7	0	0	2	0	0	0	5	71%	94 %
	2007-2008	13	2	0	0	0	0	0	11	100%	
	2008-2009	12	0	0	0	0	0	0	12	100%	
	2009-2010	15	0	2	0	0	0	0	13	87%	
	2010-2011	11	0	1	0	0	0	0	10	91%	
	2011-2012	14	0	0	0	0	0	0	14	100%	
Computerized Tomography	2006-2007	31	0	0	0	0	0	0	31	100%	96 %
	2007-2008	34	0	0	0	0	0	0	34	100%	
	2008-2009	44	0	0	0	0	0	0	44	100%	
	2009-2010	44	0	0	0	0	0	4	40	91%	
	2010-2011	33	0	1	0	0	4	0	28	85%	
	2011-2012	37	12	1	0	0	0	0	24	97%	
Magnetic Resonance	2006-2007	24	0	1	0	0	0	0	23	96%	96 %
	2007-2008	45	0	0	0	0	0	0	45	100%	
	2008-2009	44	0	0	0	0	0	0	44	100%	
	2009-2010	36	0	0	0	0	0	0	36	100%	
	2010-2011	29	5	2	0	0	3	0	19	83%	
	2011-2012	31	0	1	1	0	0	0	29	94%	
Overall Program Retention											91 %
Legend: E Enrolled, SE Still Enrolled, W Withdrawal, UW Unauthorized Withdrawal, S Suspended, AD Academic Dismissal, LOA Leave of Absence, G Graduated, R Retention											

Course Completions Rate

Academic Success in our Program is considered to be completing all course required with a grade of “C” or more. According to the Student Evaluation and Promotion Rules and Regulation, no course is approve with less than 70% of objectives or competencies develop and assess by the course evaluation strategies. As a result, no “D”, equivalent to a deficient performance in the course, is awarded.

In the Associate Degree in Radiologic Technology, courses completion rates for 2007 to 2010 were over the 70% mark. Post-Associate Degree Certificate in Diagnostic Medical Ultrasound’s courses completion rates only once (2004-2005) in the assess period went under the 90% mark, but only to 87.5%. In the Post-Associate Degree Certificate in Mammography courses completion rates are over the 70.0% and increase to 100% for the academic year 2009-2010. In The Post-Associate Degree Certificates in Computerized Tomography, courses completion rates are well over 90.0%. For Magnetic Resonance the completions rate decrease to 87.56% for the academic year due that 5 students fail in one of the courses Anatomy and Pathology. Bachelor in Science in Diagnostic Images the overall, courses completion rates are over the 90% of success.

Table 8 Course Completions Rates for Associate Degree in Radiologic Technology from 2006-2007 to 2011-2012

COURSE COMPLETION RATES																
ASSOCIATE DEGREE IN RADIOLOGIC TECHNOLOGY																
FROM 2006-2007 TO 2011-2012																
Code	Course	Credits	2006-2007							2007-2008						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
CP-101	University Life	0	34	33	0	0	1	0	97.06	33	32	0	0	1	0	96.97
EN-101	English I	3	20	2	6	8	4	0	80.00	22	3	8	8	2	1	86.36
SP-101	Spanish I	3	20	2	7	8	3	0	85.00	25	1	11	9	3	1	84.00
RT-101	Introduction to Radiology Technology	3	34	1	11	13	9	0	73.53	33	3	14	14	1	1	93.94
RT-103	Human Anatomy and Physiology I	3	36	1	6	17	12	0	66.67	36	0	3	22	10	1	69.44
RT-106	Principles Radiographics Exposure Development Rad Images	4	34	2	9	12	11	0	67.65	35	6	10	12	6	1	80.00
RT-110	Introduction to Computer Systems	2	25	5	15	1	4	0	84.00	30	5	12	8	4	1	83.33
RT-113	Radiographic Procedures and Evaluation I	3	33	2	13	9	9	0	72.73	34	1	11	14	7	1	76.47
EN-102	English II	3	17	6	5	5	0	1	94.12	23	0	7	11	5	0	78.26
SP-102	Spanish II	3	18	1	6	9	2	0	88.89	28	1	13	9	5	0	82.14
RT-202	Clinical Practice I	2	21	6	9	5	1	0	95.24	26	6	13	6	1	0	96.15
RT-203	Clinical Practice II (Summer Session)	2	1	0	1	0	0	0	100.00	28	20	7	0	1	0	96.43
RT-111	Radiologic Physics	3	24	2	3	13	5	1	75.00	34	1	5	10	18	0	47.06
RT-213	Radiographic Procedures & Evaluations II	3	24	3	11	7	3	0	87.50	31	4	19	6	2	0	93.55
RT-216	Patient Care Methods	3	24	19	2	3	0	0	100.00	32	21	5	0	4	2	81.25
RT-104	Human Anatomy and Physiology II	3	28	1	8	14	0	5	82.14	25	0	2	20	2	1	88.00
RT-313	Radiographic Procedures & Evaluation III	3	14	4	2	6	1	1	85.71	21	4	10	6	0	1	95.24
RT-115	Radiologic Pathology	2	9	4	4	1	0	0	100.00	23	8	10	4	1	0	95.65
RT-204	Clinical Practice III	3	13	8	4	0	0	1	92.31	23	16	5	1	0	1	95.65
RT-211	Radiation Biology	3	16	2	4	7	2	1	81.25	26	1	5	15	5	0	80.77
RT-231	Integral Health Concepts	3	13	11	1	0	0	1	92.31	25	19	2	3	1	0	96.00
RT-303	Sectional Anatomy	3	13	5	5	0	2	1	76.92	22	0	9	11	1	1	90.91
RT-205	Clinical Practice IV	4	11	7	2	2	0	0	100.00	21	8	9	2	2	0	90.48
RT-223	Radiographic Critique and Quality Assurance	3	13	8	4	0	0	1	92.31	22	9	6	3	4	0	81.82
RT-413	Introduction to Ultrasound Imaging	3	11	8	2	1	0	0	100.00	21	9	10	1	1	0	95.24
RT-414	Introduction to Imaging Modalities	2	13	8	4	1	0	0	100.00	21	8	4	8	1	0	95.24
RT-315A	Legal Concepts Seminar	1	11	4	4	3	0	0	100.00	22	11	3	5	3	0	86.36
<i>Total Academic Success By Year</i>		73	87.79							86.55						

COURSE COMPLETION RATES																
ASSOCIATE DEGREE IN RADIOLOGIC TECHNOLOGY																
FROM 2006-2007 TO 2011-2012																
Code	Course	Credits	2008-2009							2009-2010						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
CP-101	University Life	0	36	36	0	0	0	0	100.00	39	37	0	0	2	0	94.87
EN-101	English I	3	22	4	12	4	1	1	90.91	17	7	2	7	1	0	94.12
SP-101	Spanish I	3	22	2	10	9	0	1	95.45	19	2	6	10	1	0	94.74
RT-101	Introduction to Radiology Technology	3	35	6	10	15	4	0	88.57	41	6	19	11	3		87.80
RT-103	Human Anatomy and Physiology I	3	41	4	10	13	14	0	65.85	43	6	7	22	5	3	81.40
RT-106	Principles Radiographics Exposure Development Rad Images	4	38	6	12	15	5	0	86.84	43	11	12	13	5	2	83.72
RT-110	Introduction to Computer Systems	2	28	9	4	10	5	0	82.14	28	9	11	6	2	0	92.86
RT-113	Radiographic Procedures and Evaluation I	3	36	3	16	11	6	0	83.33	44	5	14	17	7	1	81.82
EN-102	English II	3	24	3	14	5	1	1	91.67	23	8	9	4	1	1	91.30
SP-102	Spanish II	3	22	2	6	10	3	1	81.82	25	2	8	12	1	2	88.00
RT-202	Clinical Practice I	2	29	5	13	11	0	0	100.00	37	14	17	5	0	1	97.30
RT-203	Clinical Practice II (Summer Session)	2	31	13	12	6	0	0	100.00	36	14	8	11	3	0	91.67
RT-111	Radiologic Physics	3	46	2	6	27	11	1	76.09	43	3	4	26	9	1	76.74
RT-213	Radiographic Procedures & Evaluations II	3	31	7	13	8	3	0	90.32	39	8	20	7	3	1	89.74
RT-216	Patient Care Methods	3	35	32	3	0	0	0	100.00	37	35	1	0	0	1	97.30
RT-104	Human Anatomy and Physiology II	3	35	3	4	14	14	0	60.00	47	1	6	27	10	3	72.34
RT-313	Radiographic Procedures & Evaluation III	3	27	0	7	20	0	0	100.00	28	1	7	12	8	0	71.43
RT-115	Radiologic Pathology	2	22	8	10	4	0	0	100.00	24	4	3	11	6	0	75.00
RT-204	Clinical Practice III	3	27	9	12	4	2	0	92.59	29	8	14	4	3	0	89.66
RT-211	Radiation Biology	3	16	1	3	11	0	1	93.75	32	2	3	14	9	4	59.38
RT-231	Integral Health Concepts	3	26	23	2	0	1	0	96.15	33	27	3	0	3	0	90.91
RT-303	Sectional Anatomy	3	23	3	3	10	7	0	69.57	25	2	2	11	8	2	60.00
RT-205	Clinical Practice IV	4	22	2	10	5	3	0	77.27	25	9	11	0	5	0	80.00
RT-223	Radiographic Critique and Quality Assurance	3	25	7	14	2	1	1	92.00	25	14	2	4	2	3	80.00
RT-413	Introduction to Ultrasound Imaging	3	24	13	8	3	0	0	100.00	24	7	5	9	1	2	87.50
RT-414	Introduction to Imaging Modalities	2	28	14	10	4	0	0	100.00	25	18	3	1	0	3	88.00
RT-315A	Legal Concepts Seminar	1	28	18	0	5	5	0	82.14	30	4	7	10	6	3	70.00
<i>Total Academic Success By Year</i>		73	88.76							83.98						

COURSE COMPLETION RATES

ASSOCIATE DEGREE IN RADIOLOGIC TECHNOLOGY

FROM 2006-2007 TO 2011-2012

Code	Course	Credits	2010-2011							2011-2012						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
CP-101	University Life	0	36	33	0	0	0	3	91.67	38	35	0	0	0	3	92.11
EN-101	English I	3	16	5	4	3	2	2	75.00	20	4	7	7	0	2	90.00
SP-101	Spanish I	3	15	0	7	4	0	4	73.33	20	2	11	6	0	1	95.00
RT-101	Introduction to Radiology Technology	3	36	4	12	13	1	6	80.56	39	10	16	8	0	5	87.18
RT-103	Human Anatomy and Physiology I	3	39	2	13	15	4	5	76.92	38	3	6	19	6	4	73.68
RT-106	Principles Radiographics Exposure Development Rad Images	4	40	16	7	9	2	6	80.00	40	6	11	18	0	5	87.50
RT-110	Introduction to Computer Systems	2	27	16	2	4	2	3	81.48	38	17	14	2	1	4	86.84
RT-113	Radiographic Procedures and Evaluation I	3	41	0	21	7	6	7	68.29	41	5	25	4	1	6	82.93
EN-102	English II	3	16	2	7	6	1	0	93.75	17	3	6	7	0	1	94.12
SP-102	Spanish II	3	17	0	9	7	1	0	94.12	17	1	9	6	1	0	94.12
RT-202	Clinical Practice I	2	29	8	16	0	5	0	82.76	32	20	8	2	1	1	93.75
RT-203	Clinical Practice II (Summer Session)	2	1	1	0	0	0	0	100.00	3	0	0	1	0	2	33.33
RT-111	Radiologic Physics	3	36	4	8	14	9	1	72.22	49	5	9	20	7	8	69.39
RT-213	Radiographic Procedures & Evaluations II	3	28	5	17	5	1	0	96.43	35	5	23	4	3	0	91.43
RT-216	Patient Care Methods	3	27	24	1	0	0	2	92.59	31	24	5	0	1	1	93.55
RT-104	Human Anatomy and Physiology II	3	34	4	8	15	5	2	79.41	31	3	2	20	2	4	80.65
RT-313	Radiographic Procedures & Evaluation III	3	40	1	13	22	4	0	90.00	33	1	12	18	1	1	93.94
RT-115	Radiologic Pathology	2	42	15	3	21	2	1	92.86	36	10	9	15	2	0	94.44
RT-204	Clinical Practice III	3	37	15	15	3	3	1	89.19	27	22	3	2	0	0	100.00
RT-211	Radiation Biology	3	39	5	4	25	2	3	87.18	35	0	0	22	6	7	62.86
RT-231	Integral Health Concepts	3	38	29	5	1	3	0	92.11	30	27	1	1	0	1	96.67
RT-303	Sectional Anatomy	3	45	3	7	23	9	3	73.33	37	0	5	22	6	4	72.97
RT-205	Clinical Practice IV	4	33	18	7	3	3	2	84.85	35	6	12	12	0	5	85.71
RT-223	Radiographic Critique and Quality Assurance	3	35	9	14	7	2	3	85.71	37	19	9	5	1	3	89.19
RT-413	Introduction to Ultrasound Imaging	3	37	13	17	3	3	1	89.19	31	1	9	17	2	2	87.10
RT-414	Introduction to Imaging Modalities	2	35	5	16	11	2	1	91.43	30	13	12	3	0	2	93.33
RT-315A	Legal Concepts Seminar	1	34	9	4	17	1	3	88.24	32	18	6	5	1	2	90.63
<i>Total Academic Success By Year</i>		73	85.28							85.64						

Table 9 Course Completions Rates for Bachelor in Science in Diagnostic Images from 2006-2007 to 2011-2012

COURSE COMPLETION RATES																
BACHELOR IN SCIENCE IN DIAGNOSTIC IMAGES																
FROM 2006-2007 TO 2011-2012																
Code	Course	Credits	2006-007							2007-2008						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
BID-510	Administration Services of Medical Images	3	15	15	0	0	0	0	100.00	10	9	0	0	0	1	90.00
BID-520	Pharmacology in Diagnostic Images	3	15	15	0	0	0	0	100.00	10	5	2	2	0	1	90.00
BID-550	Professional Lecture Seminar *	2	15	9	1	5	0	0	100.00	9	4	3	1	0	1	88.89
BID-530	Planning & Evaluation of Services in Diagnostic Medical Images	3	18	17	0	1	0	0	100.00	16	4	5	6	1	0	93.75
BID-540	Health & Illness Sociology	3	18	8	7	3	0	0	100.00	16	15	1	0	0	0	100.00
<i>Total Academic Success By Year</i>		14	100.00							93.16						
Code	Course	Credits	2008-2009							2009-2010						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
BID-510	Administration Services of Medical Images	3	22	19	0	0	0	3	86.36	22	12	10	0	0	0	100.00
BID-520	Pharmacology in Diagnostic Images	3	22	16	2	0	2	2	81.82	24	2	9	8	5	0	79.17
BID-550	Professional Lecture Seminar *	2	13	4	4	3	0	2	84.62	23	7	11	4	0	1	95.65
BID-530	Planning & Evaluation of Services in Diagnostic Medical Images	3	20	8	6	6	0	0	100.00	19	7	8	4	0	0	100.00
BID-540	Health & Illness Sociology	3	20	19	0	0	0	1	95.00	19	17	2	0	0	0	100.00
<i>Total Academic Success By Year</i>		14	100.00							93.70						
Code	Course	Credits	2010-2011							2011-2012						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
BID-510	Administration Services of Medical Images	3	19	11	2	0	6	0	68.42	15	12	0	0	0	2	80.00
BID-520	Pharmacology in Diagnostic Images	3	11	8	0	2	1	0	90.91	16	5	5	2	3	0	75.00
BID-550	Professional Lecture Seminar *	2	20	7	3	4	1	5	70.00	16	6	4	2	3	1	75.00
BID-530	Planning & Evaluation of Services in Diagnostic Medical Images	3	20	2	6	5	7	0	65.00	17	12	1	0	0	4	76.47
BID-540	Health & Illness Sociology	3	11	7	3	0	0	1	90.91	16	3	5	2	1	2	62.50
<i>Total Academic Success By Year</i>		14	79.20							73.8						

Table 10 Course Completions Rates for Post-Associate Certificate in Mammography from 2006-2007 to 2011-2012

COURSE COMPLETION RATES																
POST-ASSOCIATE CERTIFICATE IN MAMMOGRAPHY																
FROM 2006-2007 TO 2011-2012																
Code	Course	Credits	2006-2007							2007-2008						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
MA-401	Mammography Procedures	3	7	3	2	0	2	0	71.43	13	4	8	0	1	0	92.31
MA-402	Anatomy, Physiology And Pathology Of The Breast	2	7	3	1	1	2	0	71.43	12	6	5	1	0	0	100.00
MA-403	Physics and Quality Assurance in Mammography	3	7	5	0	0	2	0	71.43	12	4	7	0	1	0	91.67
MA-404	Operational And Clinical Fundaments of Sonomammography	3	7	1	3	1	2	0	71.43	13	5	7	1	0	0	100.00
MA-405	Clinical Practice and Research	3	7	5	0	0	2	0	71.43	12	11	0	0	1	0	91.67
<i>Total Academic Success By Year</i>		14	71.43							95.83						
Code	Course	Credits	2008-2009							2009-2010						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
MA-401	Mammography Procedures	3	11	9	1	0	1	0	90.91	14	11	3	0	0	0	100.00
MA-402	Anatomy, Physiology And Pathology Of The Breast	2	12	11	0	0	1	0	91.67	14	14	0	0	0	0	100.00
MA-403	Physics and Quality Assurance in Mammography	3	12	11	1	0	0	0	100.00	14	12	0	2	0	0	100.00
MA-404	Operational And Clinical Fundaments of Sonomammography	3	11	7	3	0	1	0	90.91	14	9	5	0	0	0	100.00
MA-405	Clinical Practice and Research	3	10	8	1	0	1	0	90.00	14	13	0	1	0	0	100.00
<i>Total Academic Success By Year</i>		14	93.14							100.00						
Code	Course	Credits	2010-2011							2011-2012						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
MA-401	Mammography Procedures	3	11	10	0	0	0	1	90.91	14	8	5	1	0	0	100.00
MA-402	Anatomy, Physiology And Pathology Of The Breast	2	11	10	0	0	0	1	90.91	14	9	5	0	0	0	100.00
MA-403	Physics and Quality Assurance in Mammography	3	11	10	0	0	0	1	90.91	14	6	6	2	0	0	100.00
MA-404	Operational And Clinical Fundaments of Sonomammography	3	11	3	6	1	0	1	90.91	14	6	6	2	0	0	100.00
MA-405	Clinical Practice and Research	3	11	8	2	0	0	1	90.91	14	13	0	0	0	1	92.86
<i>Total Academic Success By Year</i>		14	90.91							98.57						

Table 11 Course Completions Rates Post-Associate Certificate in Computerized Tomography from 2006-2007 to 2011-2012

COURSE COMPLETION RATES																			
POST-ASSOCIATE CERTIFICATE IN COMPUTERIZED TOMOGRAPHY																			
FROM 2006-2007 TO 2011-2012																			
Code	Course	Credits	2006-2007							2007-2008									
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate			
				A	B	C	F	W			A	B	C	F	W				
CT-425	Operating Fundaments of Computerized Tomography	3	31	2	9	1	7	3	0	90.32	33	3	1	1	6	1	1	93.94	
CT-430	Computerized Tomography Procedures and Protocols	3	31	0	1	1	7	2	1	0	93.55	33	1	2	1	1	0	96.97	
CT-435	Anatomy and Pathology in Computerized Tomography Images	3	31	1	1	1	8	1	1	96.77	32	1	6	2	5	0	0	100.00	
CT-440	Clinical Practice and Research in Computerized Tomography	4	31	1	1	1	4	0	5	1	1	93.55	34	1	1	7	1	0	97.06
<i>Total Academic Success By Year</i>		13	93.55							96.99									
Code	Course	Credits	2008-2009							2009-2010									
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate			
				A	B	C	F	W			A	B	C	F	W				
CT-425	Operating Fundaments of Computerized Tomography	3	44	0	1	2	1	8	5	0	88.64	38	0	1	2	4	4	0	89.47
CT-430	Computerized Tomography Procedures and Protocols	3	43	0	9	2	9	5	0	88.37	37	0	8	5	2	4	0	89.19	
CT-435	Anatomy and Pathology in Computerized Tomography Images	3	44	0	1	2	7	2	5	0	88.64	38	0	1	2	4	0	89.47	
CT-440	Clinical Practice and Research in Computerized Tomography	4	44	1	2	2	7	0	5	2	0	95.45	38	1	1	5	2	0	94.74
<i>Total Academic Success By Year</i>		13	90.27							90.72									
Code	Course	Credits	2010-2011							2011-2012									
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate			
				A	B	C	F	W			A	B	C	F	W				
CT-425	Operating Fundaments of Computerized Tomography	3	34	2	1	1	0	5	6	1	79.41	37	0	4	2	1	2	1	64.86
CT-430	Computerized Tomography Procedures and Protocols	3	33	0	1	1	5	4	3	1	87.88	36	0	7	5	4	0	88.89	
CT-435	Anatomy and Pathology in Computerized Tomography Images	3	33	3	9	1	9	4	6	1	78.79	37	0	1	2	2	1	91.89	
CT-440	Clinical Practice and Research in Computerized Tomography	4	33	7	1	1	0	8	7	1	75.76	38	1	1	5	4	5	76.32	
<i>Total Academic Success By Year</i>		13	80.46							80.49									

Table 12 Course Completions Rate Post-Associate Certificate in Magnetic Resonance 2006-2007 to 2011-2012

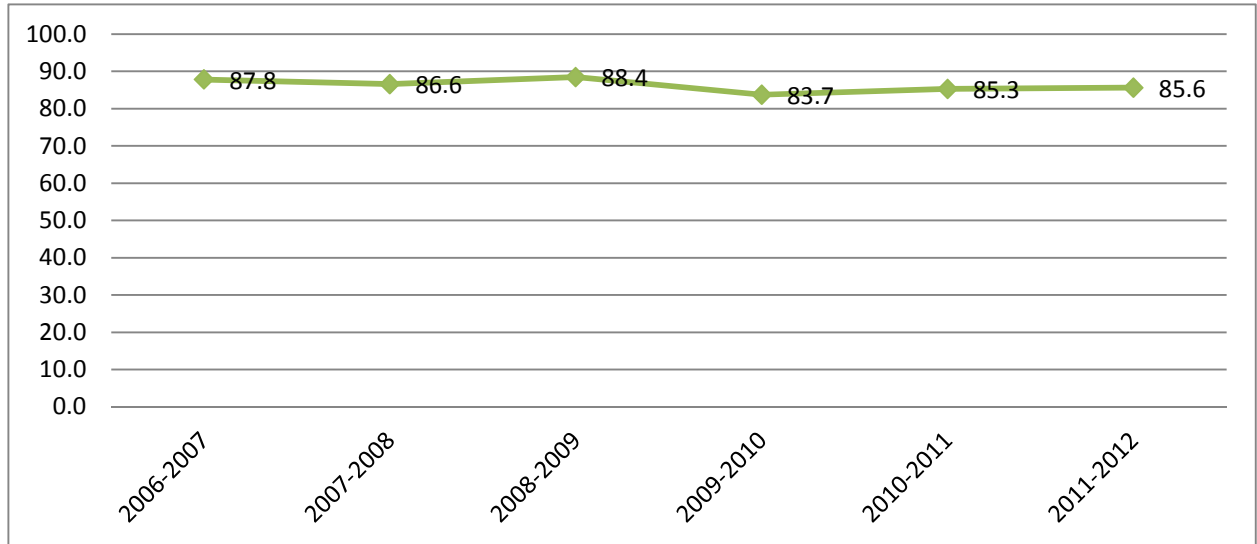
COURSE COMPLETION RATES																
POST-ASSOCIATE CERTIFICATE IN MAGNETIC RESONANCE																
FROM 2006-2007 TO 2011-2012																
Code	Course	Credits	2006-2007							2007-2008						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
MR-400	Operating Fundamentals of Magnetic Resonance	3	24	3	9	10	1	1	91.67	44	8	16	14	6	0	86.36
MR-405	Magnetic Resonance Procedures and Protocols	3	24	0	10	13	0	1	95.83	44	1	18	21	4	0	90.91
MR-410	Anatomy and Pathology in Magnetic Resonance	3	24	4	11	8	0	1	95.83	44	2	7	34	1	0	97.73
MR-415	Clinical Practice and Research in Magnetic Resonance	4	24	16	7	0	0	1	95.83	44	21	14	7	1	1	95.45
<i>Total Academic Success By Year</i>		13	94.79							92.61						
Code	Course	Credits	2008-2009							2009-2010						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
MR-400	Operating Fundamentals of Magnetic Resonance	3	33	0	11	17	5	0	84.85	37	1	14	19	1	2	91.89
MR-405	Magnetic Resonance Procedures and Protocols	3	32	0	6	24	2	0	93.75	36	0	5	25	4	2	83.33
MR-410	Anatomy and Pathology in Magnetic Resonance	3	32	0	8	22	1	1	93.75	36	0	6	23	5	2	80.56
MR-415	Clinical Practice and Research in Magnetic Resonance	4	31	9	11	9	2	0	93.55	36	5	17	12	0	2	94.44
<i>Total Academic Success By Year</i>		13	91.47							87.56						
Code	Course	Credits	2008-2009							2011-2012						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
MR-400	Operating Fundamentals of Magnetic Resonance	3	29	1	9	10	7	2	68.97	31	4	8	9	5	5	67.74
MR-405	Magnetic Resonance Procedures and Protocols	3	31	0	7	18	5	1	80.65	31	0	11	17	0	3	90.32
MR-410	Anatomy and Pathology in Magnetic Resonance	3	30	2	7	13	7	1	73.33	31	4	13	10	1	3	87.10
MR-415	Clinical Practice and Research in Magnetic Resonance	4	28	6	6	11	5	0	82.14	31	13	12	0	0	6	80.65
<i>Total Academic Success By Year</i>		13	76.27							81.45						

**Table 13 Course Completions Rate Post-Associate Certificate in Diagnostic Ultrasound
2006-2007 to 2011-2012**

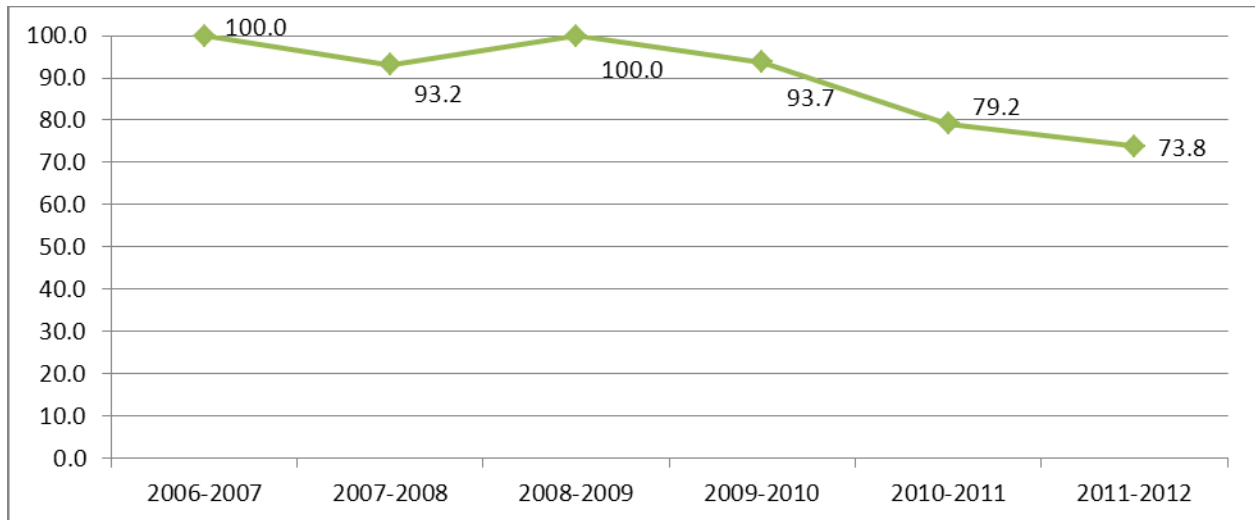
COURSE COMPLETION RATES																
POST-ASSOCIATE CERTIFICATE IN DIAGNOSTIC ULTRASOUND																
FROM 2006-2007 TO 2011-2012																
Code	Course	Credits	2006-2007							2007-2008						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
US-450	Ultrasound Physics	4	6	4	0	2	0	0	100.0	7	1	2	4	0	0	100.0
US-453	Pelvic Sonography	2	10	5	4	1	0	0	100.0	4	2	1	1	0	0	100.0
US-455	Abdominal Sonography	3	10	2	4	4	0	0	100.0	4	3	0	0	1	0	75.0
US-457	Superficial Organs and Special Procedures in Sonography	3	9	2	4	3	0	0	100.0	5	3	0	2	0	0	100.0
US-459	Integration Laboratory I	2	10	10	0	0	0	0	100.0	4	3	1	0	0	0	100.0
US-460	Clinical Practice and Research I	3	9	9	0	0	0	0	100.0	4	3	1	0	0	0	100.0
US-463	Obstetric Sonography	3	6	3	2	0	0	1	83.3	8	3	3	2	0	0	100.0
US-465	Instrumentation and Quality Assurance	4	11	5	3	1	1	1	81.8	6	3	0	3	0	0	100.0
US-467	Basic Ultrasound Studies Seminar	2	9	5	3	0	0	1	88.9	5	4	1	0	0	0	100.0
US-469	Integration Laboratory II	3	10	8	1	0	0	1	90.0	6	4	2	0	0	0	100.0
US-470	Research Project	3	9	2	6	0	0	1	88.9	5	4	1	0	0	0	100.0
US-472	Clinical Practice and Research II	3	11	9	1	0	0	1	90.9	6	5	1	0	0	0	100.0
<i>Total Academic Success By Year</i>		35	93.7							97.9						
Code	Course	Credits	2008-2009							2009-2010						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
US-450	Ultrasound Physics	4	7	2	2	3	0	0	100.0	8	4	3	1	0	0	100.0
US-453	Pelvic Sonography	2	7	1	4	2	0	0	100.0	7	5	2	0	0	0	100.0
US-455	Abdominal Sonography	3	8	2	3	3	0	0	100.0	7	1	5	1	0	0	100.0
US-457	Superficial Organs and Special Procedures in Sonography	3	7	1	2	3	1	0	85.71	8	2	5	1	0	0	100.0
US-459	Integration Laboratory I	2	7	4	2	1	0	0	100.0	6	6	0	0	0	0	100.0
US-460	Clinical Practice and Research I	3	7	6	1	0	0	0	100.0	7	7	0	0	0	0	100.0
US-463	Obstetric Sonography	3	7	2	1	2	2	0	71.4	9	1	5	3	0	0	100.0
US-465	Instrumentation and Quality Assurance	4	7	2	2	3	0	0	100.0	8	0	4	4	0	0	100.0
US-467	Basic Ultrasound Studies Seminar	2	7	2	3	2	0	0	100.0	7	6	1	0	0	0	100.0
US-469	Integration Laboratory II	3	7	3	4	0	0	0	100.0	7	6	1	0	0	0	100.0
US-470	Research Project	3	7	5	2	0	0	0	100.0	7	4	3	0	0	0	100.0
US-472	Clinical Practice and Research II	3	7	5	0	2	0	0	100.0	7	7	0	0	0	0	100.0
<i>Total Academic Success By Year</i>		35	96.4							100.0						

COURSE COMPLETION RATES																
POST-ASSOCIATE CERTIFICATE IN DIAGNOSTIC ULTRASOUND																
FROM 2006-2012 TO 2011-2012																
Code	Course	Credits	2010-2011							2011-2012						
			Student Enrolled	Grades					Comp Rate	Student Enrolled	Grades					Comp Rate
				A	B	C	F	W			A	B	C	F	W	
US-450	Ultrasound Physics	4	17	5	4	8	0	0	100.00	22	8	8	5	0	1	95.45
US-453	Pelvic Sonography	2	17	6	11	0	0	0	100.00	22	1	11	10	0	0	100.00
US-455	Abdominal Sonography	3	17	5	6	6	0	0	100.00	22	5	7	9	0	1	95.45
US-457	Superficial Organs and Special Procedures in Sonography	3	17	2	7	7	1	0	94.12	23	3	4	14	2	0	91.30
US-459	Integration Laboratory I	2	17	5	10	2	0	0	100.00	22	19	2	1	0	0	100.00
US-460	Clinical Practice and Research I	3	17	15	2	0	0	0	100.00	22	17	4	0	0	1	95.45
US-463	Obstetric Sonography	3	17	1	7	7	2	0	88.24	23	1	4	15	2	1	86.96
US-465	Instrumentation and Quality Assurance	4	17	5	6	5	1	0	94.12	21	3	9	9	0	0	100.00
US-467	Basic Ultrasound Studies Seminar	2	17	9	6	1	1	0	94.12	21	10	10	1	0	0	100.00
US-469	Integration Laboratory II	3	17	4	12	0	1	0	94.12	21	6	10	5	0	0	100.00
US-470	Research Project	3	17	10	5	1	1	0	94.12	21	21	0	0	0	0	100.00
US-472	Clinical Practice and Research II	3	17	13	2	2	0	0	100.00	21	13	8	0	0	0	100.00
<i>Total Academic Success By Year</i>		35	96.57							97.05						

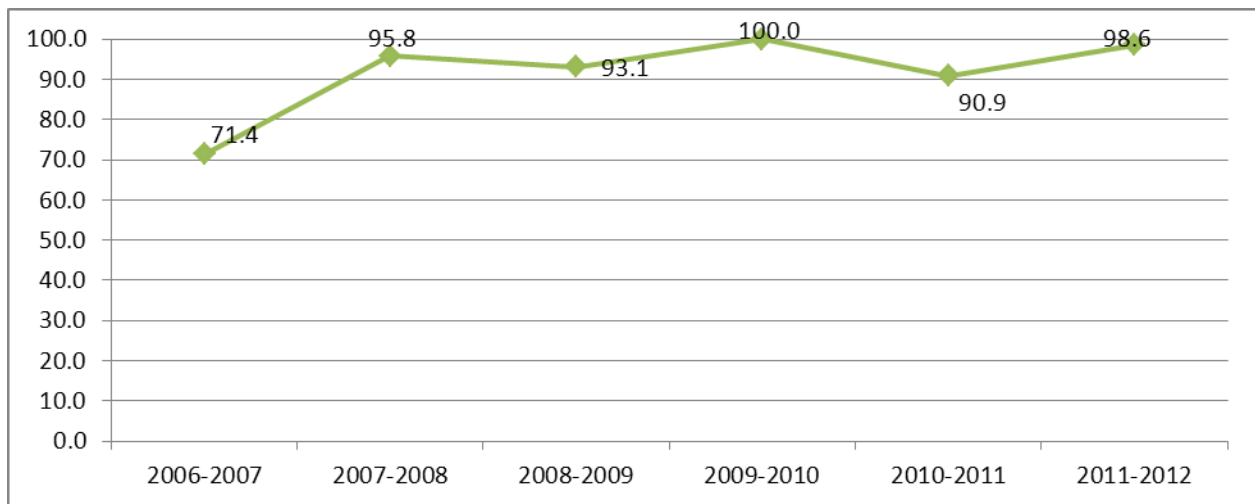
**Figure 5: Associate Degree in Radiologic Technology
Total Academic Completion by Academic Year**



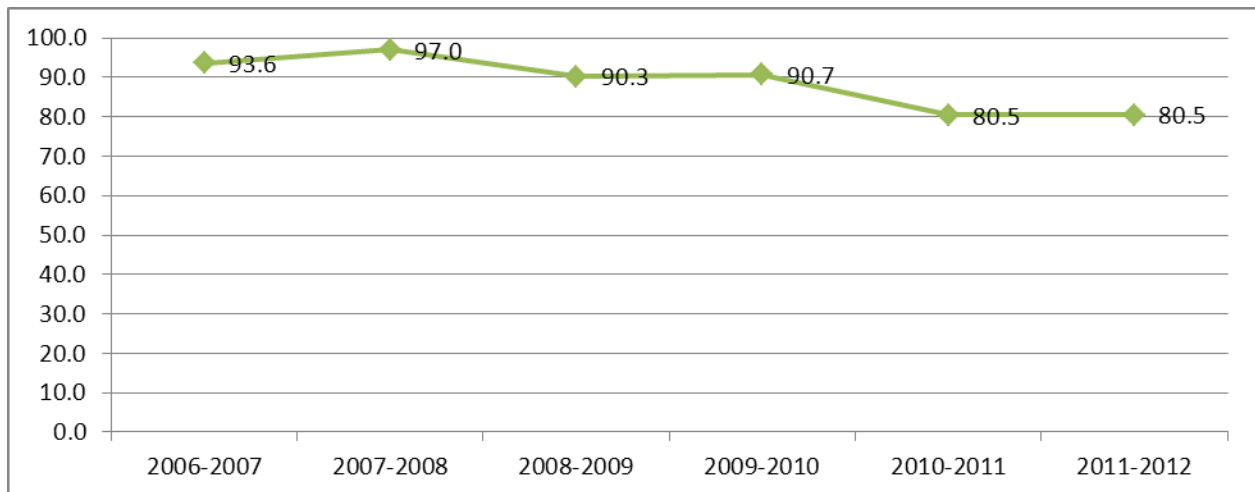
**Figure 6: Bachelor in Science in Diagnostic Images
Total Academic Completion by Academic Year**



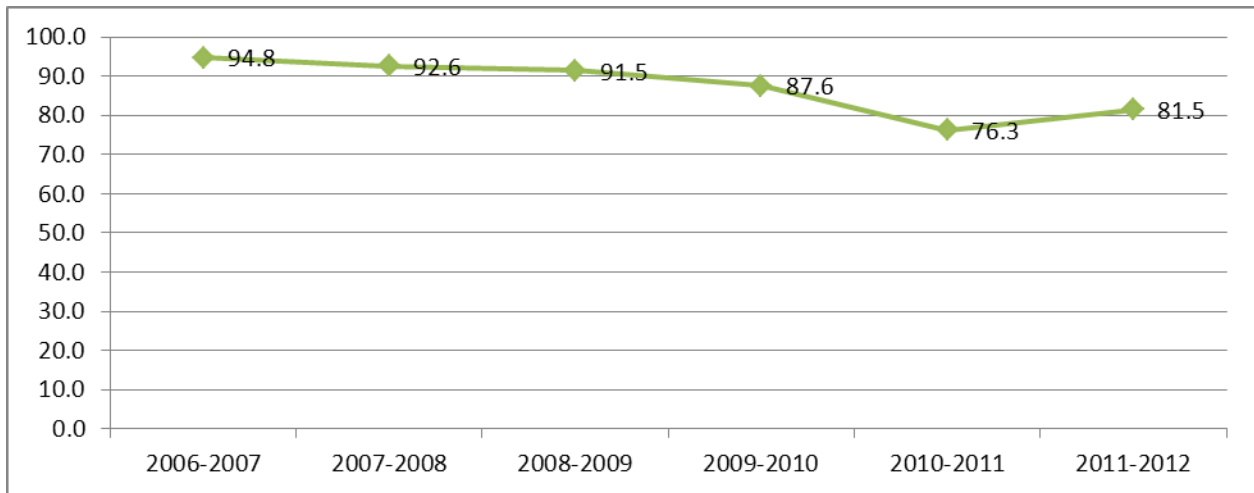
**Figure 7: Post-Associate Certificate in Mammography
Total Academic Completion by Academic Year**



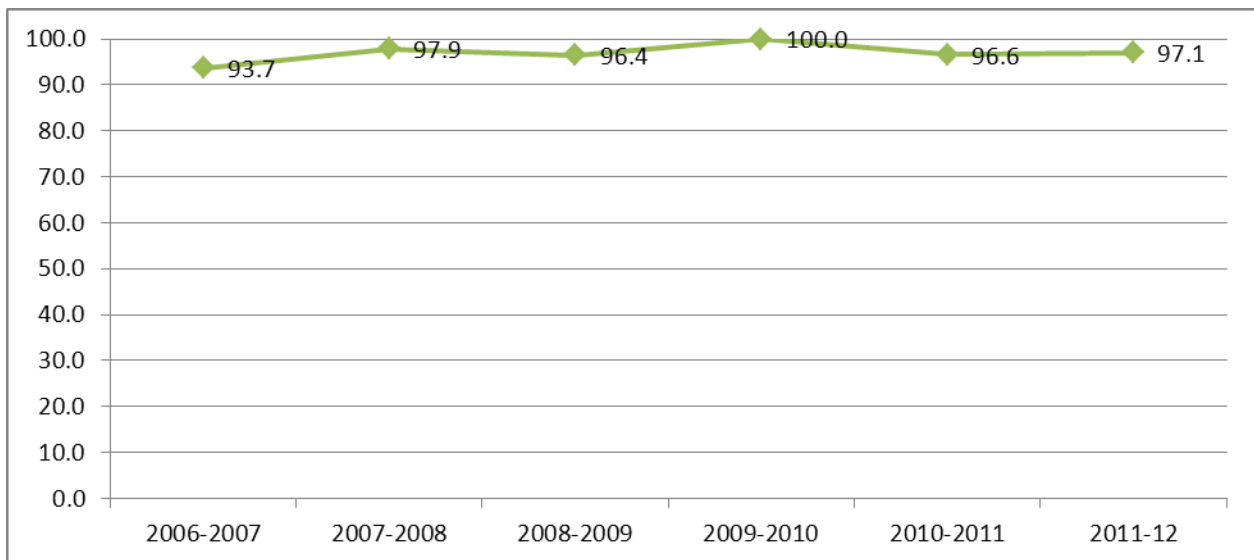
**Figure 8: Post-Associate Certificate in Computerized Tomography
Total Academic Completion by Academic Year**



**Figure 9: Post-Associate Certificate in Magnetic Resonance
Total Academic Completion by Academic Year**



**Figure 10: Post-Associate Certificate in Diagnostic Ultrasound
Total Academic Completion by Academic Year**



Goal 2

To provide students with broad experiences and academic support in the didactic and clinical aspects to allow them to develop and integrate knowledge, and develop competencies and attitudes needed for the optimum performance of his/her skills.

The following data was gathered from the Graduate Survey 2011. This survey is done every three years among Medical Images Technology Program graduates to verify their satisfaction with the program offerings.

Please indicate your satisfaction about the way our Program prepared you in the following aspects:	<i>Deficient</i>	<i>Regular</i>	<i>Good</i>	<i>Excellent</i>
	%	%	%	%
Theoretical knowledge	0.0	0.0	0.0	100.0
Clinical Skills	0.0	0.0	0.0	100.0
Problem Solving	0.0	0.0	23.5	76.5
Critical Thinking Skills	0.0	0.0	35.3	64.7
Communication Skills	0.0	0.0	29.4	70.6
Professional Attitudes	0.0	5.9	23.5	70.6
Teamwork	0.0	11.8	5.9	82.4

How would you evaluate our Program in the following areas?	<i>Deficient</i>	<i>Regular</i>	<i>Good</i>	<i>Excellent</i>
	%	%	%	%
Quality of the Program's Faculty	0.0	0.0	17.6	82.4
Academic resources (available technology; textbooks used, library, etc.)	0.0	5.9	17.6	76.5
In-depth of Content	0.0	0.0	29.4	70.6
General Program Evaluation (courses, Faculty, etc.)	0.0	0.0	23.5	76.5