



AY 2013 – 2014
Program Review

Radiologic Technology



Academic Program Review Self-Study

Radiologic Technology Program

AY 2013 – 2014

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2008 – 2013

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Introduction and Program Overview

A. Program description by level, identifying concentrations and minors as applicable

Colorado Mesa University (CMU) offers an Associate of Applied Science (AAS) in Radiologic Technology and a Baccalaureate of Applied Science (BAS) degree in Radiologic Technology. The Higher Learning Commission of the North Central Association of Colleges and Schools accredits Colorado Mesa University

AAS

The CMU AAS Radiologic Technology Program complies with the standards outlined by the Joint Review Committee on Education in Radiologic Technology (JRCERT) in the publication *Standards for an Accredited Program* in Radiologic Sciences. After successfully completion of the program, the student earns an Associate of Applied Science Degree. After meeting eligibility requirements, including ethical standards the graduate is eligible to apply to take the national certification examination administered by the American Registry of Radiologic Technologists (ARRT). Passing this examination results in granting of a certificate of registration that allows the privilege to use the title "Registered Technologist" and to use the abbreviation R. T. following the graduate's name.

BAS

The CMU BAS Radiologic Technology Program provides registered technologists the opportunity to acquire post-primary certification in advanced specialty areas in the field of radiology including computed tomography (CT), magnetic resonance imaging (MRI), vascular interventional (VI), or mammography and to acquire a baccalaureate degree with skills in informatics, quality management, and advanced patient care. The program delivers quality education through online education in the didactic and clinical arena.

B. Brief history of the program

AAS

In 1972, Mesa College offered an AAS in radiologic technology. There were 12 students accepted into the first class that graduated in 1974. In 2001, the program increased enrollment from 14 to 18 students. Over 500 students have graduated from the AAS radiologic technology program. The AAS program is the only associate degree radiologic technology program offered on the western slope of Colorado.

From its inception until 1994, the AAS Radiologic Technology program was affiliated with the Committee on Allied Health Education and Accreditation (CAHEA) sponsored by the American Medical Association. Since the time CAHEA dissolved, the program has been under the auspices of the Joint Review Committee on Education Radiologic Technology.

BAS

In 2005, CMU developed a nursing career ladder based on the vision of the Mesa County Health Care Coalition to provide the widest possible choice for health care employers and to provide job seekers with multiple options. The career ladder provided a system for students to advance their education. In alignment with this vision, the Health Sciences Department approved development of the BAS program in radiologic technology to offer higher learning in selected advanced specializations in radiologic technology. The Board of Trustees of Mesa State College and the Colorado Department of Higher Education approved the Mesa State College BAS in Radiologic Technology in January 2008 for implementation in fall 2008. There were six students accepted into the program, with the first graduate in fall 2010. There were five graduates each in the academic years 2010-11, 2011-12, and 2012-13. The CMU BAS program is the only baccalaureate degree radiologic technology program offered in the state of Colorado.

**C. Recommendations from the previous external review and progress made toward addressing them
AAS**

The most recent program review self-study was due in 2006. Mesa State College accepted the 2006 JRCERT Self-Study Report in its place. The JRCERT report cited three areas of non-compliance in the following areas:

- 1) Objective 2.4: Assure that the program has due process procedures that are readily accessible, fair, and equitably applied.
- 2) Objective 3.5: Assure the security and confidentiality of student records, instructional materials, and other appropriate program materials.
- 3) Objective 3.5: Assure that the program measures the length of all didactic and clinical courses in clock or credit hours.

The program submitted responses for each area. The JRCERT awarded accreditation for a period of eight years, which is the maximum duration awarded in this category.

Refer to the Summary of Results for the 2006 JRCERT Accreditation.

BAS

This is the first program review self-study of the BAS program.

D. Mission statement and goals for the program, including the program's centrality to CMU's role, mission, and strategic plan, and as applicable, how it adds value to the region

The mission of CMU is to be a general baccalaureate and graduate institution with selective admission standards; to offer liberal arts and sciences, professional, and technical degree programs and a limited number of graduate programs; to maintain a community college role and mission, including career and technical education programs; and to serve as a regional education provider. Consistent with the values approved by the Board of Trustees, the university strives to provide “opportunities that engage students in applied learning” and to provide an attainable, accessible post-secondary experience for students in and outside of Western Colorado that emphasizes continuous improvement.”

In alignment with the mission and values of CMU, the AAS program provides technical education for career fulfillment and the BAS program delivers professional education leading to leadership opportunities or to certification in advanced modalities. The BAS program supports the goal of the institution to raise the level of educational attainment in the 14-county region. Offering the BAS program through an online format affords students in the region opportunity to achieve higher learning while remaining in their home community. The mission of each program is specific to the program.

AAS

The mission of the AAS Radiologic Technology Program at Colorado Mesa University is to facilitate each student’s learning to become the best radiologic technologist possible through development of technical and professional skills as well as behaviors, attitudes, and ethics desired by patients, employers, and the community served.

BAS

The mission of the CMU BAS Radiologic Technology Program is to provide registered technologists opportunity for post-primary certification education leading to a baccalaureate degree.

E. How the program's curriculum supports other majors/minors and general education requirements, as applicable

The AAS and BAS curriculum does not support other majors or minors. The curriculum for both programs supports general education requirements.

AAS

The AAS curriculum requires 15 credits of general education and 4 credits of foundation prerequisites.

BAS

Students accepted into the program receive 36 hours of BAS core taken as part of a state approved AAS degree. The BAS curriculum requires 31 credits of general education, 6 credits of other lower division, 11 credits of foundation, and 12 (9 upper division) elective credits.

F. Locational/comparative advantage

Of the ten radiologic technology programs offered in Colorado, CMU's AAS program is the only program on the western slope. This location serves a 250-mile radius in western Colorado and Utah. Local and regional hospitals and clinics on the western slope have depended on the program to provide registered technologists for nearly 40 years.

CMU is the only institution of higher learning in Colorado to offer a baccalaureate degree in radiologic technology.

G. Any unique characteristics of the program

Individual students in the AAS program contribute over 1,300 hours of volunteer time in the local and regional community during their education experience.

A unique feature of the BAS program is that it is fully online. The online format provides flexibility for associate degree graduates who want to continue education while working fulltime or part-time. Additionally, the online format accommodates students from rural areas or those who are otherwise unable or unwilling to access traditional classroom delivery.

H. Other information/data (program's option)

AAS

Each spring year through a selective admission process, the program selects students to begin the program the following fall. The program receives 90 to 100 applications each year to fill the 18-19 available seats. For the initial selection, the program ranks students based on academic preparation and HOBET scores. From this pool of 40+ candidates, the interview committee selects students based on aptitude for service within the field of radiologic technology.

Curriculum

A. Describe the program's curriculum in terms of its breadth, depth, and level of the discipline.

AAS

The AAS program curriculum aligns with the five major content categories outlined in the ARRT *Content Specifications for the Examination in Radiography* and the ASRT *Practice Standards for Medical Imaging*.

In general, most applicants complete (or are enrolled in) the 18 credits of general education at the time of application. Prior to entry into the program, candidates must complete the four foundation prerequisite

credits. The program distributes the 27 didactic and 28 clinical core radiology credits over five semesters. Seventy-seven semester hours of credit are required for the AAS in Radiologic Technology.

BAS

The BAS program curriculum for each advanced specialization aligns with the ARRT *Content Specifications for the Examination in Radiography* and the ASRT *Practice Standards for Medical Imaging*. The program provides students opportunity to complete the clinical experience requirements outlined in the Content Specifications for the Examination in Radiography produced by the ARRT.

Students accepted into the program receive 36 hours of BAS core taken as part of a state approved AAS degree. The BAS curriculum requires 31 credits of general education, 6 credits of other lower division, 11 credits of foundation, and 12 (9 upper division) elective credits. One hundred twenty semester hours are required for the BAS in Radiologic Technology.

At this time, candidates for the ARRT examination in an advanced specialization (CT, MRI, VI, or mammography) do not have to complete a formal program of study. However, candidates are required to provide documentation demonstrating clinical competency. Employed registered technologists are typically able to acquire the necessary competencies where they are employed. However, unemployed registered technologists may have difficulty finding a facility willing to allow them the opportunity to complete competencies. The BAS program provides a mechanism for students to acquire the necessary clinical competencies.

Registered technologists that do not have an associate degree are required to complete the general education for an associate degree prior to acceptance into the BAS program. After completing the associate degree, students are eligible for acceptance into the BAS program.

The BAS program allows registered technologist several opportunities to acquire higher education.

- 1) Associate degree registered technologists may opt to take select didactic courses to gain advanced education prior to acceptance into the BAS program.
- 2) From 2008 to fall 2013 the program allowed associate degree registered technologists a non-degree seeking option to take two didactic courses (five credits) and two clinical specialization courses (six credits) and then sit for the post-primary ARRT examination in an advanced specialization.
Refer to Future Program Plans, section D. for an explanation for this change based on this program review process.
- 3) From 2008 to fall 2013 associate degree registered technologists could opt to take all BAS general education, foundation, and major core courses to receive a baccalaureate degree and sit for the national examination in an advanced specialization.
Refer to Future Program Plans, section D. for an explanation for this change based on this program review process.

B. Program currency. What curricular changes have been made since the last program review?

AAS

In spring 2007, the Undergraduate Curriculum Committee approved a change from eight credit hours to six credit hours for RTEC 214 Radiographic Clinical Experience III. This change achieved consistency in the number of credit hours awarded for the number of contact hours.

Due to changes in emerging technology, the Undergraduate Curriculum Committee approved the deletion of three courses and the addition of three courses.

The program deleted the following courses:

RTEC 125, Radiologic Science (2 credit hours)

The last semester the course could be offered before deletion was fall 2008.

RTEC 132, Radiographic Equipment and Specialized Imaging (1 credit hour)

The last semester the course could be offered before deletion was spring 2008.

RTEC 132L, Radiographic Equipment and Specialized Imaging (1 credit hour)

The last semester the course could be offered before deletion was spring 2008.

The program added following courses effective fall 2009:

RTEC 123, Digital Imaging (2 credit hours)

RTEC 133, Imaging Equipment

RTEC 133L, Imaging Equipment Lab

The 2012-13 program sheet reflected modifications by CMU to increase available options for general education requirements.

BAS

In fall 2008, the Mesa State College Undergraduate Curriculum Committee approved the addition of RTEC 480 Clinical Specialization I (3 credits). The committee approved the modification of RTEC 490 Clinical Specialization from six credits to three credits with the change a change from Clinical Specialization to Clinical Specialization II.

In spring 2010, the Mesa State College Undergraduate Curriculum Committee approved the following program modifications:

- 1) The college eliminated the category of degree distinction. STAT 200 (3 credits) and BIOL 241 (3 credits degree distinction and 1 credit elective) were moved from the degree distinction category into the foundation section. BIOL 210/210L (4 credits) were moved from the major requirements section into the foundation section.
- 2) The Undergraduate Curriculum Committee approved the change of upper division elective credits from 35 hours to 33 hours due to state requirements for total number of credits to graduate.
- 3) The Undergraduate Curriculum Committee approved the change of general education math requirement from MATH 113,College Algebra to MATH 110, College Mathematics or higher. STAT 200, Probability and Statistics required a prerequisite of either course. The rationale for the change was to allow transfer students who have taken MATH 110 to be able to take the statistics course without taking another math course. Faculty justified the change because the degree is a BAS rather than BS.

C. Description of program delivery locations and formats and how it has shifted to meet the changing needs of its students.

AAS

The AAS program delivery is primarily on campus. Clinical experiences during the first year are located in Grand Junction. During the second year, students are required to complete an eight-week clinical rotation at a site on the western slope outside of Grand Junction. On a space available basis, students

residing in surrounding rural areas are afforded the opportunity to complete up to five, four-week rotations in a facility near their residence.

BAS

The BAS program delivery is an online format. In fall 2010, the Higher Learning Commission approved the CMU change request to extend its regional accreditation to the offering of online degree programs.

In 2009, WebCT was the online course management system. Since spring 2011, the online course management system is Desire 2 Learn (D2L).

Analysis of Student Demand and Success

A narrative describing trends related to the following data that are generated by the institutional research and budget offices' staff. The narrative also should identify any program-specific admissions criteria and comment on program's growth potential, particularly in light of any planned curricular changes. While the five-year data should be included as appendices to the self-study, summary tables may be incorporated into the narrative.

A. Number of majors (by concentration(s)) and minors

AAS

The AAS is in radiologic technology. There is no minor available.

BAS

The BAS program offers advanced specializations (concentrations) in computed tomography, magnetic resonance imaging, vascular interventional, and mammography.

B. Registrations and student credit hours by student level

AAS Registrations and Student Credit Hours by Student Level

	2008-09		2009-10		2010-11		2011-12		2012-13	
Class Standing	Registration	Credit hours								
Freshman										
Sophomore	294	765	341	857	331	836	342	882	282	726
Junior							7	13		
Senior	19	49	6	24			6	12	37	122

BAS Registrations and Student Credit Hours by Student Level

	2008-09		2009-10		2010-11		2011-12		2012-13	
Class Standing	Registration	Credit hours								
Freshman	6	12	6	14	2	5	3	7		
Sophomore	7	15	16	38	7	19	3	6	2	6
Junior	10	22	7	17	7	20	1	2	20	51
Senior	34	74	38	103	35	88	57	141	63	160

C. Registrations and student credit hours (fall and spring terms) subtotalled by course level

AAS Registrations and Student Credit Hours by Course Level

Course Level	2008-09		2009-10		2010-11		2011-12		2012-13	
	Registration	Credit hours								
100	208	400	243	467	235	452	247	475	205	392
200	102	408	102	408	96	384	108	432	114	456
300	2	4								
400	1	2	2	6						

BAS Registrations and Student Credit Hours by Course Level

Course Level	2008-09		2009-10		2010-11		2011-12		2012-13	
	Registration	Credit hours								
300	48	106	22	48	23	52	32	72	38	84
400	9	17	45	124	28	80	32	84	47	133

D. Number of graduates (by concentration)

AAS Graduates

	2008-09	2009-10	2010-11	2011-12	2012-13
Graduates	17	17	16	19	19

BAS Graduates by Concentration

Concentrations	2008-09	2009-10	2010-11	2011-12	2012-13
CT	NA	0	1	3	4
MRI	NA	1	4	0	1
VI	NA	0	0	1	0
Mammography	NA	0	0	1	0

E. One-year retention rates and four- and six-year graduation rates

AAS

With the exception of 2009 and 2011, the AAS program has accepted 18 students each year. To remain in the program students must take courses sequentially. A failing grade in RTEC coursework could result in dismissal from the program. In the event a student must take a semester off for pregnancy, illness, or other significant reason, he or she can reenter the program on a space available basis the following year. The attrition rate for the AAS program was very low due to the competitive admission process.

Attrition of AAS Students by Year in the Program

	2008-09	2009-10	2010-11	2011-12	2012-13	2013
Students Admitted	18	20	18	19	18	18
First Year Attrition	1	3	0	0	3	-
Second Year Attrition	0	0	0	0	0	-

BAS

During the evaluation period, the design of the BAS program allowed students flexibility in the number of courses they registered for each semester. There were and continue to be few fulltime students.

Additionally, some students did not seek a degree, so it has been difficult to track retention. As noted before, as result of this program review the program realized the need to formalize progression. Students entering the BAS program will now have to be degree seeking and are limited to six credits in the major before they are required to complete 15 general education credits and all foundation courses.

F. Student successes/recognitions, especially in external student competitions

AAS

Each year second year students compete in a student bowl competition at the Association of Collegiate Educators in Radiologic Technology (ACERT) conference.

As noted in the table *National (ARRT) Comparison of Pass Rates* in Student Learning Outcomes and Assessment, section B. the pass rate for the program is above the national pass rate.

BAS

Of the 16 graduates of the program, 12 successfully passed the certification examination. One graduate is scheduled to sit for the examination in the near future. Three students slated to graduate this year have already successfully passed the certification examination.

G. Other information/data (program's option).

Two administrative assistants support all health science programs (five nursing programs, and emergency medical technician, medical laboratory technician, and radiologic technology programs).

The department head supports all health science programs on the main campus. Additionally, the department head supports the Certified Nursing Assistant, Medical Office Assistant, and high school medical preparation programs on the Bishop campus of Western Colorado Community College.

Academic Program Resources

A narrative describing trends related to following data generated by Institutional Research, library, and budget offices. While the five-year data should be included as appendices to the report, summary tables may be incorporated into the narrative.

A. Faculty

1) Ratio of full-time equivalent students (FTES) to full-time equivalent faculty (FTEF)

Faculty to student ratios are low in all health care programs where clinical components and education include direct patient care.

AAS Ratio of Full-Time Equivalent Students (FTES) to Full-Time Equivalent Faculty (FTEF)

2008-09			2009-10			2010-11			2011-12			2012-13		
FTES	FTEF	FTES: FTEF												
27.1	3.0	9.2	29.4	3.0	9.9	27.9	2.7	10.3	30.2	2.7	11.2	28.3	2.7	10.4

BAS Ratio of Full-Time Equivalent Students (FTES) to Full-Time Equivalent Faculty (FTEF)

2008-09			2009-10			2010-11			2011-12			2012-13		
FTES	FTEF	FTES: FTEF												
4.1	0.8	5.2	5.7	1.7	3.4	4.4	1.9	2.3	5.2	1.9	2.7	7.2	2.1	3.4

- 2) Course credit hours and student credit hours by faculty type (i.e., tenured/tenure-track (T/TT), instructor, administrators/staff/coaches, lecturers)

AAS Course Credit Hours and Student Credit Hours by Faculty Type

	2008-09			2009-10			2010-11			2011-12			2012-13		
	CH	SCH	SCH%												
T/TT	43	446	55%	47	537	61%	37	472	56%	25	353	39%	29	351	41%
FT Non-TT	28	368	45%				12	108	13%						
PT				24	344	39%	16	256	31%	40	554	61%	36	497	59%

BAS Course Credit Hours and Student Credit Hours by Faculty Type

	2008-09			2009-10			2010-11			2011-12			2012-13		
	CH	SCH	SCH%												
T/TT	19	123	100%	38	160	93%	41	122	92%	41	134	86%	43	175	81%
PT				2	12	7%	5	10	8%	5	22	14%	8	42	19%

- 3) Faculty successes/quality/recognitions - details related to teaching, advising, scholarship, service, and other achievements

AAS

The AAS program has one tenured and one tenure track faculty members. There are three part-time instructors. Fulltime faculty typically teach 24 credits/year and part-time contracts range from 3 to 8 credits/semester. In addition to teaching, fulltime faculty participate in advising, scholarship, and service activities. All faculty hold a valid Colorado Community College System Career and Technical Education Credential. All certified radiologic technologist faculty maintain registration each year.

- a) **Patti Ward, PhD, RT(R)** is a fulltime tenured professor. She served as the Clinical Coordinator from 1990 to spring 2011. In fall 2011, she assumed the duties as Program Director for the AAS program. She served as the Western Colorado Community College Health Sciences Department Head summer 2011 to 2013. She holds an AAS degree in Radiologic Technology, BS in Organizational Management, MEd in Technology in Education, and a PhD in Community College Leadership. In addition to teaching a variety of radiologic technology courses, she has taught the Freshman Year Initiative (SUPP 101) course since 2002. She developed and taught the Sophomore Year Experience (SUPP 202) and Introduction to Health Care Professions (HSCI 101) courses.

Dr. Ward is the advisor for the Radiology Club and AmeriCorps. She documents hundreds of advising contacts with students each year and regularly participates in department and campus wide advising sessions and recruitment activities. She has contributed to new editions of the *Textbook of Radiographic Positioning and Related Anatomy* since 2005, completed numerous book reviews, and regularly presents at a national radiologic technology conference. Dr. Ward served on Faculty Senate from 2007 to 2012 and was the secretary from 2010 to 2011. She served on the CMU 2010 Strategic Planning committee, HLC Criterion Five subcommittee, and Tenure and Promotion committee since 2010. She served as the president of the Western Slope Society of Radiologic Technologists since 2000. As an active member of the Colorado Society of Radiologic Technologists, she served as the state secretary and currently serves as the By Laws committee chair. Dr. Ward is an active member of Altrusa International and serves on the board.

Dr. Ward received the exemplary faculty award each year since its inception in 2006 with the exception of two years when she was awarded a sabbatical.

- b) **Olga Grisak, MS, RT(R)(CT)** is a fulltime tenure track assistant professor. She taught part-time fall 2012 and spring 2013. In fall 2013, she accepted a position as the Clinical Coordinator. Ms. Grisak is a member of the Faculty Welfare committee and participates in professional development activities. She serves as the program's radiation protection officer and is the co-advisor for the radiology club. She will begin advising students next semester.
- c) **Cicely Allen, RT(R)(CT)** has been a part-time clinical instructor since spring 2010. She holds an AAS degree in Radiologic Technology from CMU and certification in CT. She is completing the CMU BAS program with a specialization in mammography. Ms. Allen served as an affiliate clinical instructor for two years prior to her employment at CMU.
- d) **Thea Khan-Farooqi, MD** has been a part-time instructor since 2012 when she was recruited to teach the second year Radiographic Pathology (RTEC 251) course. As an orthopedic surgeon, she brings a wealth of experience and expertise to share with students.
- e) **Laura Prout, BS, RT(R)** has been a part-time instructor since fall 2011. She primarily teaches three sections of a lab each semester.

BAS

The BAS program has one tenure track and two part-time faculty members. The fulltime faculty member typically teaches 24 credits/year and part-time contracts range from 2 to 3 credits/semester. In addition to teaching, fulltime faculty members participate in advising, scholarship, and service activities. All faculty members maintain registration in radiologic technology and certified advanced specializations each year.

- a) **LaJuana Ehlers, MEd, RT(R)(M)** has been a tenure-track assistant professor since 2008. She earned a BS in Radiologic Technology from Northern Arizona University and MEd from Colorado State University. Her clinical background includes radiography, interventional, mammography, and magnetic resonance imaging. She co-authored a book chapter and reviewed two textbooks. Since 2011, Ms. Ehlers has served on the CMU Distance Learning committee and she participated on the Health Science Department Distance Education committee. She serves as a board member for the Association for Distance Education and Independent Learning. She participated on the Mammography Curriculum Revision workgroup for the ARRT. This fall she began advising students in the program.
- b) **Lauren Huffman, MAEd, RT(R)(CT)** has been a part-time instructor since 2012. She earned an AAS in Radiologic Technology from Kent State University and BS in Radiologic Technology with specialization in CT. She holds a MA in Education from Muskingum University.
- c) **Bette Schans, PhD, RT(R)** currently serves as a part-time instructor. Ms. Schans is a tenured professor and was the Program Director for the AAS program from 1994 to fall 2011. She developed the BAS program in 2008 and taught RTEC 460, Quality Management and Health Care Law yearly since that time. She earned an AAS in Radiologic Technology from the Community College of Denver and a BS in Health Care Management from Metropolitan State College. She holds a MS in Management and Organization from the University of Colorado and a PhD in Education and Human Resource Studies from Colorado State University. She continues to serve as the Lambda Nu advisor (honor society for radiologic technology students) and is a committee member for the Association of Collegiate Educators in Radiologic Technology. She has an impressive teaching, advising, scholarship, and service record. Ms. Schans currently is the CMU Director of Assessment of Student Learning.

- d) **Patti Ward, PhD, RT(R)** assumed duties as the BAS Program Director in fall 2012. She taught one or two semesters of RTEC 480 and 490 Clinical Specialization I and II each year since fall 2010. She advised all BAS students from fall 2012 to fall 2013 and continues to advise new applicants to the program. She developed an acceptance letter, BAS Information Packet, and BAS Student Handbook.

4) Faculty curriculum vitae should be included in an appendix

See appendices *Faculty Vitae*.

5) Other data (program's option)

The AAS program was challenged by turnover and inability to replace faculty in a timely manner. Refer to Future Program Plans, section *AAS Challenges*.

B. Financial Information (finance and budget): As part of this narrative, describe any significant increases or decreases in the unit cost of the program during the review period, noting factors that may be affecting costs and the possibility of correcting any deviation within existing resources.

1) Total budget revenues and program expenditures

Total budget revenues have been adequate to meet current program expenditures. There have been no significant increases or decreases in the unit cost of the program during the review period. However, there has been no department funding for faculty development since about 2010.

From 2008 to 2012, students in the program were assessed lab fees. These fees paid for monthly personal dosimeters (radiation monitoring devices) and minor equipment purchases for the lab. The assessment of student fees ended in 2012. Currently, the AAS program draws from shared department funds from

2) Ratio of total expenditures/student credit hours

The budget for both programs, based on student credit hours, is 14 percent. The budget is adequate at this time in comparison to any state institution.

3) External funding (if applicable): Any external funding the program or its faculty have submitted and received since the last review. What potential opportunities exist for obtaining external funds during the next six years?

AAS

The program funds major equipment purchases primarily with grants. The AAS program was successful in securing a grant for \$50,000 from Caring for Colorado to purchase an additional energized x-ray unit for the dedicated radiologic technology lab. The equipment was received and installed in spring, 2010.

The program receives funding for other equipment and instructional materials and funding for faculty development through Perkins grants each year.

In addition to Perkins funding, the Colorado Health Foundation and Colorado Trust are opportunities for obtaining external funds during the next six years.

C. Library assessment

- 1) Health care is changing and more than ever currency requires access to online journals and electronic books. Both AAS and BAS programs receive good budget support. Program faculty are actively involved in the selection process. Strengths include currency of the monograph collection and the variety of indexing services available for journal articles.

- 2) Weaknesses include reliance on InterLibrary Loan for the many journals that have a publisher embargo on the full-text and the age of the anatomy collection.

See appendix *Library Program Assessment*.

D. Physical facilities

AAS

Physical facilities specifically provided for the radiologic technology programs are on the main campus of CMU in the Maverick Center. The facilities include faculty offices, small reception and workroom areas, a dedicated classroom, and dedicated energized laboratory.

- 1) Two faculty offices provide adequate space for the two, fulltime AAS faculty to conduct business. However, the Health Sciences department is challenged to provide offices for faculty. Several fulltime faculty must share small office spaces. All part-time faculty must share office space.
- 2) Offices have desktop computers that are networked to department black and white and color printers.
- 3) The dedicated classroom provides an adequate learning environment for students. There is sufficient space in the classroom to accommodate lecture style seating and space for small group activities.
- 4) The dedicated laboratory is divided into two distinct spaces. One space permits seating for small group lecture and group activities. The second space houses two x-ray machines. The laboratory has adequate storage for equipment and supplies.
- 5) Overall, the classroom and laboratory space could accommodate several more students. However, the opportunity for growing the program is limited by clinical placement sites in the western slope region.

BAS

The BAS program is entirely online, so physical facilities are not available. The primary faculty do not live in the Grand Junction area, so no offices are provided for them.

E. Instructional technology and equipment

AAS

The AAS program utilizes a great deal of instructional equipment. Equipment and software is updated as funding is available, based on faculty and student input, and changes in technology.

- 1) Classroom
The smart-classroom has a computer with Internet access, projector, document projector, and audio-video equipment installed.
- 2) Laboratory
Major lab equipment includes two high frequency generators, tables, wall units, and x-ray tubes. Based on changing technology, the program phased out film imaging/development and began using a computed radiography system in 2008. As technology continues to change it will be necessary for the program to

Students have access to computer labs in several locations on the main campus, including the Maverick Center. There is wireless connectivity for faculty and students.

BAS

CMU provides the Desire2Learn student learning management system.

F. Efficiencies in the way the program is operated

AAS

The program director is directly involved in program clinical placement, assessment, accreditation, and evaluation. In addition, the program director is responsible for faculty evaluation and placement, student advising, clinical placement, and faculty and student concerns, while carrying a fulltime teaching load.

BAS

The program director is directly involved in program assessment, accreditation, and evaluation. In addition, the program director is responsible for faculty placement, and faculty and student concerns. The majority of student advising (including all face-to-face) is handled by the program director because the fulltime faculty member is located in Denver.

G. Other information/data (program's option)

The regional community supports the AAS and BAS programs and students. Local and regional clinical sites are willing to accept students from both programs for clinical rotations. The program has developed good relationships with all of the AAS clinical sites. Three rural sites award a gas stipend to AAS students and one site offers housing to students. The advisory board actively supports the AAS program.

Student Learning Outcomes and Assessments

While five-year data tables should be included as appendices to the report, summary tables may be incorporated into the narrative. Note for programs with professional accreditation/state approval: If student learning outcomes and their assessment are part of the self-study, learning outcomes information may be submitted in the format required by the review agency; if not, these programs should follow the items listed below. Additionally, these programs are required to submit mid-cycle reports as described in section F, with the format to be determined by the Director of the Assessment of Student Learning in collaboration with the Academic Department Head. See Table 2 for SLO reporting schedule of reporting and follow-up.

Elements to be addressed in this section include:

- A. List student learning outcomes (SLOs) for the program and how they relate to the program's mission statement and courses. A curriculum map should be included in the appendix. The program should also describe how it contributes to the achievement of the institution-wide student learning outcomes as applicable.**

AAS

The program mission to develop technical and professional skills is addressed in the goals for students to be clinically competent, to demonstrate communication skills, and to develop critical thinking skills. The program mission to develop desired behaviors, attitudes, and ethics is reflected in the goal for students to demonstrate value-based behaviors.

The program goals link to student learning outcomes. All CMU associate graduates are expected to demonstrate proficiency in applied learning, specialized knowledge, quantitative fluency, communication fluency, and critical thinking. In addition to these campus-wide student-learning outcomes, graduates of this major will meet additional student learning outcomes related to the program goals.

Goal: Students will be clinically competent.

Student Learning Outcomes: Utilize broad-based knowledge and skills to become competent entry-level radiographers. (**Applied Learning; Specialized Knowledge**)

Demonstrate proficiency in using mathematics for technique selection and radiation protection measures. (**Intellectual Skills – Quantitative Fluency**)

Goal: Students will demonstrate communication skills.

Student Learning Outcomes: Demonstrate effective oral and written communication in the radiologic sciences. (**Intellectual Skills – Communication Fluency**)

Goal: Students will develop critical thinking skills.

Student Learning Outcomes: Interpret analytical data to determine a course of action to solve problems. (**Intellectual Skills – Critical Thinking**)

Goal: Students will model professionalism.

Student Learning Outcomes: Demonstrate value-based behaviors as the foundation for professional practice. (**Specialized Knowledge**)

BAS

The mission of the CMU BAS Radiologic Technology Program is to provide registered technologists opportunity for post-primary certification education leading to a baccalaureate degree.

All CMU baccalaureate graduates are expected to demonstrate proficiency in critical thinking, communication fluency, quantitative fluency, and specialized knowledge/applied learning. In addition to these campus-wide student-learning outcomes, graduates of this major will be able to:

1. Relate ethical principles to real-life problems in the radiologic sciences. (**Specialized Knowledge**)
2. Combine academic theory with practitioner experience and skills. (**Applied Learning**)
3. Apply quantitative analysis methods to develop appropriate conclusions. (**Quantitative Fluency**)
4. Communicate effectively through written documents. (**Communication Fluency**)
5. Develop critical thinking and problem solving skills that demonstrate a professional level of expertise in advanced specialty areas in the radiologic sciences. (**Critical Thinking**)

- B. Identify the direct and indirect measurements that assess the program's student learning outcomes. What does the assessment information indicate about how effective the academic program is in preparing students for the future? Identify any other documentation of program quality, including external validation. While assessment results in specific coursework can be reported, the report should focus on outcomes at the program level. Assessment results should be summarized in tabular form and include a narrative that describes the findings. Information on student satisfaction as well as current student and alumni success should be included (i.e., graduate employment, awards, pass rates on licensure exams, graduate school acceptance and admissions test scores (GRE, MCAT, LSAT, etc.), advanced degrees obtained, results of alumni and employer surveys, etc.)**

National (ARRT) Comparison of Pass Rates

	CMU RT Program First Attempt Pass Rates	CMU RT Program Second Attempt Pass Rates	National Pass Rates
2013	95%	100%	available
2012	100%	-	93.0%
2011	94.1%	100%	92.7%
2010	100%	-	92.4 %
2009	100%	-	91.4%
2008	100%	-	91.0%

C. Describe program improvements resulting from assessment of SLOs since the last program review AAS

The program developed student learning outcomes in 2013. Since the last program review, the program assessed student learning and program outcomes as part of the JRCERT accreditation process.

BAS

In summer 2013, the program and Institutional Assessment submitted an online graduate survey, with one graduate response. The program mailed a graduate survey in fall 2013 with two graduate responses.

The program developed student learning outcomes and a curriculum map in 2013. The program is in the process of developing assessment criteria and a timeline. The first student learning outcome data collection will take place in 2014.

D. Indicate if student learning outcomes being refined, or if data collection being modified (if applicable)

In 2012, student learning outcomes for the AAS program were aligned with CMU outcomes and BAS outcomes were developed.

E. Other information/data related to learning outcomes assessment (program's option)

As per JRCERT accreditation in 2006, student learning outcomes have always been measurable and applicable to the AAS radiologic technology program.

Future Program Plans

A. Vision for program

AAS

- 1) Plans for the future of the program include increasing the number of students admitted from 18 to 19 or 20. The challenge is to maintain JRCERT placement standards and employment rates in an area with declining numbers of radiographers in diagnostic imaging. The plan is to find creative ways to place students in clinical experiences without compromising quality.
- 2) For the program to remain up-to-date with changes in technology, it will be important for the program to add direct digital capabilities to the lab.

BAS

As technology advances, the demand for radiologic technologists with advanced certifications has increased. The country needs qualified professionals to provide medical imaging in CT, MRI, VI, and mammography. Based on the 2016 ARRT requirement for education from approved sources, the outlook for the program looks promising. It will be important for the program to find ways to market the program statewide.

B. Strengths and challenges facing program

AAS

Strengths

- 1) There is sustained student interest in the program AAS program. The program attracts students from eastern Colorado and outside the state. Interest in the AAS Radiologic Program has remained high for over twenty years and there is no indication that will change in the near future. Following the change in 2011 to university status, interest in health care programs has continued to grow. There are 90 to 100 applicants for the program each year, of which approximately 45 are qualified for the program.
- 2) The employment rate locally is stable. Students attending CMU from outside the regional area are returning to urban areas for employment. The five-year employment rate for AAS graduates is 85%.
- 3) There is strong regional support for the AAS program. The AAS Advisory committee actively supports the program.
- 4) Students and the regional community recognize the AAS program as a quality program. The majority of radiologic technologists employed in the regional area are graduates of the program.
- 5) The program has strong, dedicated faculty. The program director earned a PhD and the clinical coordinator earned a master's degree; both of which exceed accreditation standards.

Challenges

- 1) From 2011 to 2013, the greatest challenge facing the AAS program has been the hiring and retention of part-time and fulltime faculty. In fall 2011, the AAS and BAS Program Director, Bette Schans left the AAS position to accept duties as the HLC Committee Criterion Four chair and Dr. Ward assumed the vacated position. Dr. Schans remained as the BAS Program Director and reduced her teaching load to six credits per semester. The program hired two part-time instructors to fill Dr. Schans position. In fall 2012, Dr. Schans resigned as the BAS Program Director and Dr. Patti Ward assumed the vacated position. Since Dr. Ward could no longer remain as the clinical coordinator, Cicely Allen (part-time clinical instructor for the AAS) accepted the interim position. After an attempt to hire a clinical coordinator failed, Dr. Schans agreed to teach three credit hours in the AAS program in fall 2012. In fall 2012, the AAS two part-time instructors resigned and two more attempts to hire a clinical instructor failed. In spring and fall 2012, Dr. Ward worked an overload to fill in the vacancies. The program filled the clinical coordinator position in fall 2013.
- 2) The capacity of affiliate clinical facilities for students to complete the 1,300 hours of clinical experience leads to challenges growing the AAS program. JRCERT standards require the presence of a registered technologist for each student during clinical experiences.

While local clinical facilities serve a growing population, the numbers of regular diagnostic imaging procedures have decreased. The advent of advanced modalities such as CT and MRI have decreased the number of diagnostic procedures performed and as a result, the number of technologists employed in the radiology department has declined. The AAS program has established affiliation agreements with six clinical facilities in the Grand Junction area and six facilities on the western slope. In fall program added Family Health West in Fruita as an affiliate clinical site. The program increased the number of students accepted into the program from 18 to 20. Subsequently, a reduction in the number of students permitted in other clinical sites declined. Since that time, the program has continued to limit the number of students accepted into the program to 18 to meet accreditation standards.

BAS**Strengths**

- 1) The program has been able to recruit excellent, qualified faculty who are proficient in online learning.
- 2) The program has served as a regional provider for students to complete advanced specializations and to obtain a BAS in Radiologic Technology.
- 3) This is the only baccalaureate program in radiologic technology in the state.

Challenges

- 1) A challenge facing the BAS program is that the fulltime tenure-track assistant professor and one part-time instructor do not live in the Grand Junction area. This has particularly presented a challenge for the tenure-track faculty to participate in campus wide activities, training, and networking.
- 2) It has been a challenge for the program to recruit students outside of the immediate area. While the program is online, most of the students are graduates of the AAS program.

C. Trends in the discipline that could affect future planning for program (if applicable)**AAS**

- 1) Beginning in 2015, the ARRT will require all candidates for a primary pathway certification to earn an academic degree (two- or four-year) degree. This requirement means hospital based programs must affiliate with a college. This requirement should not affect the CMU AAS program as there are no competing hospital based programs in the regional area.
- 2) According to the Bureau of Labor Statistics, U.S. Department of Labor, *Occupational Outlook Handbook, 2012-13 Edition*,
..employment of radiologic technologists is expected to grow by 28 percent between 2010 and 2020, faster than the average for all occupations. Although hospitals will remain the main employer of radiologic technologists, a number of new jobs will be in physicians' offices and in imaging centers. Employment in these healthcare settings is expected to increase because of the shift toward outpatient care whenever possible. (<http://www.bls.gov/ooh/healthcare/radiologic-technologists.htm>)

However, according to the ASRT *Enrollment Snapshot of Radiography, Radiation Therapy, and Nuclear Medicine Technology Programs–2012* (2013), the number of students entering radiography educational programs decreased by 4.7 percent in 2012. Despite the decrease, programs directors reported turning away qualified students at a rate higher than those that were accepted. Eighty-nine percent of radiography program directors reported they anticipated keeping entering class enrollment numbers the same in the coming years. This may be explained in part by the findings of the study that reported employment rates for recent radiography graduates close to 85 percent.

BAS

- 1) Currently registered technologists can acquire post-primary certification in advanced specializations based on experience. Beginning in 2016, 16 hours of structured education related to the content specification for that exam will be required in order to sit for the ARRT certification examination. The structured education must be recognized by the ARRT or university-awarded. The ARRT requirement affords opportunity for the BAS program to meet the needs of registered technologists for structured education to achieve certification in an advanced specialization.
- 2) Despite the employment outlook by the U.S. Bureau of Labor and Statistics, some graduates from the AAS program have found employment on the western slope difficult. Due to the economic downturn,

many technologists remain employed longer making it difficult for new AAS graduates to find employment. A baccalaureate degree with certification in an advanced specialization makes the graduate more marketable. Students are finding employment outside the area.

- 3) Most employers require the baccalaureate degree for administrative, supervisory, or teaching positions. There is a dire need for educators in radiologic technology now and in the future.

D. How program review process is being used to improve the program's teaching and learning

- 1) Two immediate changes have taken place due to the program review process.
 - a) The BAS program will require students to complete the program within five years.
 - b) The BAS program will only allow students to take six credits in the major before they must complete general education and foundation course requirements.

Appendix A

AAS Information Packet



Department of Health Sciences

*AAS Radiologic
Technology Program*

(Associate of Applied Science Degree)

Information Packet with Application





AAS Radiologic Technology Program Information Packet

About the Profession

The registered radiologic technologist plays an important role on the medical team by providing quality radiographic images for a physician or radiologist (a physician who specialized in interpretation of diagnostic radiologic images). As a professional assistant, the radiologic technologist functions to aid in the diagnosis of various abnormalities.

Responsibilities of the radiologic technologist include adjusting radiographic equipment for specific examinations, placing the patient into the correct position, making the required exposure, and processing images. In some cases, mobile radiographic equipment must be used in the emergency room, in surgery, or at the patient's bedside. Responsibilities may also include performing quality assurance procedures, ordering supplies, and maintaining radiographic equipment.

The major responsibility of the radiologic technologist, however, is compassionate care of the patient. In a profession driven by technical advances, caring for the needs of the patient remains the primary objective. Compassionate care includes proficiency in communication, respecting individual rights, and maintaining safety.

Employment Opportunities

Varieties of career opportunities are available as a radiologic technologist. A registered radiologic technologist is qualified to work in hospitals, doctor's offices, and public health facilities.

Radiologic technology is a dynamic career with new applications and techniques appearing regularly. This field affords many opportunities for professional growth. An Associate of Applied Science degree in Radiologic Technology serves as a stepping-stone for advancement into magnetic resonance imaging (MRI), vascular-interventional imaging, cardiac-interventional imaging, computed tomography (CT), mammography, sonography, quality management, radiation oncology, and education.

About the Program

The Radiologic Technology Program at Colorado Mesa University includes classroom studies and clinical experience. Most of the classroom studies are during the fall and spring semesters of the first year of the program. Completing general education or required support courses before beginning the program does not decrease the length of the program. However, it does considerably decrease the semester credit hour load that will be necessary to graduate as proposed. Upon successful completion of the program, the student receives an Associate of Applied Science degree.

All classroom studies are conducted on the Colorado Mesa University campus. Clinical experience includes rotations at several clinical facilities throughout western Colorado. The structure of the Radiologic Technology Program requires the student to attend the eight week summer session between the first and second year of study. In addition, sometime during the second year, an eight-week rotation in Delta, Montrose, Rifle, Glenwood Springs, or Rangely is required.

Community Hospital, Grand Junction
Delta County Memorial Hospital, Delta

Family Health West, Fruita
Glenwood Medical Associates, Glenwood Springs

Grand River Medical Center, Rifle
Montrose Memorial Hospital, Montrose

Rangely District Hospital, Rangely
Rocky Mountain Orthopaedics, Grand Junction
St. Mary's Hospital and Medical Center, Grand Junction
Valley View Hospital, Glenwood Springs
Veterans Administration Medical Center, Grand Junction
Western Orthopedics, Grand Junction

Program Accreditation and Degree

The Joint Review Committee on Education in Radiologic Technology accredits the AAS Radiologic Technology Program.

Following successful completion of the Radiologic Technology Program, and ethics and examination requirements, the graduate is eligible to sit for the national registry examination administered by the American Registry of Radiologic Technologists. A passing score on this examination results in the granting of a certificate of registration that allows the privilege to use the title "Registered Technologist" and to use the abbreviation R.T. following the graduate's name.

Program Mission Statement

The mission of the AAS Radiologic Technology Program at Colorado Mesa University is to facilitate each student's learning to become the best radiologic technologist possible through development of technical and professional skills as well as behaviors, attitudes, and ethics desired by patients, employers, and the community served.

Program Goals and Student Learning Outcomes

All CMU associate graduates are expected to demonstrate proficiency in applied learning, specialized knowledge, quantitative fluency, communication fluency, and critical thinking. In addition to these campus-wide student-learning outcomes, graduates of this major will be able to:

Goal: Students will be clinically competent.

Student Learning Outcomes: Utilize broad-based knowledge and skills to become competent entry-level radiographers. (Applied Learning; Specialized Knowledge)

Demonstrate proficiency in using mathematics for technique selection and radiation protection measures. (Intellectual Skills – Quantitative Fluency)

Goal: Students will demonstrate communication skills.

Student Learning Outcomes: Demonstrate effective oral and written communication in the radiologic sciences. (Intellectual Skills – Communication Fluency)

Goal: Students will develop critical thinking skills

Student Learning Outcomes: Interpret analytical data to determine a course of action to solve problems. (Intellectual Skills – Critical Thinking)

Goal: Students will model professionalism.

Student Learning Outcomes: Demonstrate value-based behaviors as the foundation for professional practice. (Specialized Knowledge)

Program Application Deadline

The deadline for application to the program each academic year is March 1. The number of clinical facilities in the area limits the number of admissions. Students are selected based on academic preparation, HOBET score, aptitude for service within the field, and positions available in the program. This field of study requires a math and science background and effective communication skills. The program recommends that applicants complete high school courses in the areas of biology, physics, and chemistry (or college-level courses). Applicants continuing in the program must maintain a 2.0 average each semester and receive no grade lower than a "C" (2.0) in radiologic technology courses.

Counseling, Housing, Financial Aid, and Scholarships

Please refer to the Colorado Mesa University website, www.coloradomesa.edu or the current Colorado Mesa University catalog for information concerning career counseling, housing, financial aid, and scholarships.

More Information

For more information about the program, course requirements, and course descriptions please visit Colorado Mesa's website at: www.coloradomesa.edu/healthsciences/radtech.html or call 970-248-1398.

Graduation Requirements for AAS in Radiologic Technology

		Credit Hours	Contact Hours
General Education			
English Composition	111, 112	6	96
Math 113		4	64
Social Sciences, Natural Sciences, Humanities, Fine Arts, or Selected Applied Studies		6	96
Health and Wellness	KINE 100	1	16
Physical Activity	KINA	1	16
Foundation Prerequisite Courses			
Anatomy and Physiology Lecture	BIOL 209	3	48
Anatomy and Physiology Lab	BIOL 209L	1	32
Radiologic Technology Core Courses			
Didactic		23	368
Laboratory		4	128
Clinical		28	1,320
Total Hours		77	2,184

Total contact hours will not exceed 40 hours per week.

Suggested Course Sequencing for AAS in Radiologic Technology

This is a recommended sequence of coursework. General education requirements may be taken prior to or simultaneously with program courses. In general, most applicants complete general education courses prior to entering the program. Certain courses may only be offered during the fall or spring semesters. It is the student's responsibility to meet with the assigned advisor and check the two-year course matrix on the Colorado Mesa website for course availability.

FIRST YEAR

<u>Fall Semester</u>		<u>Hours</u>	<u>Spring Semester</u>		<u>Hours</u>
ENGL 111	English Composition	3	ENGL 112	English Composition	3
MATH 113	College Algebra or higher	4	General Education*		3
General Education*		3	BIOL 209**	Human Anat & Physiology	3
KINE 100	Health and Wellness	1	BIOL 209L**	Human Anat & Physiology Lab	1
KINA	Activity	<u>1</u>			10+
		12			

SECOND YEAR

<u>Fall Semester</u>		<u>Hours</u>	<u>Spring Semester</u>		<u>Hours</u>
RTEC 114	Radiographic Clinical Experience I	2	RTEC 124	Rad. Clinical Experience II	4
RTEC 120	Intro to Rad. Tech. and Patient Care I	3	RTEC 131	Rad. Anatomy & Positioning II	2
RTEC 121	Radiographic Anatomy/Positioning I	2	RTEC 131L	Rad. Anatomy & Positioning II Lab	1
RTEC 121L	Anatomy/Position I Lab	1	RTEC 133	Imaging Equipment	2
RTEC 122	Principles of Radiographic Exposure I	2	RTEC 133L	Imaging Equipment Lab	1
RTEC 122L	Princ. Of Radiographic Exposure I Lab	1	RTEC 135	Radiation Biology and Protection	2
RTEC 123	Digital Imaging	<u>2</u>			12
		13			

THIRD YEAR

<u>Summer Semester</u>		<u>Hours</u>
RTEC 214	Clinical Experience III	<u>6</u> 6+

<u>Fall Semester</u>		<u>Hours</u>	<u>Spring Semester</u>		<u>Hours</u>
RTEC 224	Clinical Experience IV	8	RTEC 234	Clinical Experience IV	8
RTEC 251	Radiographic Pathology	3	RTEC 261	Radiographic Review	3
RTEC 255	Radiographic Assessment I	<u>1</u>	RTEC 265	Radiographic Assessment II	<u>1</u>
		12			12

* (Social Sciences, Natural Sciences, Humanities, Fine Arts, or Selected Applied Studies)
 PSYC 150 highly recommended and BIOL 101/101L or HSCI 100 are recommended

**BIOL 209 and 209L are foundation prerequisite courses and must be completed prior to entry into the program. BIOL 209 and 209L must have been completed within the five-year period prior to submission of application.

+ 12 credit hours required for fulltime status

Common Questions & Answers about the AAS Radiologic Technology (RT) Program

Please read all application materials, the program course descriptions in the CMU catalog, and visit the program website at www.coloradomesa.edu/healthsciences/radtech.html.

Do I have to receive acceptance from CMU before I can apply for the RT program?

Yes.

Does the RT program require an admission fee?

No, there is no fee to apply to the program but there is a fee to apply to CMU.

Should I apply to the RT program before I request prior college transcripts to be mailed to CMU?

You may turn in the program application form before you ask other colleges to send transcripts.

However, it is your responsibility to make sure the Department of Health Sciences receives all application documents before the deadline. Contact the Registrar's Office at 248-1555 to have transfer credits evaluated for possible acceptance at Colorado Mesa University.

Do all RT application documents have to be received by the Department of Health Sciences office before the application deadline?

Yes, the Department of Health Sciences must receive copies of all college transcripts, a transcript evaluation (if you have taken courses from other colleges), a copy of a high school transcript or GED, copy of HOBET (Health Occupations Basic Entrance Test) test results, and a program application prior to the deadline.

Do I have to complete all the general education courses prior to applying to the program?

No, you do not. However, most students have completed (or are enrolled in) the general education courses and the foundation prerequisite courses when they apply.

Do the foundation prerequisite courses (BIOL 209/209L) have to be completed prior to applying to the program?

No, however the courses must be successfully completed prior to entering the RT program. Most students have completed or are enrolled in the courses prior to applying to the program. If you have not completed the courses and are accepted into the program, acceptance is contingent on successful completion of BIOL 209/209L prior to the beginning of fall semester or you will be denied entry into the program.

What classes can I take to fulfill general education requirements?

Refer to the Graduation Requirements for the AAS degree section in the Colorado Mesa University Catalog. The selected 100 and 200 level classes listed in this section are acceptable for fulfilling general education requirements.

Should I speak with an advisor before I register for general education courses?

You are strongly encouraged to speak with a RT program advisor prior to registering for general education courses. RT courses may only be taken after you are accepted into the RT program.

Can I enroll part-time?

While completing general education, you can enroll part-time, but once you start the RT program, you must enroll fulltime to complete coursework.

How many students does the RT program accept each year?

The program accepts 18 students each year. Please note there are typically five or six applicants for each opening.

What are the pass rates for the national examination?

See the National Comparison of Pass Rates below.

How does the RT program select students to begin the program?

First, the program awards points based on academic preparation and the HOBET score. Second, the program invites candidates with the highest academic ranking to interview. The program selects students to begin the program based on the interview process.

Does the RT program use a waiting list?

No, the program does not use a waiting list. Applicants must reapply for consideration the following year.

When does the RT program start?

RT program courses begin in the fall semester. Program courses are offered in sequence and must be taken in order.

How long is the RT program?

The AAS program consists of five consecutive semesters of program courses and generally two semesters of general education and foundation prerequisite courses. Students typically attend the university three years (assuming acceptance into the program with the first application).

Do students have to do clinical work?

Yes, there is a great deal of clinical experience involved. Generally, students experience approximately 1300 hours of clinical education.

How much does the RT program cost?

Please visit www.coloradomesa.edu for current tuition and fee information. The admissions office can answer questions about tuition and fees. See Projected Radiologic Technology Program Costs for estimated expenditures for the program.

Are there any scholarships specifically for RT students?

Yes, there are scholarships available for RT students, but these are usually for students already in the program. The applications for scholarships are processed during the spring semester to assist students in paying for the next academic year. Please contact the Financial Aid Department for further aid information.

Can I work while I take classes?

Some students work during the RT program. However, it is challenging and the program does not recommend it for most students. Student should expect to spend a minimum of two hours of study and preparation for every hour of in class and clinical. The program recommends limiting work or other substantial commitments to less than 20 hours per week.

Do I need my own computer?

Many courses include computer and Internet-based assignments. Having your own computer gives you more freedom in completing course assignments. Computer labs are available on campus for student use. As a student, you receive access to the MAVzone and an email address, which you will be required to access regularly.

How does the CMU RT program curriculum compare to a community college curriculum for a student interested in transferring from a community college in Colorado?

See the Crosswalk between CCC and CMU Radiologic Technology Curriculum below.

Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

Crosswalk between CCC and CMU Radiologic Technology Curriculum

Community College RT Curriculum

RTE 101, 111 (4 cr)

Introduction to Radiography
 Radiographic Patient Care

RTE 121 (3 cr)

Radiologic Procedures I

RTE 122 (3 cr)

Radiologic Procedures II

RTE 131 (1.5 cr)

Radiographic Pathology and Image Eval I

RTE 132 (1.5 cr)

Radiographic Pathology and Image Eval II

RTE 141 (3 CR)

Radiographic Equipment/Imaging I

RTE 142 (3 cr)

Radiographic Equipment/Imaging II

RTE 221 (3 cr)

Advanced Medical Imaging

RTE 231 (2 cr)

Radiation Biology and Protection

RTE 289 (3 cr)

Capstone

RTE 181 (5 cr)

Radiographic Internship I

RTE 182 (5 cr)

Radiographic Internship II

RTE 183 (7 cr)

Radiographic Internship III

RTE 281 (8 cr)

Radiographic Internship IV

RTE 282 (8 cr)

Radiographic Internship V

Colorado Mesa University RT Curriculum

RTEC 120 (3 cr)

Introduction to Radiologic Technology
 and Patient Care

RTEC 121, 121L (3 cr)

Radiographic Anatomy and Positioning I
 Radiographic Anatomy and Positioning Lab I

RTEC 131, 131L (3 cr)

Radiographic Anatomy and Positioning II
 Radiographic Anatomy and Positioning Lab II

RTEC 251, 255, 265 (5cr)

Radiographic Pathology (3)
 Radiographic Assessment I (1)
 Radiographic Assessment II (1)

RTEC 251, 255, 265 (5cr)

Radiographic Pathology (3)
 Radiographic Assessment I (1)
 Radiographic Assessment II (1)

RTEC 123 (2 cr)

Digital Imaging

RTEC 122, 122L (3 cr)

Principles of Radiographic Exposure
 Principles of Radiographic Exposure lab

RTEC 133, 133 L (3 cr)

Imaging Equipment
 Imaging Equipment lab

RTEC 131, 131L (3 cr)

Radiographic Anatomy and Positioning II
 Radiographic Anatomy and Positioning lab II

RTEC 135 (2 cr)

Radiation Biology and Protection

RTEC 261 (3 cr)

Radiographic Review

RTEC 114 (2 cr)

Radiographic Clinical Experience I

RTEC 124 (4 cr)

Radiographic Clinical Experience II

RTEC 214 (6 cr)

Radiographic Clinical Experience III

RTEC 224 (8 cr)

Radiographic Clinical Experience IV

RTEC 234 (8 cr)

Radiographic Clinical Experience V

Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

National Comparison of Pass Rates

	CMU RT Program First Attempt Pass Rates	CMU RT Program Second Attempt Pass Rates	National Pass Rates
2013	95%	100%	unavailable
2012	100%	100%	93.0%
2011	94.1%	100%	92.7%
2010	100%	100%	92.4 %
2009	100%	100%	91.4%
2008	100%	100%	91.0%

Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

Projected AAS Radiologic Technology Program Costs

This list serves as an estimate to assist students in budgeting. The costs are approximate and are subject to change without notice.

<u>**Tuition and Fees</u>	
General education (two semesters at 12 credit hours each)	5,765.00
AAS RT program courses only (five semesters)	13,200.00
<u>Housing and Meal Plans</u>	Variable
Miscellaneous	
Background Check (prior to beginning program)	60.00
Liability insurance (annually)	36.75
CPR	32.00
Immunizations	
TST-2 part (TB skin test) testing (annually)	10.00
Tetanus, diphtheria, and pertussis (TDaP) vaccination	30.00-67.00
Influenza (flu) vaccination (annually)	20.00-30.00
Varicella (chicken pox) vaccination	154.00-159.00
Measles, mumps, and rubella vaccination	67.00-110/00
Hepatitis B immunizations (\$67-120 x 3)	201.00-300.00
Meningococcal (suggested) immunization	90.00
<u>Books-CMU Bookstore</u> (new book price)	
First Year fall semester (bundle)	750.00
First Year spring semester	0
Second Year summer semester	0
Second Year fall semester (bundle)	200.00
Second Year spring semester (bundle)	140.00-160.00
Uniforms	
Uniform whites (\$45 x 2 recommended)	90.00
Lab coat	40.00
Shoes	70.00
Incidentals	
Name tag	7.00
RT Program identification patches (\$5 x 2 recommended)	10.00
Lead side markers	25.00

** Tuition and fees listed are in state and assume COF eligibility.

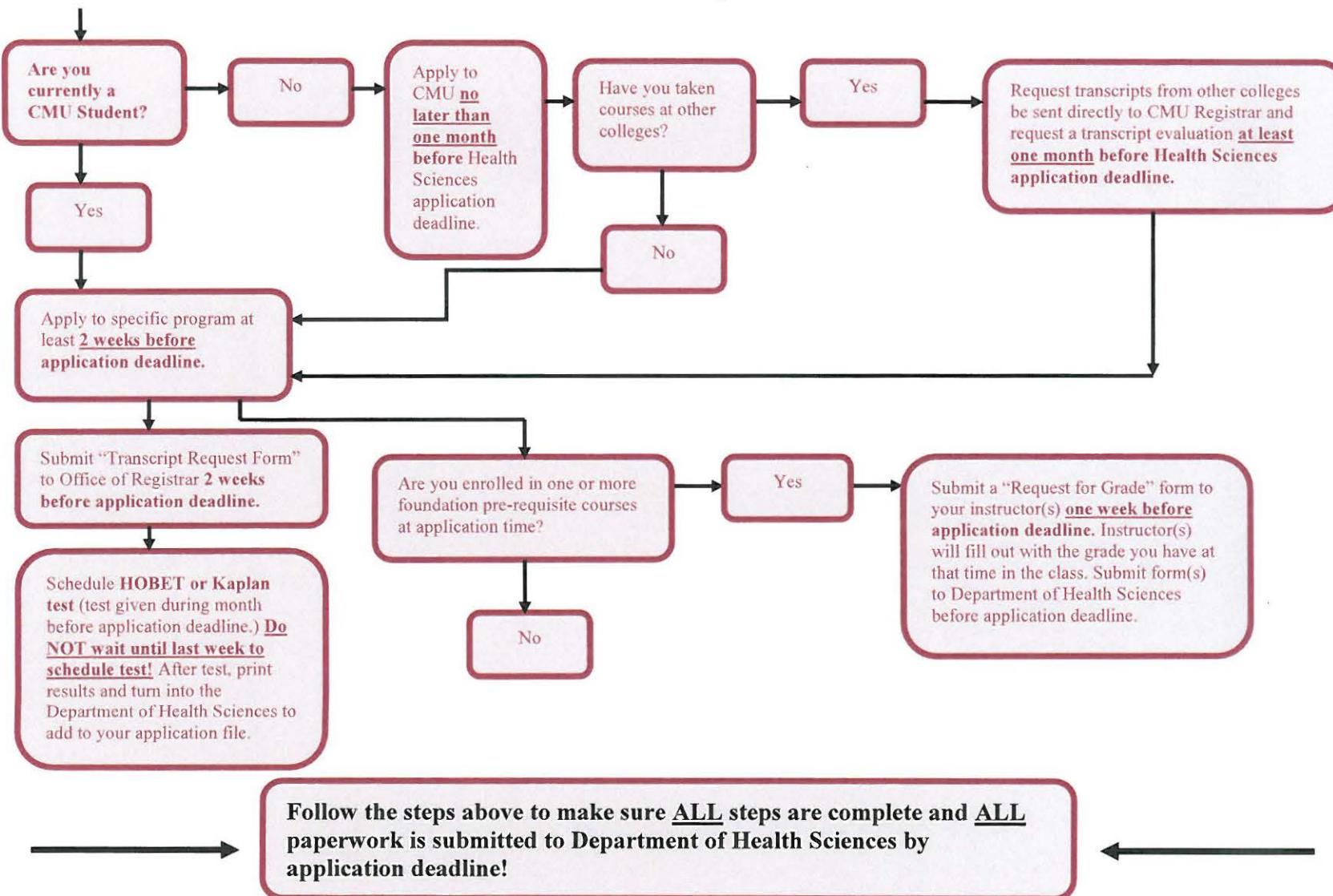
Application Process

Refer the “How Do I Apply to a Program in the Department of Health Sciences?” chart on the next page.

1. Submit a completed **Colorado Mesa University application**, including application fee, through the Admissions Office or reactivate application file if you have missed one semester at Colorado Mesa University, declaring Associate of Applied Science in Radiologic Technology as area of emphasis. If you are a graduate of Colorado Mesa University, you must readmit to the University. You may apply online at www.coloradomesa.edu/admissions. You must be accepted by the university and assigned the AAS Radiologic Technology major code prior to registering for classes.
2. Submit copies of all transcripts from other colleges/universities to the **CMU Office of the Registrar** (**contact previously attended schools and have them send transcripts to the CMU Registrar – who will complete a transcript evaluation and decide what prior courses will transfer to CMU**). Transcript evaluation by the registrar is required for all courses taken at other colleges and universities. Applicants must have at least a 2.0 (C) on a 4.0 scale for all courses required for the completion of the Associate of Applied Science. This policy applies regardless of when the course was completed.
3. Applicants typically complete or are about to complete general education and foundation prerequisite courses. Applicants must complete all courses in the program with a grade of “C” (2.0) or better. If completing general education and biology courses at an accredited institution other than Colorado Mesa University, please check with a university registrar or advisor to assure that general education and biology courses will transfer to Colorado Mesa University. If currently enrolled in college algebra or anatomy and physiology, include an instructor signed “request for grade” form (available on the website) to verify your midterm grade.
4. Take the HOBET (Health Occupations Basic Entrance Test). The required examination measures basic reading, mathematics, science, and English and language usage skills. Registration information is available on the program website <http://www.coloradomesa.edu/healthsciences/radtech.html> the first week of February.
5. Submit an application and requested documents by March 1 for fall semester entrance. The application is included in this packet and is available on the Colorado Mesa University website www.coloradomesa.edu. Acceptance into the program is contingent upon passing the criminal background investigation. Applicants complete the background check after acceptance into the program. Once admitted to the program, the student must show proof of immunizations, CPR, and obtain a health physical prior to starting the clinical portion of the program.

How Do I Apply to a Program in the Department of Health Sciences?

Begin here!



**Associate of Applied Science Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University**

Summary Sheet: Application

You may fax items to the Department of Health Sciences, Attention: Renae Phillips at (970) 248-1133

Submit the following items to the Department of Health Sciences Office prior to the application deadline of March 1:

- _____ 1. Application for AAS Radiologic Technology (including handwritten essay)
- _____ 2. Current Colorado Mesa University transcript and/or transcript(s) and transcript evaluation for all colleges/universities attended. Have these sent directly by the CMU Registrar's Office to the Department of Health Sciences by completing the *Transcript Request Form* below.

Before turning in the *Transcript Request Form* to the Registrar's Office, make sure the following are completed. If you turn in the *Transcript Request Form* prior to completing the following, the Registrar's Office will send incomplete transcripts/transcript evaluations resulting in an incomplete application. Incomplete applications will not be reviewed. It is the applicant's responsibility to complete the following by the deadline:

Current CMU Student Applicants:

- Confirm with the Registrar's Office (970-248-1555) that there are no holds on your account.
- Submit *Transcript Request Form* to the Registrar's Office no later than two weeks prior to application deadline.

Non-Current CMU Student Applicants:

- Apply to CMU via the Admissions Office.
- Confirm with the Admissions Office your acceptance to CMU.
- Confirm with the Registrar's Office receipt of all transcripts from previously attended colleges/universities.
- Confirm with the Registrar's Office completion of your transcript evaluation.
- Confirm with the Registrar's Office that there are no holds on your account.
- Submit *Transcript Request Form* to the Registrar's Office no later than two weeks prior to application deadline.

- _____ 3. Copy of high school transcript
- _____ 4. Standardized Admission Test (HOBET: Health Occupations Basic Entrance Test) at an approximate cost to applicant of \$30.00. For additional information, please check the website. **Please Note:** If you are not planning to take the HOBET test at CMU, it is your responsibility to schedule the proctored exam at a location near you, as the Department of Health Sciences will not provide that service.

It is the applicant's responsibility to make sure the Department of Health Sciences office receives all paperwork prior to the deadline.

**AAS Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University**

Transcript Request Form

To have transcripts forwarded to the Department of Health Sciences, either deliver, mail, or FAX this form to the CMU Office of the Registrar.

Office of the Registrar
Colorado Mesa University
1100 North Avenue
Grand Junction, CO 81501

(FAX 970-248-1131)

Required CMU Student ID # 700 *Required Full Legal Name (please print clearly)*

Required Signature

Registrar: Please send copies of the following to the CMU Department of Health Sciences office:
(1) transcripts from other colleges/universities, if applicable; (2) transcript evaluation prepared by the
Office of the Registrar, if applicable; (3) high school transcripts; (4) current Colorado Mesa University
transcript, if applicable. Please complete the grey area.

For Registrar's Use Only

Has applicant been accepted at CMU? Yes No

Which program? Baccalaureate Associate

Transcripts from other colleges attended: Attached: Xtender:

Transcript evaluation: Attached: Xtender:

High school transcripts or GED: Attached: Xtender:

Colorado Mesa University transcript: Attached: Xtender:

AAS Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

Application for Admission

1. Full legal name _____
Last _____ First _____ M.I. _____ Maiden Name _____

CMU Student ID# 700 Date of Application _____ / _____
(assigned upon acceptance to Colorado Mesa University)

2. Email Address (*print clearly*): _____ @mavs.coloradomesa.edu

3. Present mailing address:

Street Address _____ Apt # _____

City _____ State _____ Zip _____

4. Permanent home address (if different from above):

Street Address _____ Apt # _____

City _____ State _____ Zip _____

5. Home phone number: N/A (_____) Cell phone number: N/A (_____)

6. High School Graduate? Yes No GED? Yes No

7. Current college or technical school: _____

8. Previous college or technical school experience (list name and year(s) attended)

A. _____ Year(s) Attended: _____

B. _____ Year(s) Attended: _____

9. Are you a Certified Nursing Assistant? Yes No

10. Have you applied to the Radiologic Technology program before? Yes No

If yes, when _____

**On a separate sheet of paper, please explain why you wish to become a Radiologic Technologist.
The explanation should be one or two paragraphs in length and handwritten in black ink.**

The admissions committee reserves the right to select applicants who shall be admitted. Acceptance is contingent upon receipt of all required application materials by the Department of Health Sciences and completion of foundation prerequisite courses. Maintaining acceptance in the Radiologic Technology program is contingent upon passing a CBI background check.

This application and all supporting materials must be received by the Department of Health Sciences no later than the March 1 deadline for consideration of admission into the Radiologic Technology Program.

I certify that all information on this application form is accurate and complete. Concealment of facts or false statements may result in dismissal from the program. Further, I am granting permission for the Department of Health Sciences to access my Colorado Mesa University records; including, but not limited to transcripts and transcript evaluations from the Office of the Registrar.

Signature _____ Date _____

Appendix B

BAS Information Packet



Department of Health Sciences

***BAS Radiologic
Technology Program***
(Bachelor of Applied Science Degree)

Information Packet with Application



Bachelor of Applied Science in Radiologic Technology

The program offers radiologic technologists with an associate degree in radiologic technology opportunity to achieve a bachelor of applied science in radiologic technology and prepares the graduate to seek certification in at least one additional specialty area in radiologic technology. This can lead to greater employment opportunities, increased compensation, and job security.

The graduate can take a certifying examination in computed tomography, magnetic resonance imaging, vascular interventional radiography, or mammography upon completion of courses and clinical competencies in a specialty area. Dual certification enables the graduate to find employment in general diagnostic as well as advanced areas of radiologic technology.

In an online format, students develop skills in advanced specialty areas in radiologic technology, cross sectional anatomy, advanced patient care, radiology informatics, and the business side of health care.

To apply to the program the applicant must:

- Have an associate degree in Radiologic Technology or the equivalent
- Hold primary pathway registration with the American Registry of Radiologic Technology

Applicants from certificate radiography programs must contact the program director for further options.

Admission requirements may change from year to year. It is the applicant's responsibility to obtain the current admission requirements. If the applicant completes general education requirements of the program at another college or university, the registrar must receive final transcripts before Colorado Mesa University will award a degree.

The student must procure a clinical site for completion of the clinical portion of the program. Colorado Mesa University and the clinical site must establish and maintain an affiliation agreement during the time the student is completing the clinical portion.

To schedule an advising appointment for the BAS in Radiologic Technology, contact Dr. Patti Ward, RT(R), Program Director, at (970) 248-1775 or pward@coloradomesa.edu. Please see the Colorado Mesa University website at www.coloradomesa.edu for information on this program.

GENERAL INFORMATION

Renae Phillips

Professional Staff Assistant

Department of Health Sciences

rdphilli@coloradomesa.edu

Phone: (970) 248-1235

Fax: (970) 248-1133

Program Mission Statement

The mission of the BAS Radiologic Technology Program at Colorado Mesa University is to provide registered technologists opportunity for post-primary certification education leading to a baccalaureate degree.

Program Student Learning Outcomes

1. Relate ethical principles to real-life problems in the radiologic sciences. (Specialized Knowledge)
2. Combine academic theory with practitioner experience and skills. (Applied Learning)
3. Apply quantitative analysis methods to develop appropriate conclusions. (Quantitative Fluency)
4. Communicate effectively through written documents. (Communication Fluency)
5. Develop critical thinking and problem solving skills that demonstrate a professional level of expertise in advanced specialty areas in the radiologic sciences. (Critical Thinking)

Program Goals

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

1. Students will utilize broad-based knowledge and skills to become competent entry-level radiographers.
2. Students will demonstrate skills in effective thinking and problem solving, communication, and lifelong learning.
3. Students will demonstrate value-based behaviors as the foundation for professional practice.
4. The program will provide competent, qualified technologists to the community.

Program Application Deadline

The deadline for application to the program each academic semester is July 15 for fall semester or December 15 for spring semester.

Counseling, Financial Aid, and Scholarships

Please refer to the Colorado Mesa University website, www.coloradomesa.edu or the current Colorado Mesa University catalog for information concerning career counseling, financial aid, and scholarships.

More Information

For more information about the program, course requirements, and course descriptions please visit Colorado Mesa's website at: www.coloradomesa.edu/healthsciences/radtech.html or call 970-248-1398.

**Suggested Course Sequencing for a BAS Major in Radiologic Technology after
Completing the AAS Radiologic Technology Program**

This is a recommended sequence of course work. Certain courses may have prerequisites or they may only be offered during the fall or spring semesters. It is the student's responsibility to meet with the assigned advisor and check the two-year course matrix on the Colorado Mesa website for course availability.

(Refer to the Program Sheet and CMU Catalog for Approved Courses)

FIRST YEAR

Fall Semester		Hours	Spring Semester		Hours
KINA	Kinesiology Activity	1	General Education Natural Science		3
General Education Humanities		3	General Education Natural Science Lab		1
General Education Natural Science		3	General Education Fine Arts		3
General Education History		3	General Education Applied Studies		3
BIOL 210	Human Anat & Physiology II	3	BIOL 241	Pathophysiology	4
BIOL 210L	Human Anat & Physiology II Lab	1			
		14			14

SECOND YEAR

Fall Semester		Hours	Spring Semester		Hours
100-400	Elective—Upper or Lower Division	3	STAT 200	Statistics	3
RTEC 320	Informatics	2	RTEC 327	Cross Sectional Anatomy II	2
RTEC 325	Cross Sectional Anatomy I	2	RTEC 365	Advanced Patient Care	3
One of the following specializations		2	One of the following specializations		3
RTEC 450	Mammography I		RTEC 470	Mammography II	
RTEC 452	VII I		RTEC 472	VI II	
RTEC 454	CT I		RTEC 474	CT II	
RTEC 456	MR I		RTEC 476	MR II	
RTEC 460	Quality Management	3	RTEC 480	Clinical Specialization I	3
		12			14

THIRD YEAR

Fall Semester		Hours
300-400	Upper Division Elective	2
300-400	Upper Division Elective	3
NURS 415	Business of Health Care	2
RTEC 490	Clinical Specialization II	3
RTEC 494	Capstone	3
		13

Common Questions & Answers about the BAS Radiologic Technology Program

Please read all application materials, the program course descriptions in the CMU catalog, and visit the program website at www.coloradomesa.edu/healthsciences/radtech.html.

What is the delivery system for the program?

All general education, foundation, and major courses are available online. General education and foundation courses are also available on the CMU campus and the Bishop or Montrose campuses offer many courses. All BAS major requirements are only offered online.

Do I need my own computer?

As BAS major requirements are delivered online, having your own computer gives you more freedom in completing course assignments. Computer labs are available on campus for student use. As a student, you receive access to the MAVzone, a web-based learning program Desire to Learn (D2L), and an email address.

Do I have to receive acceptance from CMU before I can apply for the program?

Yes.

Does the program require an admission fee?

No, there is no fee to apply to the program but there is a fee to apply to CMU.

What are the application deadlines for the program?

The application deadline is July 15 for fall semester and December 15 for spring semester.

Should I apply to the RT program before I request prior college transcripts to be mailed to CMU?

You may turn in the program application form before you ask other colleges to send transcripts. However, it is your responsibility to make sure the Department of Health Sciences receives all application documents before the deadline. Contact the Registrar's Office at 248-1555 to have transfer credits evaluated for possible acceptance at Colorado Mesa University.

Does the Department of Health Sciences have to receive all RT application documents before the application deadline?

Yes, the Department of Health Sciences must receive copies of all college transcripts, a transcript evaluation (if you have taken courses from other colleges), and a program application prior to the deadline.

Do I have to complete all general education and foundation courses prior to applying to the program?

If you do not have an associate degree, you must complete the associate degree general education requirements before you can register for a course in the BAS major. You can take no more than six credits from the major courses before you must complete 15 credits of general education (beyond the associate degree) and all foundation requirements (STAT 200, BIOL 210/210L, BIOL 241).

Do I have to be continuously enrolled in BAS coursework?

Yes, once you have been accepted into the program you must register for at least one course from the major, foundation, or upper division elective each fall and spring. If you find it necessary to interrupt the program of study for one or more semesters, you can request an extension and readmission into the program.

I already have a certification in a specialized modality. I want to get a baccalaureate degree in that modality. In this situation, are there any differences in the program requirements?

If you have a specialized certification and desire a baccalaureate degree in that modality, in several instances you can opt to complete a portfolio rather than take the course. If you opt to complete the portfolio, you still have to register and pay for the course. See the program director for further details.

What classes can I take to fulfill general education requirements?

Refer to the Graduation Requirements for the BAS degree section in the Colorado Mesa University Catalog. The selected 100 and 200 level classes listed in this section are acceptable for fulfilling general education requirements.

Should I speak with an advisor before I register for general education courses?

You are strongly encouraged to speak with a RT program advisor prior to registering for general education courses.

Can I enroll part-time?

Yes, you can enroll as a part-time student, but you must complete all coursework for graduation within five years following acceptance into the program.

Can I enroll as a non-degree seeking student?

Yes, you can enroll as a non-degree seeking student. However, you can take no more than six credits from the major courses before you must complete 15 credits of general education (beyond the associate degree) and all foundation requirements (STAT 200, BIOL 210/210L, BIOL 241).

Is there a deadline for completing coursework?

Yes, you must complete all coursework for graduation within five years following acceptance into the program.

When does the program start?

Students can enter the program in the fall or spring semesters. However, certain courses have prerequisites or are only offered during the fall or spring semesters.

Is clinical experience a part of the curriculum?

Yes, clinical experience is part of the curriculum. Students complete 150 hours of clinical experience per semester for two semesters with the goal to complete all ARRT competency requirements during that time.

Does CMU determine where I complete clinical experiences?

No, it is up to the student to find a clinical facility to complete clinical experiences. An affiliation agreement between CMU and the clinical facility must be in place. Contact the program director well in advance as the process to acquire the agreement may take four to six weeks or longer to complete. Please note that clinical facilities require a criminal background investigation, immunization records, and other documentation prior to accepting students.

How much does the program cost?

Please visit www.coloradomesa.edu for current tuition and fee information. The admissions office can answer questions about tuition and fees. See Projected Radiologic Technology Program Costs for estimated expenditures for the program.

Are there any scholarships specifically for students in the program?

There are no specific scholarships designated for baccalaureate RT students. Students may qualify for other scholarships. Applications for scholarships are processed during the spring semester to assist students in paying for the next academic year. Please contact the Financial Aid Department for further aid information.

Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

Projected BAS Radiologic Technology Program Costs

This list serves as an estimate to assist students in budgeting. The costs are approximate and are subject to change without notice.

<u>**Tuition and Fees</u>	
Based on the five-semester Suggested Course Sequence	16,094.07
<u>Housing and Meal Plans</u>	Variable
Miscellaneous	
Health insurance	Variable
Background Check	60.00
Liability insurance (annually)	36.75
CPR	32.00
Immunizations	
TST-2 part (TB skin test) testing	10.00
Tetanus, diphtheria, and pertussis (TDaP) vaccination	30.00-67.00
Influenza (flu) vaccination (annually during clinical rotations)	20.00-30.00
Varicella (chicken pox) vaccination	154.00-159.00
Measles, mumps, and rubella vaccination	67.00-110/00
Hepatitis B immunizations (\$67-120 x 3)	201.00-300.00
Meningococcal (suggested) immunization	90.00
<u>Books-CMU Bookstore (new book pricing)</u>	525.00-650.00
Uniforms	
Uniform (\$45 x 2 recommended)	90.00
Lab coat	40.00
Shoes	70.00
Incidentals	
RT Program identification patches (\$5 x 2 recommended)	10.00
Dosimeter – initial setup fee	10.00

** Tuition and fees listed are in state and assume COF eligibility. Figures include cost of general education, foundation, and courses required for the major (assuming prior completion of associate degree).

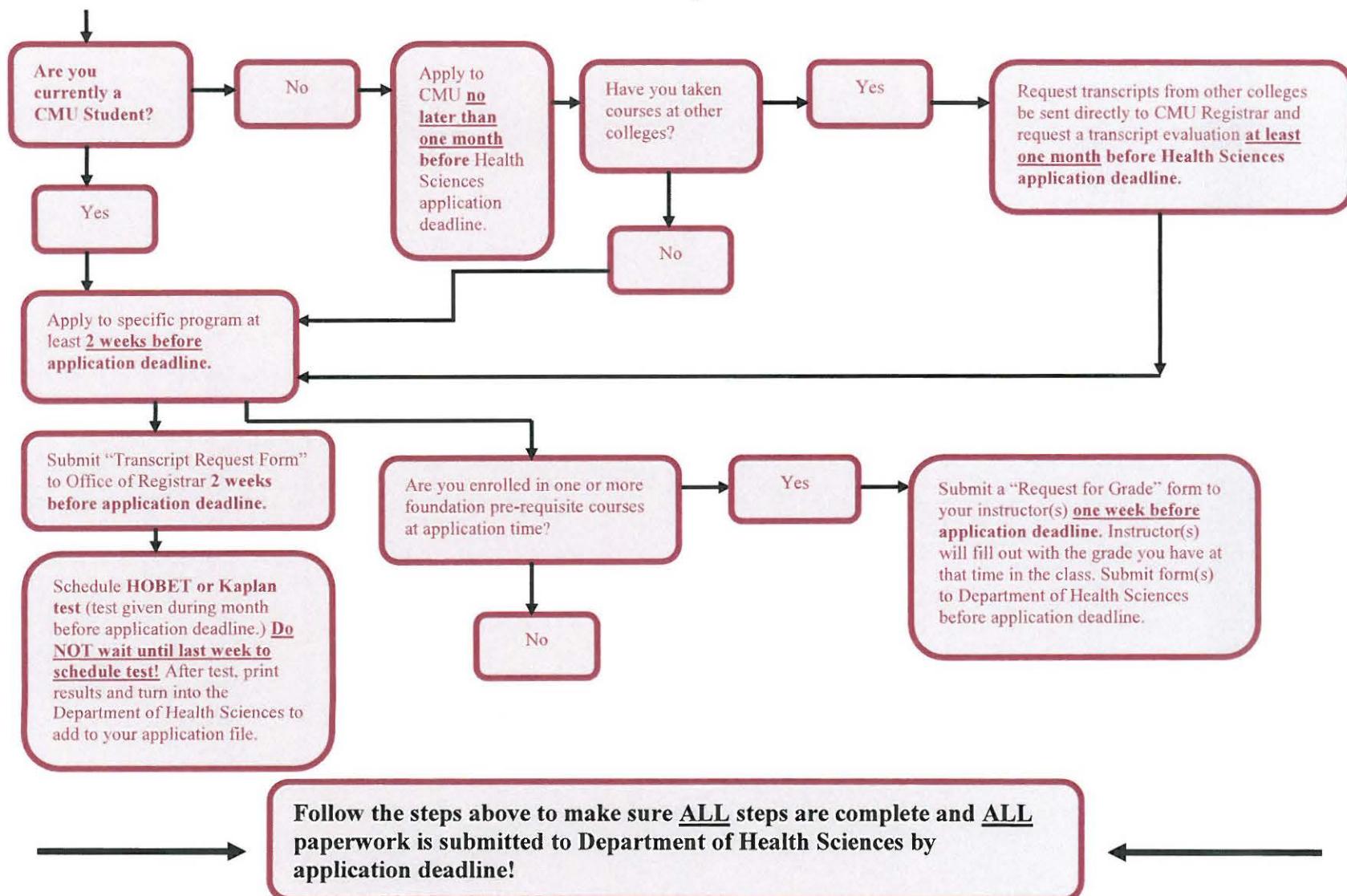
Application Process

Refer the “How Do I Apply to a Program in the Department of Health Sciences?” chart on the next page.

1. Submit a completed **Colorado Mesa University application**, including application fee, through the Admissions Office or reactivate application file if you have missed one semester at Colorado Mesa University, declaring Bachelor of Applied Science in Radiologic Technology as area of emphasis. If you are a graduate of Colorado Mesa University, you must readmit to the University. You may apply online at www.coloradomesa.edu/admissions. You must be accepted by the university and assigned the BAS Radiologic Technology major code prior to registering for classes.
2. Submit copies of all transcripts from other colleges/universities to the **CMU Office of the Registrar (contact previously attended schools and have them send transcripts to the CMU Registrar – who will complete a transcript evaluation and decide what prior courses will transfer to CMU)**. Transcript evaluation by the registrar is required for all courses taken at other colleges and universities. Applicants must have at least a 2.0 (C) on a 4.0 scale for all courses required for the completion of the Bachelor of Applied Science. This policy applies regardless of when the course was completed.
3. General education, foundation, and other program-required courses for completion of a Bachelor of Applied Science degree can be taken concurrently with program courses. All courses in the program must be completed with a grade of “C” (2.0) or better. If completing general education and biology courses at an accredited institution other than Colorado Mesa University, please check with a university registrar or advisor to assure that general education and biology courses will transfer to Colorado Mesa University.
4. Submit a separate application for the BAS in Radiologic Technology for consideration for the fall or spring semester. The application is included in this packet and is available on the Colorado Mesa University website, www.coloradomesa.edu. Please be aware that students are admitted contingent upon passing the criminal background investigation through American Databank (applicants will do the background check after acceptance to the program and prior to clinical experience). Once admitted to the program, the student must show proof of immunizations, CPR, and obtain a health physical prior to starting the clinical portion of the program.

How Do I Apply to a Program in the Department of Health Sciences?

Begin here!



BAS Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

Summary Sheet: Application

You may fax items to the Department of Health Sciences, Attention: Renae Phillips at (970) 248-1133.

Submit the following items to the Department of Health Sciences Office prior to the application deadline of July 15 for fall semester, December 15 for spring semester, and April 15 for summer semester:

- _____ 1. Application for BAS Radiologic Technology
- _____ 2. Current Colorado Mesa University transcript and/or transcript(s) and transcript evaluation for all colleges/universities attended. Have these sent directly by the CMU Registrar's Office to the Department of Health Sciences by completing the *Transcript Request Form* below.

Before turning in the *Transcript Request Form* to the Registrar's Office, make sure the following are completed. If you turn in the *Transcript Request Form* prior to completing the following, the Registrar's Office will send incomplete transcripts/transcript evaluations resulting in an incomplete application. Incomplete applications will not be reviewed. It is the applicant's responsibility to complete the following by the deadline:

Current CMU Student Applicants:

- Confirm with the Registrar's Office (970-248-1555) that there are no holds on your account.
- Submit *Transcript Request Form* to the Registrar's Office no later than two weeks prior to application deadline.

Non-Current CMU Student Applicants:

- Apply to CMU via the Admissions Office.
- Confirm with the Admissions Office your acceptance to CMU.
- Confirm with the Registrar's Office receipt of all transcripts from previously attended colleges/universities.
- Confirm with the Registrar's Office completion of your transcript evaluation.
- Confirm with the Registrar's Office that there are no holds on your account.
- Submit *Transcript Request Form* to the Registrar's Office no later than two weeks prior to application deadline.

It is the applicant's responsibility to make sure the Department of Health Sciences office receives all paperwork prior to the deadline.

BAS Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

Transcript Request Form

To have transcripts forwarded to the Department of Health Sciences, either deliver, mail, or FAX this form to the CMU Office of the Registrar.

Office of the Registrar
Colorado Mesa University
1100 North Avenue
Grand Junction, CO 81501

(FAX 970-248-1131)

clearly) 700 _____ **Required Full Legal Name (please print**
Required CMU Student ID #

Required Signature

Registrar: Please send copies of the following to the CMU Department of Health Sciences office:
(1) transcripts from other colleges/universities, if applicable; (2) transcript evaluation prepared
by the Office of the Registrar, if applicable; (3) high school transcripts; (4) current Colorado
Mesa University transcript, if applicable. Please complete the grey area.

For Registrar's Use Only

Has applicant been accepted at CMU? Yes No

Which program? Baccalaureate Associate

Transcripts from other colleges attended: Attached: Xtender:

Transcript evaluation: Attached: Xtender:

High school transcripts or GED: Attached: Xtender:

Colorado Mesa University transcript: Attached: Xtender:

BAS Radiologic Technology Program
Department of Health Sciences, Colorado Mesa University

Application for Admission

1. Full legal name _____
Last _____ First _____ M.I. _____ Maiden Name _____

CMU Student ID# 700 Date of Application _____ / _____
(assigned upon acceptance to Colorado Mesa University)

2. Email Address (*print clearly*): _____ @mavs.coloradomesa.edu

3. Present mailing address

Street Address _____ Apt # _____

City _____ State _____ Zip _____

4. Permanent home address (if different from above)

Street Address _____ Apt # _____

City _____ State _____ Zip _____

5. Home phone number N/A (_____) Cell phone number: N/A (_____)

6. AAS Program Attended _____
Name of School _____

Complete Address of School _____

7. Degree Granted _____ Graduation Date _____

8. ARRT/NMTCB/ARDMS ID Number _____

9. Are you currently under suspension, CE probation, censure, or revocation?

Yes (explain on a separate piece of paper) No

10. Specialty Interest CT MRI VI Mammography

I certify that all the information on this application form is accurate and complete. Concealment of facts or false statements may result in dismissal from the program. Further, I am granting permission for the Department of Health Sciences to access my Colorado Mesa University records; including, but not limited to transcripts and transcript evaluations from the Office of the Registrar.

Signature: _____ Date: _____

Submit paperwork to
Colorado Mesa University, Department of Health Sciences
Radiologic Technology Program
1100 North Avenue
Grand Junction, CO 81501
or Fax to: 970-248-1133

Appendix C

AAS Curriculum Map

COLORADO MESA UNIVERSITY
Curriculum Map

Program Name: AAS Radiologic Technology

Program Outcomes	RTEC 114	RTEC 120	RTEC 121	RTEC 121 L	RTEC 122	RTEC 122L	RTEC 123	RTEC 124	RTEC 131	RTEC 131L	RTEC 133	RTEC 133L	RTEC 135	RTEC 214	RTEC 224	RTEC 234	RTEC 251	RTEC 255	RTEC 261	RTEC 265
Outcome #1 Utilize broad-based knowledge and skills to become competent entry-level radiographers. (Applied Learning; Specialized Knowledge)	X		X	X					X	X				X	X	X		X	X	X
Outcome #2 Demonstrate value-based behaviors as the foundation for professional practice. (Specialized Knowledge)		X						X						X	X	X				
Outcome #3 Demonstrate proficiency in using mathematics for technique selection and radiation protection measures. (Intellectual Skills – Quantitative Fluency)					X	X	X				X	X	X							
Outcome #4 Demonstrate effective oral and written communication in the radiologic sciences. (Intellectual Skills – Communication Fluency)		X													X	X	X	X		
Outcome #5 Interpret analytical data to determine a course of action to solve problems. (Intellectual Skills – Critical Thinking)																		X	X	X

Appendix D

BAS Curriculum Map

*BAS Curriculum Map***COLORADO MESA UNIVERSITY**
Curriculum Map**Program Name:** BAS Radiologic Technology

Program Outcomes	RTEC 320	RTEC 325	RTEC 327	RTEC 365	RTEC 450	RTEC 452	RTEC 454	RTEC 456	RTEC 460	RTEC 470	RTEC 472	RTEC 474	RTEC 476	RTEC 480	RTEC 490	RTEC 494	
Outcome #1 Relate ethical principles to real-life problems in the radiologic sciences. (Specialized Knowledge)	X			X					X								
Outcome #2 Combine academic theory with practitioner experience and skills. (Applied Learning)		X	X												X	X	
Outcome #3 Apply quantitative analysis methods to develop appropriate conclusions. (Quantitative Fluency)																X	
Outcome #4 Communicate effectively through written documents. (Communication Fluency)															X	X	X
Outcome #5 Develop critical thinking and problem solving skills that demonstrate a professional level of expertise in advanced specialty areas in the radiologic sciences. (Critical Thinking)					X	X	X	X		X	X	X	X				

Appendix E

Library Program Assessment

Library Program Assessment

John U. Tomlinson Library, Colorado Mesa University

Date of Assessment: October 2013

Purpose of Assessment: Program Review

Program under review: Radiologic Technology

Program Level/s: AAS and BAS

Liaison: Barbara Borst

1. Collection Assessment

Collection development is the joint responsibility of the Radiologic Technology faculty and the Health Sciences Librarian. Review slips and new title lists are sent to the faculty each month for their review. Titles recommended are sent to the librarian who reviews them and sends them on for purchase as money allows.

a. Reference Support:

The print Reference Collection is growing smaller as more materials are available in an online format and as more materials are placed in the circulating collection for wider access by the students.

Representative titles include:

Radiology Imaging Words and Phrases 2nd ed 2005 (print)

Gale Encyclopedia of Nursing & Allied Health 3rd ed. 2013 (online)

Encyclopedia of Diagnostic Imaging (2008) (online)

Gray's Anatomy 40th ed 2008 (print)

Grant's Atlas of Anatomy 12th ed 2009 (print)

Basic Atlas of Sectional Anatomy 4th ed 2007 (print)

b. Monographic Sources

The collection was assessed using a combination of call number searches and subject searches.

Call number areas were: R 895-920 Medical physics, medical radiology

RC 78 Radiography

RM 845-862 Radiotherapy

Subject headings used:

Radiology, medical

Radiography

Radiologic technologist

Radiotherapy

Diagnostic imaging

Magnetic resonance imaging

Tomography

Human anatomy

As shown in the charts below, the majority of the monograph collection is now e-books. This is due in large part to the SpringerLink E-book Collection. The currency percentage is very high as 92% of the radiology and imaging books have been published since 2005 and 40% since 2010.

Age Analysis Charts:

Radiography & Imaging	Print	E-book
2010-	11	182
2005-2009	13	231
2000-2004	8	4
1990s	11	6
1980s		
1970s	1	
Pre 1970	2	
TOTAL	46	423

Medical physics & Medical radiology	Print	E-book
2010-		11
2005-2009	2	10
2000-2004	1	1
1990s	3	1
1980s	1	
1970s		
Pre 1970		
TOTAL	7	23

Radiotherapy	Print	E-book
2010-		33
2005-2009	2	43
2000-2004	2	
1990s	1	1
1980s	1	
1970s	2	
Pre 1970	2	
TOTAL	10	77

Human anatomy	Print	E-book
2010-	11	11
2005-2009	37	5
2000-2004	7	3
1990s	18	
1980s	16	
1970s	20	
Pre 1970	14	
TOTAL	123	19

As a partial government depository, the Library also makes available a large number of federal documents published by the Department of Health and Congress. These are available in a variety of formats – paper, microform, CD and online.

c. Electronic Resources

Index/Databases and Online Journal packages:

CINAHL Complete

Medline

Informa Healthcare

Science Direct

Cochrane Library

EBM Guidelines

Sage Journals Online

Wiley Online Library

d. Periodicals

The Library has a strong base for journal research with 2 print subscriptions and online access through the online journal packages and the full-text access in the databases. Some of the titles available in the aggregator databases have a 6 or 12 month embargo on the full-text. Additionally, links are provided for titles available in PubMed Central.

Current Paper Subscriptions:

Applied Radiology
Radiologic Technology

Representative Electronic Journals:

Acta Radiologica
Clinical Imaging
Critical Reviews in Computed Tomography
Electromagnetic Biology & Medicine
Emergency Radiology (12 month embargo)
European Radiology (12 month embargo)
Imaging & Therapy Practice
International Journal of Biomedical Imaging
Journal of Digital Imaging (12 month embargo)
Journal of Magnetic Resonance
 Journal of Magnetic Resonance Imaging
 Journal of Medical Imaging & Radiation Oncology
Journal of Nuclear Medicine Technology
Journal of X-ray Science & Technology (6 month embargo)
Medical Device Daily
Neuroimage
Neuroradiology (12 month embargo)
Pediatric Radiology (12 month embargo)
Radiologic Science & Education
Radiology (12 month embargo)
Radiology Management
Radiology Research & Practice
Radiology Today

e. Additional Resources:

Journal literature not available through Colorado Mesa University, including those titles not available because of publisher embargo, can be provided by the Interlibrary Loan Department. Article requests are provided through 2 programs, RapidILL and OCLC Resource Sharing. RapidILL gives access to 245 academic library journal collections. The average amount of time it takes to fill an article request is 12 hours. Most requests are filled through this program. Beyond that, OCLC Resource Sharing gives access to 72,000 library collections world-wide. Both of these programs also provide book chapters as scanned documents.

Books and media not owned by Colorado Mesa University can be borrowed from other libraries through Prospector, Colorado libraries plus University of Wyoming, or OCLC Resource Sharing, libraries worldwide. Prospector books arrive in about 3 working days via the statewide library courier service.

2. Evaluation of the total collection

a. Strengths

- Good budget support and strong participation by faculty in the selection process
- Currency of monograph collection
- Variety of indexing services available for journal articles

b. Weaknesses

- Reliance on InterLibrary Loan for the many journals that have a publisher embargo on the full-text
- Age of the anatomy collection

3. Recommendations

- Continue buying e-books to increase student access “beyond the walls”
- Review materials published pre-2005 for continued relevancy and accuracy
- Check for new editions of standard titles

Library Director: Sarah Cron Date: 10/15/2013

Appendix F

Summary of Results of JRCERT Accreditation from 2006

Summary of Results of JRCERT Accreditation from 2006



Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3162
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Chief Executive Officer
Jacquie S. Greenblatt, Ed.S., R.T.(R)
F.A.R.T. F.A.R.E.S.

May 11, 2006

Tim Foster, J.D.
President
Mesa State College
1100 North Avenue
Grand Junction, CO 81501

RE: Program #01810000

Dear Dr. Foster:

The report of the site visitors who evaluated the radiography program sponsored by Mesa State College on April 6-7, 2006 has been reviewed. The program, including the previously noted substantive change, is scheduled for consideration by the Joint Review Committee on Education in Radiologic Technology (JRCERT) at the Fall 2006 meeting.

The program was evaluated using the **Standards for an Accredited Educational Program in Radiologic Sciences (2002)**. The following is a composite report developed from documentation submitted by the program, the report of site visit team findings submitted by the site visit team, and staff review of relevant materials. The sponsor must respond to this report of findings prior to JRCERT consideration.

The following clinical education settings were visited:

Community Hospital - Grand Junction, CO
St. Mary's Hospital & Medical Center - Grand Junction, CO

Standard One - Mission/Goals, Outcomes, and Effectiveness

The program, in support of its mission and goals, develops and implements a system of planning and evaluation to determine its effectiveness and uses the results for program improvement.

The site visit team reported the following findings:

The program has a mission statement that adequately defines the purpose and scope of the program. Program goals are measurable. The mission statement and goals are readily available to students, faculty, administrators, and the general public.

The JRCERT promotes excellence in education and enhances quality and safety of patient care through the accreditation of educational programs.

Standard Three - Organization and Administration (cont'd)

Summary for Standard Three:

Based on the documentation submitted by the program and the findings of the site visit team, the program appears to be in substantial compliance, at the time of the site visit, with **Objectives 3.1, 3.2, and 3.4**. The program is not in compliance with **Objectives 3.3 and 3.5**.

Recommendations are provided for Standard Three:

Objective 3.3 - Assure the security and confidentiality of student records, instructional materials, and other appropriate program materials.

Objective 3.5 - Assure that the program measures the length of all didactic and clinical courses in clock hours or credit hours.

Standard Four - Curriculum and Academic Practices

The program's curriculum and academic practices promote the synthesis of theory, use of current technology, competent clinical practice, and professional values.

The site visit team reported the following findings:

A master plan of education is in place. The curriculum prepares students to practice in the professional discipline. Professional values, life-long learning, and competency in critical thinking and problem solving skills are promoted throughout the curriculum. The curriculum reflects the evaluation of all learning domains. Learning opportunities in current and developing imaging technologies are provided to all students.

Summary for Standard Four:

Based on the documentation submitted by the program and the findings of the site visit team, the program appears to be in substantial compliance, at the time of the site visit, with **Standard Four**.

Standard Five - Resources and Student Services

The program's learning resources, learning environments, and student services are sufficient to support its mission and goals.

The site visit team reported the following findings:

Learning resources provided by the sponsoring institution support the program goals. The clinical education settings provide students with a wide variety and volume of procedures for competency achievement. Student services are readily available and accessible to all students.

Summary for Standard Five:

Based on the documentation submitted by the program and the findings of the site visit team, the program appears to be in substantial compliance, at the time of the site visit, with **Standard Five**. (**Objective 5.2** does not apply to this program.)

Standard Six - Human Resources

The program has sufficient qualified faculty and staff with delineated responsibilities to support program mission and goals.

The site visit team reported the following findings:

Faculty and staff are appropriately qualified for their assignments. Program faculty are enthusiastic and committed to the students, the program, and the profession. Program faculty are excellent role models for the students. Students consider faculty a major strength of the program. There is an adequate number of faculty to meet the educational, administrative, and accreditation requirements. Faculty are provided with opportunities for continued professional development.

Summary for Standard Six:

Based on the documentation submitted by the program and the findings of the site visit team, the program appears to be in substantial compliance, at the time of the site visit, with **Standard Six**.

Standard Seven - Students

The program's and sponsoring institution's policies and procedures serve and protect the rights, health, and educational opportunities of all students.

The site visit team reported the following findings:

The program's admission policies are clearly defined and published. Student recruitment and admission practices are non-discriminatory. Students are provided current and accurate information regarding program structure and content. Enrolled students are provided timely and supportive academic, behavioral, and clinical advisement throughout the program. Student activities are supervised by program faculty to assure educational validity.

Summary for Standard Seven:

Based on the documentation submitted by the program and the findings of the site visit team, the program appears to be in substantial compliance, at the time of the site visit, with **Standard Seven**.

Standard Eight - Radiation Safety

Program policies and procedures are in compliance with federal and state radiation protection laws.

The site visit team reported the following findings:

Program policies and procedures are in compliance with federal and state radiation protection laws. A pregnancy policy is published and made known to enrolled and accepted female students. Students are appropriately instructed in the utilization of imaging equipment and accessories in the employment of techniques and procedures to minimize radiation exposure to patients, selves, and others. Students are appropriately supervised prior to and after achieving competency. All unsatisfactory radiographs repeated by students are performed under the direct supervision of a qualified practitioner.

Standard Eight - Radiation Safety (cont'd)

Summary for Standard Eight:

Based on the documentation submitted by the program and the findings of the site visit team, the program appears to be in substantial compliance, at the time of the site visit, with **Standard Eight**. (Objective 8.4 does not apply to this program.)

Standard Nine - Fiscal Responsibility

The program and the sponsoring institution have adequate financial resources, demonstrate financial stability, and comply with obligations for Title IV federal funding, if applicable.

The site visit team reported the following findings:

Sound financial commitment to enrolled students is exhibited through adequate funding of human and physical resources. The program director participates in the budget planning process.

Summary for Standard Nine:

Based on the documentation submitted by the program and the findings of the site visit team, the program appears to be in substantial compliance, at the time of the site visit, with **Standard Nine**. (Objective 9.3 does not apply to this program.)

Responding to the Report of Findings

A copy of this report of findings is supplied to each member of the site visit team. Team members are requested to review this report and communicate any inaccuracies or inconsistencies with these findings to the JRCERT office prior to the deadline for program response.

A response to this report of findings, including the signature of the Chief Executive Officer of the sponsoring institution, is required prior to Committee consideration. The response must be received by June 22, 2006. The institution and program are encouraged to share this report of findings and its response with program faculty and institutional and departmental officials of its clinical education settings.

The response must include a concise rationale and documentation to support program compliance with each recommendation. The program must assure that it has developed and implemented appropriate practices that will demonstrate **STANDARD-RS** compliance. Assurance of development can be demonstrated by providing to the JRCERT necessary documents that support the program's compliance with the recommendations. When forms are provided as evidence, a representative sampling of completed forms must be submitted to assure that the practice or procedure is implemented. The response may also include comments on the site visit, site visitors or the accreditation process.

The program is advised that based on a review of information submitted in support of the program's response to the report of findings, the Committee has the right to add citations not included in the original report of findings.

Tim Foster, J.D.
May 11, 2006
Page 6

Thank you for recognizing the value of specialized accreditation and for permitting the JRCERT to evaluate the radiography program. If I can provide additional information or clarification regarding this report, do not hesitate to contact me.

Sincerely,



Ms. Leslie F. Winter, M.S., R.T.(R)
Executive Associate Director

LFW/cj

copy: Bette A. Schans, Ph.D., R.T.(R)
Kristy Reuss, Ph.D., R.N.
Michael A. Mixdorf, M.Ed., R.T.(R)(CT)
Rose M. Achle, B.S., R.T.(R)(M)

JRCERT

Joint Review Committee on Education in Radiologic Technology
20 N. Wacker Drive, Suite 2850, Chicago, IL 60606-3182
Tel: (312) 704-5300 • Fax: (312) 704-5304 • Web Site: www.jrcert.org

October 30, 2006

Tim Foster, J.D.

President

Mesa State College
1100 North Avenue
Grand Junction, CO 81501

RE: Program #01810000

Previous Accreditation Status: 8 Years

Most Recent Site Visit: 04/06

Agenda: R-D

Dear Dr. Foster:

The Joint Review Committee on Education in Radiologic Technology (JRCERT) appreciated the opportunity to evaluate the associate degree radiography program sponsored by Mesa State College. The JRCERT is the only agency recognized by the U.S. Department of Education for the accreditation of educational programs in radiography, radiation therapy, magnetic resonance, and medical dosimetry. Specialized accreditation awarded by the JRCERT offers institutions significant value by providing peer evaluation and by assuring the public of quality professional education in the radiologic sciences.

The continuing accreditation status of the program was considered at the October 20, 2006 meeting of the Joint Review Committee on Education in Radiologic Technology. The program, including the previously reported substantive change, i.e., change in program length from 27 to 22 months, was evaluated according to the **Standards for an Accredited Educational Program in Radiologic Sciences (2002)**. The JRCERT awards:

ACCREDITATION FOR A PERIOD OF EIGHT YEARS.

The maximum duration that may be awarded by the Joint Review Committee on Education in Radiologic Technology in this category is eight years.

An interim report will be required. The projected date for submission of the interim report is the Second Quarter of 2010. The JRCERT will provide program officials adequate notice of the due date for submission of the interim report. Based on the interim report, the JRCERT will determine if the accreditation award of 8 years will be maintained or reduced and the continuing accreditation process expedited.

If the accreditation award is maintained, the next site visit is tentatively scheduled for the Second Quarter of 2014.

The JRCERT promotes excellence in education and enhances quality and safety of patient care through the accreditation of educational programs.

Tim Foster, J.D.
October 30, 2006
Page 2

The program is advised that consistent with JRCERT Policy 11.600, the JRCERT reserves the right to conduct unannounced site visits of accredited programs. The sponsoring institution would be responsible for the expenses of any on-site evaluation.

The attachment to the program director's copy of this letter identifies the clinical total capacity, as provided by the program, for the institutions recognized as clinical education settings. It is the responsibility of the program to provide a copy of this letter to appropriate personnel at the clinical education settings.

The Joint Review Committee on Education in Radiologic Technology Directors and staff congratulate you and the program faculty for achieving the maximum award of accreditation from the JRCERT and wish you continuing success in your efforts to provide a quality educational program. If we can be of further assistance, do not hesitate to contact us.

Sincerely,

H. Martin Northup MD

H. Martin Northup, M.D., FACP
Chair

HMN/LFW/jm

copy: Program Director: Bette A. Schans, Ph.D., R.T.(R)
Chair: Kristy Reuss, Ph.D., R.N.
Site Visitors: Michael A. Mixdorf, M.Ed., R.T.(R)(CT)
Rose M. Aehle, M.S., R.T.(R)(M)
Accreditation Services Coordinator

Leslie Winter, M.S. RTR
Executive Associate Director, JRCERT
20 North Wacker Dr. Suite 2850
Chicago, IL 60606

Program # 0181
RE: RESPONSE TO REPORT OF FINDINGS

Dear Leslie,

This letter is in response to the report of findings dated May 11, 2006. The report cites three areas of non-compliance and there is a response to each area.

1. Objective 2.4: I have attached the new due process policy for the department. A timeline has been placed in the policy. Please note that the JRC had approved our due process policy prior to the site visit and the site visitors cited us for noncompliance because of the time line issue.
2. Objective 3.5: I have attached the new policy for securing student graded competencies until the student has received the graded form.
3. Objective 3.5: This fall, the credit hours for RTEC 214 will be lowered from 8 to 6 credit hours but this will not take effect until approved by the curriculum committee and faculty senate. This will give a more equitable ratio of clock to credit hours for the three courses beginning in May, 2007.

I hope this will suffice to put our program into full compliance with the standards. Thank you for your attention to this matter.

Sincerely



Tim Foster
President



Dr. Bette Schans, RTR
Program Director

Appendix G

Faculty Vitae for AAS Program

Faculty Vitae for AAS Program

Cicely, Allen, RT(R)(CT) – Part-Time Clinical Instructor

Olga Grisak, MS, RT(R)(CT) – Tenure Track Assistant Professor, Clinical Coordinator

Dr. Thea Khan-Farooqi, MD – Part-Time Instructor

Laura Prout, BS, RT(R) – Part-Time Instructor

Patti Ward, PhD, RT(R) – Tenured Professor, AAS and BAS Program Director

Name:

Cicely D Allen

Start Year: 2010

Program:

Radiologic Technology

Department:

Health Sciences



Lecturer Vita

Highest Degree

AS Mesa State College Radiology Technology 2006

Education: (List all degrees beginning with most recent-include post docs and external certificates)

AS, Radiology Technology, Mesa State College, 2006; RT(R), ARRT, 2006; RT(CT), ARRT, 2009.

Teaching 2003-Present:

Courses Taught

RTEC 224, Clinical Experience; RTEC 234, Clinical Experience

Evidence of Continuous Improvement

2012, CTE 250

Innovative Materials/Activities

N/A

Prior Professional Experience Relevant to Current Position: (Include year(s) of employment, employer, position title and responsibilities)

Year(s) of Employment	Employer	Position Title	Position Responsibilities
2006-Present	Community Hospital	Rad/CT Tech	Direct patient care ex: preform diagnostic x rays ,CT exams and special procedures with Radiologists. Computer input(charting) related to patient exams.

Please record the number "items/events" you have listed above in the following categories.

If you specify items/events under "other," please provide an explanation/definition.

<input type="checkbox"/> Books	<input type="checkbox"/> Book Reviews	<input type="checkbox"/> Creative Publications
<input type="checkbox"/> Journal Articles	<input type="checkbox"/> Performances	<input type="checkbox"/> Patents
<input type="checkbox"/> Conference Presentations	<input type="checkbox"/> Exhibitions	<input type="checkbox"/> Grants-funded and non-funded
<input type="checkbox"/> Sabbaticals	<input type="checkbox"/> Fulbrights	<input type="checkbox"/> Book Chapters
0 <input type="checkbox"/> Other (related to discipline)	N/A	

Name:

Olga Grisak

Start Year: 2013

Program:

Radiologic Technology

Department:

Health Sciences

Faculty Rank

Professor

Assistant Professor

Associate Professor

Instructor

Highest Degree

MS



Lviv Polytechnic National University

Biotechnical and Medical Devices and Systems

2000

Education: (List all degrees beginning with most recent-include post docs and external certificates)

Associate of Applied Science (Radiologic Technology), 2010

Master of Science Degree (Biotechnical and Medical Devices and Systems), 2000

Bachelor of Science Degree (Electronic Devices), 1999

ARRT registered in Computed Tomography, 2012 - present

ARRT registered in Diagnostic Radiography, 2010 - present

Teaching 2003-Present:

Courses Taught

RTEC 122

RTEC 123

RTEC 114

RTEC 133

Evidence of continuous improvement:

Dr. Taylor's workshop on Methods for Engaging NeXt Generation Students and Helping Them Achieve Their Academic Goals, October 15th, 2013

34.5 hours of Continuing Education in Computed Tomography and Diagnostic Radiography, 2012-2013, ASRT

36 hours of Continuing Education in Diagnostic Radiography, 2011, ASRT

Scholarship and Creative Work, 2003-Present:

Scholarship Related to Discipline

Service 2003-Present:



Full-time Faculty Vita

Olga Grisak - *continued*

Advising 2003-Present:

Honors and Awards 2003-Present:

Professional Experience:

Year(s) of Employment	Employer	Position Title	Position Responsibilities
2012- 2013	Colorado Mesa University	Part-time Lecturer	Teaching Radiologic Technology courses
2010 - present	Community Hospital	Radiologic Technologist	Performing Computed Tomography and Diagnostic Radiography examinations
2010-2012	Western Orthopedics and Sport Medicine	Radiologic Technologist	Performing Diagnostic Radiography examinations

Please record the number "items/events" you have listed above in the following categories.

If you specify items/events under "other," please provide an explanation/definition.

0 <input checked="" type="checkbox"/> Books	0 <input checked="" type="checkbox"/> Book Reviews	0 <input checked="" type="checkbox"/> Creative Publications
0 <input checked="" type="checkbox"/> Journal Articles	0 <input checked="" type="checkbox"/> Performances	0 <input checked="" type="checkbox"/> Patents
0 <input checked="" type="checkbox"/> Conference Presentations	0 <input checked="" type="checkbox"/> Exhibitions	0 <input checked="" type="checkbox"/> Grants-funded and non-funded
0 <input checked="" type="checkbox"/> Sabbaticals	0 <input checked="" type="checkbox"/> Fullbright	0 <input checked="" type="checkbox"/> Book Chapter
<input checked="" type="checkbox"/> Other (related to discipline)		

Name:

Thea A Khan-Farooqi (Wojtkowski)

Start Year: 2012

Program:

Radiologic Technology

Department:

Health Sciences



Lecturer Vita

Highest Degree

Other University of Washington School of Medicine Medical School 1999

Education: (List all degrees beginning with most recent-include post docs and external certificates)

University of Washington and Affiliated Hospitals, Seattle, WA

Resident, Department of Orthopaedic Surgery and Sports Medicine 2004

University of Washington and Affiliated Hospitals, Seattle, WA

Intern, Department of General Surgery 2000

University of Washington School of Medicine, Seattle, WA

M.D. with honors 1999

Stanford University, Stanford, CA

B.S. in Biological Sciences 1994

Interdepartmental Honors in Humanities

Teaching 2003-Present:

Courses Taught

RTEC 255

Evidence of Continuous Improvement

Innovative Materials/Activities

Prior Professional Experience Relevant to Current Position: (Include year(s) of employment, employer, position title and responsibilities)

Year(s) of Employment	Employer	Position Title	Position Responsibilities
-----------------------	----------	----------------	---------------------------

Aug 2009 to present; Rocky Mountain Orthopaedic Associates, Orthopaedic surgeon

Aug 2006 to June 2009; The Polyclinic; Orthopaedic surgeon

Dec 2005 to June 2006; Blue Ridge Healthcare; Orthopaedic surgeon

April to July 2005; Hawaii Kaiser Permanente, Moanalua campus; General orthopaedics and fracture care

Name:

Laura D Prout

Start Year: 2010

Program:

Radiologic Technology

Department:

Health Sciences



Lecturer Vita

Highest Degree

BS Colorado State University Biology Year 2002

Education: (List all degrees beginning with most recent-include post docs and external certificates)

AS, Radiologic Technology, Mesa State College, 2009; ARRT Accreditation: R.T. (R), 2009;

BS, Biology, Colorado State University, 2002; AS, Biology, Trinidad State Junior College, 1998;

American Safety & Health Institute, CPR Pro for the professional rescuer, Aug 2013 - 2015.

Teaching 2003-Present:

Courses Taught

RTEC 122L Principles of Exposure

RTEC 133L Radiographic Equipment

RTEC 122 Principles of Exposure - Fall 2012

RTEC 135 Radiation Biology and Protection - Spring 2013

Evidence of Continuous Improvement

Completed 48 hours of continuing education credits approved by ARRT beginning 2009 - present.

Prior Professional Experience Relevant to Current Position: (Include year(s) of employment, employer, position title and responsibilities)

Year(s) of Employment	Employer	Position Title
03/2010 to Present,	DES Disability Exam Services,	Radiologic Technologist / Medical Assistant,

Position Responsibilities: Perform a range of radiographic examinations. Adhere to the highest radiation protection standards for both patients and staff. Exhibit good communication skills both written and verbal. Exercise a working understanding of radiographic exposure factors and techniques. Maintain aseptic technique and infection control. Perform all aspects of patient preparation procedures, ie; check vitals, perform ECG, and spirometry examinations. Acquire a thorough patient history. Maintain strict document control regarding patient privacy. Preserve empathetic and unwavering emphasis on patient needs.

Name:
Lynda P. Ward

Start Year: 1990

Program:
Radiologic Technology

Department:
Health Sciences

Faculty Rank
 Professor Assistant Professor
 Associate Professor Instructor

Highest Degree

PhD	<input checked="" type="checkbox"/> Institution Colorado State University	Discipline Education	2009
-----	---	----------------------	------

Education: (List all degrees beginning with most recent-include post docs and external certificates)

PhD, Education and Human Resource Studies, Colorado State University - Ft. Collins, Colorado, 2009
Masters, Education, Lesley University - Cambridge, Massachusetts, 2000
BS, Organizational Management - Colorado Christian University -- Grand Junction, Colorado, 1998
AAS, Radiologic Technology, Mesa College - Grand Junction, Colorado, 1974
Registered Radiologic Technologist, American Registry of Radiologic Technologists, 1974 - present
Healthcare Provider American Heart Association 2000 - present

Teaching 2003-Present:

Courses Taught

RTEC 114, Radiographic Clinical Experience
RTEC 120, Introduction to Radiologic Technology and Patient Care
RTEC 121/121L, Radiographic Anatomy and Positioning I and Laboratory
RTEC 123, Digital Imaging
RTEC 124, Radiographic Clinical Experience II
RTEC 125, Radiologic Science
RTEC 131/131L, Radiographic Anatomy and Positioning II and Laboratory
RTEC 132, Radiographic Equipment and Special Imaging
RTEC 133, Imaging Equipment
RTEC 214, Radiographic Clinical Experience, III
RTEC 224, Radiographic Clinical Experience IV
RTEC 234, Radiographic Clinical Experience V
RTEC 255, Radiographic Assessment I
RTEC 480, Clinical Specialization I
RTEC 490, Clinical Specialization II
HSCI 101, Introduction to Health Care Professions
SUPP 101, Introduction to Higher Education
SUPP 202, Sophomore Year Experience

Evidence of Continuous Improvement

Faculty Development Workshop-Teacher2Teacher, 12-05-2012
Faculty Development CCCS Training, 11-06-2012
Veteran's Hospital Training, 10-01-2012
Faculty Development Workshop-Bain, 08-09/10-2012
LASSI follow up session, 04-27-2012
Faculty Development Workshop-Degree Qualifications Profile, Gaston, 01-05/06-2012
CCCS Program Approval Training, 12-02-2011



Full-time Faculty Vita

Patti Ward - continued

Faculty Development Workshop-D2L Training, 11-08-2011
Western Slope Society of Radiologic Technologists Fall Seminar, 11-05-2011
LASSI Workshop, Brandon, 10-18-2011
BLS/CPR certification, 09-30-2011
Faculty Development Workshop: Introduction to D2L, 09-23-2011
The ALARA Concept for Performing Pediatric Head CT, 05-31-2011
Dose Reduction Techniques for Pediatric Chest, Abdomen, and Pelvis CT, 05-31-2011
FYI Training, 05-20-2011
Colorado Society of Radiologic Technologists Conference, 04-28 and 29-2011
Western Slope Society of Radiologic Technologists Spring Seminar, 04-23-2011
Faculty Development Workshop - Advising, 04-20-2011
Faculty Development Workshop - Scantrons, 03-25-2011
Association of Collegiate Educators in Radiologic Technology Conference, 02-23 to 02-26-2011
Emergency Response Workshop and Roundtable, Nicoletti, 02-03-2011
Professional Continuing Education Credits/ASRT - 38 hours, 2011
Professional Continuing Education Credits/ASRT - 36.5 hours, 2010
Western Slope Society of Radiologic Technologists Fall Seminar, 11-13-2010
Read 3 books (What the Best College Teachers Do, The Courage to Teach, The Last Lecture)
CAB Training, 09-01-2010
i-Clicker Training Workshop, 08-31-2010
FYI Training Workshop, 05-21-2010
HS Department Advising Session #3 Workshop, 05-05-2010
Faculty Development Workshop, Ley, 04-30-2010
Western Slope Society of Radiologic Technologists Spring Seminar, 04-24-2010
HS Department Advising Session #2 Workshop, 04-14-2010
HS Department Advising Session #1 Workshop, 02-11-2010
Association of Collegiate Educators in Radiologic Technology Conference, 02-10 to 02-12-2010
Professional Development Workshops, Phelps, 01-15-2010
Doctoral coursework - 6 credit hours, 2009
Professional Continuing Education Credits/ASRT - 31.5 hours, 2009
CPR certification training, 10-02-2009
Faculty Development Workshop, 08-13-2009
Faculty Development Workshop - Design for Learning, 05-19-2009
Quality Assessment of Online Courses and Strategizing your ROI for Online Learning-Bailey, 05-01-2009
Best Practices in I'Clicker Use in the College Classroom-Becker, 03-18-2009
FYI Training, 02-12-2009
Association of Collegiate Educators in Radiologic Technology Conference, 02-04 to 02-06-2009
Linking Classroom Assessment Techniques to the Research on How People Learn-Millis, 01-15-2009
Course Redesign Revitalization and Writing for Publication-Millis, 01-16-2009
Doctoral coursework - 6 credit hours, 2008
Professional Continuing Education Credits/ASRT - 23 hours, 2008
Western Slope Society of Radiologic Technologists Fall Seminar, 10-25-2008
PowerPoint Workshop, Snyder, 09-30-2008
Advanced Excel Workshop, Snyder, 09-26-2008
Basic Excel Workshop, Snyder, 09-23-2008
Faculty Development Workshop, MS Word, 09-16-2008
Becoming a Master Student, Hamm, 07-18-2008
Faculty Development (Physics Brown Bag), 04-03-2008
Evaluating Critical thinking and Classroom Management: Dealing with Difficulties, Neal, 05-02-2008
Association of Collegiate Educators in Radiologic Technology Conference, 02-06 to 02-09-2008
Faculty Development Workshop, Nyhammer, 01-18-2008
ATI In-service/Training, 01-16-2008
Doctoral coursework - 12 credit hours, 2007
Literature Review - Experiential Learning, 2007
Professional Continuing Education Credits/ASRT - 47 hours, 2007
Western Slope Society of Radiologic Technologists Fall Seminar, 10-27-2007
CPR certification training, 10-2007

Patti Ward - *continued*

FYI Workshop, 07-25-2007
Digital Training (Kodak), 06-19-2007
Digital Radiography for Educators-University of North Carolina, Chapel Hill, 05-19 to 24-2007
Center for Teaching and Learning Workshop, 05-03-2007
WebCT training, 04-11-2007
Center for Teaching and Learning Workshop, 04-07-2007
Turnitin Training, 02-12-2007
Association of Collegiate Educators in Radiologic Technology Conference, 01-31 to 02-02-2007
Computed radiography training, 01-04-2007
Doctoral coursework - 18 credit hours, 2006
Literature Review - Effective Leadership - 10 sources, 2006
Professional Continuing Education Credits/ASRT - 18 hours, 2006
Western Slope Society of Radiologic Technologists Winter Seminar, 12-02-2006
Respondus Training, 11-16-2006
Club Advisory Board advisor training, 09-19-2006
Leadership Conference, 08-10, 11, 12-2006
CPR certification training, 04-29-2006
Team Building, 04-28-2006
Association of Collegiate Educators in Radiologic Technology Conference, 01-31 to 02-04-2006
Doctoral coursework - 6 credit hours, 2005
Literature Review - Emotional Intelligence Test Measures, 2005
Professional Continuing Education Credits/ASRT - 34 hours, 2005
Western Slope Society of Radiologic Technologists Fall Seminar, 11-19-2005
Leadership Summit, 11-11 to 11-13-2005
Colorado Society of Radiologic Technologists Conference, 04-28 to 04-30-2005
Association of Collegiate Educators in Radiologic Technology Conference, 02-01 to 02-2005
Faculty Workshop-Interactive Syllabus, 01-10-2005
Doctoral coursework - 6 credit hours (2004)
Literature Review - Emotional Intelligence - 28 sources, 2004
Professional Continuing Education Credits/ASRT - 24 hours, 2004
Western Slope Society of Radiologic Technologists Fall Seminar, 11-06-2004
CAPP training, 09-10-2004
FYI training, 05-18-2004
FYI training, 05-11-2004
Colorado Society of Radiologic Technologists Conference, 04/29 to 05/01-2004
Will Radiation Kill You Deader Than a Handgun?-Xigma Xi, 01-26-2004
Professional Continuing Education Credits/ASRT - 38 hours, 2003
Western Slope Society of Radiologic Technologists Fall Seminar, 11-08-2003
FYI training, 08-06-2003
FYI training, 08-08-2003
Western Slope Society of Radiologic Technologists Spring Seminar, 04-05-2003
Association of Collegiate Educators in Radiologic Technology Conference, 01-29 to 02-01-2003
Colorado Society of Radiologic Technologists Conference, 05-08 to 05-10-2003
Employment as a radiographer 263 hours, 2003

Innovative Materials/Activities

HSCI 101 To help students put the history of medicine into perspective I divide the class into groups of three or four. Each group is given 20 laminated pictures and 30 labels and statements to attach with clothes pins (in proper sequence) to a rope. Students check their work against PowerPoint slides.

Scholarship and Creative Work, 2003-Present:

Scholarship Related to Discipline

Journal Articles

Ward, P. and Makela, C. Radiography Students' Clinical Learning Styles, *Radiologic Technology*, 81(6), 527-537. (2010).

Conference Presentation

Patti Ward - *continued*

"Long Bone Fractures of the Upper Limb." Association of Collegiate Educators in Radiologic Technology Conference, Las Vegas, Nevada. 02-01 to 02-2005.

"Breast Reconstruction." Western Slope Society of Radiologic Technologists Fall Seminar. 11-06-2004.

Book reviews

Contribution Quick and Easy Medical Terminology (7th ed.), Leonard (two chapters) (2012)

Chapter review new unnamed Medical Terminology Short course, McGraw-Hill (2012)

Patient Care in Radiography (8th ed.), Erlich (22 chapters) (2012)

Slick, S. Spanish for Radiology. Command Spanish: Petal, Mississippi, 2011. (Summer 2011)

Quick and Easy Medical Terminology (7th ed.), Leonard (six chapters) (2011)

Pre-revision review Digital Radiography and PACS, Carter and Veale (2nd ed.) (2010)

Pre-revision review Textbook of Radiographic Positioning and Related Anatomy (8th ed.), Bontrager (2010)

Quick and Easy Medical Terminology (6th ed.), Leonard (six chapters) (2009)

Introduction to Radiologic Technology (7th ed.), Gurley (three chapters) (2009)

Pre-revision review Quick and Easy Medical Terminology for 6th ed., Leonard (2008)

Proposal review Diagnosis and Prevention of Osteoporosis: A Guide for Health Professionals (2008)

Mosby's Medical Dictionary of Medicine, Nursing, and Health Professions (8th ed.) (150 pages) (2007)

Digital Radiography and PACS, Carter and Veale (1st ed.) (2006)

Pre-revision review Textbook of Radiographic Positioning and Related Anatomy (7th ed.), Bontrager (2006)

Quick and Easy Medical Terminology (5th ed.), Leonard (2005)

Proposal review PACS-CR-DR for Imaging Technologists, Carter and Vealé (2005)

Introduction to Radiologic Sciences and Patient Care (4th ed.), Adler and Carlton (2005)

Pre-revision review Quick and Easy Medical Terminology for 5th ed. (2004)

Pre-revision review of Introduction to Radiologic Sciences and Patient Care for 4th ed. (2004)

Quick and Easy Medical Terminology, Leonard (three chapters) (2011)

Quick and Easy Medical Terminology (7th ed.), Leonard (six chapters) (2011)

Pre-revision review Digital Radiography and PACS, Carter and Veale (2nd ed.) (2010)

Pre-revision review Textbook of Radiographic Positioning and Related Anatomy (8th ed.), Bontrager (2010)

Quick and Easy Medical Terminology (6th ed.), Leonard (six chapters) (2009)

Introduction to Radiologic Technology (7th ed.), Gurley (three chapters) (2009)

Pre-revision review Quick and Easy Medical Terminology for 6th ed., Leonard (2008)

Proposal review Diagnosis and Prevention of Osteoporosis: A Guide for Health Professionals (2008)

Mosby's Medical Dictionary of Medicine, Nursing, and Health Professions (8th ed.) (150 pages) (2007)

Digital Radiography and PACS, Carter and Veale (1st ed.) (2006)

Pre-revision review Textbook of Radiographic Positioning and Related Anatomy (7th ed.), Bontrager (2006)

Quick and Easy Medical Terminology (5th ed.), Leonard (2005)

Proposal review PACS-CR-DR for Imaging Technologists, Carter and Vealé (2005)

Introduction to Radiologic Sciences and Patient Care (4th ed.), Adler and Carlton (2005)

Pre-revision review Quick and Easy Medical Terminology for 5th ed. (2004)

Pre-revision review of Introduction to Radiologic Sciences and Patient Care for 4th ed. (2004)

Quick and Easy Medical Terminology, Leonard (three chapters) (2003)

Book Chapters

Cervical and thoracic spine. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (8th ed). St. Louis: Mosby. (2014)

Lumbar spine, sacrum, and coccyx. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (8th ed). St. Louis: Mosby. (2014)

Cervical and thoracic spine. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (7th ed). St. Louis: Mosby. (2010).

Lumbar spine, sacrum, and coccyx. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (7th ed). St. Louis: Mosby. (2010)

Production of x-rays. In Easton (Ed.), Introduction to Radiography, Edinburgh: Elsevier. (2009)

Cervical and thoracic spine. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (6th ed). (287-320). St. Louis: Mosby. (2005)

Lumbar spine, sacrum, and coccyx. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related

Patti Ward – *continued*

Anatomy (6th ed). (321-347). St. Louis: Mosby. (2005)
Bony thorax - sternum and ribs. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (6th ed). (349-366). St. Louis: Mosby. (2005)
Cervical and thoracic spine. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (5th ed). St. Louis: Mosby. (2003)
Lumbar spine, sacrum, and coccyx. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (5th ed). St. Louis: Mosby. (2003)
Bony thorax - sternum and ribs. In Bontrager & Lampignano (Eds.) Textbook of Radiographic Positioning and Related Anatomy (5th ed). St. Louis: Mosby. (2003)

Scholarship Related to Pedagogy in Discipline

Conference Presentation

"Reflective Journaling for Clinical Practice" Association of Collegiate Educators in Radiologic Technology, Las Vegas, Nevada 02-09-2012

"What are the Learning Styles of Radiography Students during Clinical Practice?" Association of Collegiate Educators in Radiologic Technology, Las Vegas, Nevada 02-10 to 02-12-2010.

"Experiential Learning in Clinical Practice." Association of Collegiate Educators in Radiologic Technology Conference, Las Vegas, Nevada. 02-06 to 02-09-2008.

"Learning Preferences for Academic and Experiential Learning." Mesa State College Introduction to Clinical Education Seminar, Grand Junction, Colorado. 08-09-2007.

"Teaching and Learning." Mesa State College Nursing Introduction to Clinical Education Seminar, Grand Junction, Colorado. 08-09-2006.

"Adult Learning Theory." Association of Collegiate Educators in Radiologic Technology Conference, Las Vegas, Nevada. 01-31 to 02-04-2006.

Sabbatical

Completed Dissertation-Learning Styles of Radiography Students during Clinical Practice. Fall 2008 to Spring 2009 (half time): 08/13/2008 to 01/12/2009

Professional Memberships

American Registry of Radiologic Technologists - 1974 - present
American Society of Radiologic Technologists - 1988 - present
Colorado Society of Radiologic Technologists -1989 - present
Western Slope Society of Radiologic Technologists - 1974 -1978 and 1991 - present
Colorado Career and Technical Credential

Service 2003-Present:

University

2012

Faculty Senate

Tenure and Promotion committee

HLC Criterion 5 subcommittee (committee chair spring)

Student Services Search Committee

Assistant Coordinator of Career Services Search Committee

Health Sciences Director Search Committee

Radiologic Technology Assistant Professor Search #1 (Chair)

Radiologic Technology Assistant Professor Search #2 (Chair)

Library/Media representative

Patti Ward – *continued*

Science Fair Judge
FYI Parents Welcome
Department Leadership Team
Graduate surveys and employer surveys for Radiologic Technology Program
Radiologic Technology Program Advisory Committee chair
Faculty classroom evaluations - 3
General Education Assessment chair for HSCI 101
MASH Camp leader (summer)
Presentation: MASH Camp Levels 1 and 3
Guest Speaker Spring Level 3 and Level 5 Nursing
Guest Speaker Fall Level 1 and Level 5 Nursing
Guest Speaker HSCI 101, 002 (spring)
Orientation for New RT Students
Prospective student interviews -17.5 hours total
Radiology Club advisor

2011

Faculty Senate
Tenure and Promotion Committee
HLC Criterion 5 subcommittee
Leadership Academy Committee
Library/Media representative
Science Fair Judge
Department Leadership Team (fall)
Graduate surveys and employer surveys for Radiologic Technology Program
Radiologic Technology Program Advisory Committee chair (spring)
Radiologic Technology Program Advisory Committee (fall)
Faculty classroom evaluations - 3
General Education Assessment chair for HSCI 101
Presentation: "Learning Styles" (BSN-Level 1)
Presentation: "Learning Styles" (BSN-Level 5)
Presentation: Academic Success, Stampede Weekend, 08-20-2011
MASH Camp leader (summer)
Presentation: MASH Camp
Guest Speaker HSCI 101, 002 (spring)
Orientation for New RT Students
Prospective student interviews -17.5 hours total
Radiology Club advisor
ASTRA Cub advisor

2010

Strategic Planning Committee
Faculty Senate
Tenure and Promotion Committee
Leadership Academy Committee
Library/Media representative
Science Fair Judge
Radiologic Technology Program Advisory Committee
MASH Camp leader (summer)
Presentation: MASH Camp
Mass Casualty committee
Orientation for New RT Students
Prospective student interviews - 18.5 hours
Radiology Club advisor

2009

Faculty Senate

Patti Ward - *continued*

Leadership Academy Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Packed laboratory for move to new offices
Presentation - Department Tenure Track Faculty
MASH Camp leader (summer)
Presentation: MASH Camp
Orientation for New RT Students
Prospective student interviews - 12 hours
Radiology Club advisor (Fall)
Presentation, "Learning Styles" to nursing students, 01-27-2009
Presentation, "Nonverbal Communication" for Leadership Academy, 01-24-2009

2008

Faculty Senate
RT Search Committee
Leadership Academy Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Presentation, "Learning Styles" to nursing students, 08-21-2008
Presentation - Mash Camp (summer)
Orientation for New RT Students
Presentation, "Learning Styles" to nursing students, 01-24-2008
Prospective student interviews - 12 hours
Radiology Club advisor (Spring)

2007

Faculty Senate (fall)
Curriculum Committee (spring)
Leadership Academy Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Affiliate Clinical Instructor Committee Chair
Presentation Nonverbal Communication 11-13-2007
Presentation "Radiology Today" - Med Prep students -Mod 1
Presentation "Radiology Today" - Med Prep students-Mod 2
Presentation "Learning Styles" (Level 1 - nursing students and instructors), 08-23-2007
Presentation - Mash Camp (summer)
Proctor TEAS tests 02-08-2007
Proctor TEAS tests 03-06-2007
Presentation "Learning Styles" (Level 1 - nursing students and instructors), 01-26-2007
Orientation for New RT Students
Prospective student interviews
Radiology Club advisor

2006

Curriculum Committee
Graduation Committee
Leadership Academy Committee
UTEC Med Prep Advisory Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Affiliate Clinical Instructor Committee chair
Mentor to new faculty
Orientation for New RT Students
Prospective student interviews
Radiology Club advisor

Patti Ward – *continued*

Leadership Academy Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Packed laboratory for move to new offices
Presentation - Department Tenure Track Faculty
MASH Camp leader (summer)
Presentation: MASH Camp
Orientation for New RT Students
Prospective student interviews - 12 hours
Radiology Club advisor (Fall)
Presentation, "Learning Styles" to nursing students, 01-27-2009
Presentation, "Nonverbal Communication" for Leadership Academy, 01-24-2009

2008
Faculty Senate
RT Search Committee
Leadership Academy Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Presentation, "Learning Styles" to nursing students, 08-21-2008
Presentation - Mash Camp (summer)
Orientation for New RT Students
Presentation, "Learning Styles" to nursing students, 01-24-2008
Prospective student interviews - 12 hours
Radiology Club advisor (Spring)

2007
Faculty Senate (fall)
Curriculum Committee (spring)
Leadership Academy Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Affiliate Clinical Instructor Committee Chair
Presentation Nonverbal Communication 11-13-2007
Presentation "Radiology Today" - Med Prep students -Mod 1
Presentation "Radiology Today" - Med Prep students-Mod 2
Presentation "Learning Styles" (Level 1 - nursing students and instructors), 08-23-2007
Presentation - Mash Camp (summer)
Proctor TEAS tests 02-08-2007
Proctor TEAS tests 03-06-2007
Presentation "Learning Styles" (Level 1 - nursing students and instructors), 01-26-2007
Orientation for New RT Students
Prospective student interviews
Radiology Club advisor

2006
Curriculum Committee
Graduation Committee
Leadership Academy Committee
UTEC Med Prep Advisory Committee
Library/Media representative
Radiologic Technology Program Advisory Committee
Affiliate Clinical Instructor Committee chair
Mentor to new faculty
Orientation for New RT Students
Prospective student interviews
Radiology Club advisor

Patti Ward - *continued*

2005

Curriculum Committee

Graduation Committee

UTEC Med Prep Advisory Committee

Library/Media representative

Radiologic Technology Program Advisory Committee

Affiliate Clinical Instructor Committee Chair

Presentations for Center for Teaching and Learning-Introduction to PowerPoint and Intermediate PowerPoint

Orientation for New RT Students

Prospective student interviews

Radiology Club advisor

2004

Curriculum Committee

Graduation Committee

Academic Policies Committee

UTEC Med Prep Advisory Committee

Library/Media representative

Radiologic Technology Program Assessment Committee

Radiologic Technology Program Advisory Committee

Affiliate Clinical Instructor Committee Chair

Youth Career Exploration and Job Opportunity Fair

Orientation for New RT Students

Prospective student interviews

Radiology Club advisor

2003

Curriculum Committee

Graduation Committee

Academic Policies Committee

UTEC Med Prep Advisory Committee

Library/Media representative

Radiologic Technology Program Advisory Committee

Affiliate Clinical Instructor Committee Chair

Radiologic Technology Program Assessment Committee

Department representative for Curriculum Subcommittee

Presentation, "Learning Styles" to nursing students, 01-15-2003

Presentation "The Allied Health Field: Radiography" to Athletic Trainers, 09-10-2003

Presentation "More Than Just Broken Bones" Freshmen Seminar, 10-27-2003

Presentation "More Than Just Broken Bones" Freshmen Seminar, 10-30-03

Orientation for New RT Students

Prospective student interviews

Radiology Club advisor

Community

Regional

2003

Colorado Northwestern Community College, Dental Hygiene Advisory Committee

Local

2012

Board of Directors Grand Junction Chapter, Altrusa International

Altrusa International, 41.5 hours community service (five service projects)

Mentor at risk youth in the community, 34 hours

Patti Ward - *continued*

2011

Board of Directors Grand Junction Chapter, Altrusa International
Altrusa International, 65 hours community service
Mentor at risk youth in the community, 60 hours

2010

Altrusa International, 35 hours community service
Mentor at risk youth in the community 62.5 hours

2009

Mentor at risk youth in the community 6 to 10 hours per month

2008

Medical Team volunteer (weekly, local church)
Mentor at risk youth in the community 6 to 10 hours per month

2007

Medical Team volunteer (weekly, local church)
Mentor at risk youth in the community 6 to 10 hours per month

2006

Mentor at risk youth in the community 6 to 10 hours per month

2005

Mentor at risk youth in the community 6 to 10 hours per month

2004

Youth Career Exploration and Job Opportunity Fair
Health Care Workforce Summit (and subcommittee)
Mentor at risk youth in the community 6 to 10 hours per month

2003

Colorado Northwestern Community College, Dental Hygiene Advisory Committee
Mentor at risk youth in the community 6 to 10 hours per month

Professional Organizations

2013

Colorado Society of Radiologic Technology, By Laws Chair
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Fall Seminar

2012

Colorado Society of Radiologic Technology, By Laws Chair
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Fall Seminar
Moderator for Association of Collegiate Educations in Radiologic Technology Conference

2011

Secretary, Colorado Society of Radiologic Technology
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Fall Seminar
Western Slope Society of Radiologic Technologists Spring Seminar
Moderator for Association of Collegiate Educations in Radiologic Technology Conference

2010

President Western Slope Society of Radiologic Technologists

Patti Ward - *continued*

Western Slope Society of Radiologic Technologists Fall Seminar
Western Slope Society of Radiologic Technologists Spring Seminar
Moderator for Association of Collegiate Educations in Radiologic Technology Conference

2009
President Western Slope Society of Radiologic Technologists

2008
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Fall Seminar
Moderator for Association of Collegiate Educations in Radiologic Technology Conference

2007
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Fall Seminar
Moderator for Association of Collegiate Educations in Radiologic Technology Conference

2006
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Fall Seminar
Moderator for Association of Collegiate Educations in Radiologic Technology Conference

2005
President Western Slope Society of Radiologic Technologists

2004
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Spring Seminar
Western Slope Society of Radiologic Technologists Fall Seminar

2003
President Western Slope Society of Radiologic Technologists
Western Slope Society of Radiologic Technologists Spring Seminar
Western Slope Society of Radiologic Technologists Fall Seminar
Judge - Colorado State Society of Radiologic Technologists Conference Student Bowl

Advising 2003-Present:

University level

2012
Orientation Sessions: 4
Mesa Experience: 2
Major Fair sessions: 1
Mav Scholars: 1
Radiology Club advisor
Department Group advising: 3

2011
Orientation Sessions: 8
Mesa Experience: 2
Major Fair sessions: 1
Radiology Club advisor
ASRTA Club advisor

2010
Orientation Sessions: 8
Mesa Experience: 2
MAV Scholar: 1

Patti Ward - *continued*

Major Fair sessions: 1
Radiology Club advisor

2009
Orientation Sessions: 5
Mesa Experience: 2
Major Fair sessions: 1
Radiology Club advisor

2008
Orientation Sessions: 4
Mesa Madness: 2
Major Fair sessions: 3
Radiology Club advisor

2007
Orientation Sessions: 2
Mesa Madness: 1
Major Fair sessions: 1
Radiology Club advisor

2006
SOAR Sessions: 4
Radiology Club advisor

2005
SOAR Sessions: 7
Radiology Club advisor

2004
SOAR Sessions: 10
Radiology Club advisor

2003
SOAR Sessions: 1
Major Fair session: 2
Radiology Club advisor

Department level

2012
Individual advising contracts: 512
Early Alert notices: 54
Letters: 12

2011
Individual advising contacts: 457
Early Alert notices: 90
Letters: 23

2010
Individual advising contacts: 221
Early Alert notices: 58
Letters: 6

2009
Open Advising Sessions: 13

Patti Ward – *continued*

Open Advising Sessions: 13
Individual advising contacts: 176
Early Alert notices: 8
Letters: 8

2008

Open Advising Sessions: 20
Individual advising: 21 hours
Early Alert notices: 3
Letters: 7

2007

Open Advising Sessions: 4
Individual advising: 32.5 hours
Letters: 9

2006

Individual advising: 18.5 hours
Letters: 6

2005

Individual advising: 24 hours

Honors and Awards 2003-Present:

National

Elsevier Faculty Development Scholarship, 2008

Regional

Colorado Society of Radiologic Technologist's Registered Technologist Memorial Scholarship, 2006

Local

Nominated for Distinguished Faculty Award, 2013
CMU Exemplary Faculty Merit Award, 2012
CMU Exemplary Faculty Merit Award, 2011
Mesa State College Exemplary Faculty Merit Award, 2010
Halftime Sabbatical Fall 2008 - Spring 2009
Mesa State College Exemplary Faculty Merit Award, 2007
Faculty Professional Development Grant, 2007
Mesa State College Exemplary Faculty Merit Award, 2006
Academic Services Department Certificate of Merit, 2003-2004

Professional Experience:

Practicing radiographer for more than 10 years

Please record the number "items/events" you have listed above in the following categories.

If you specify items/events under "other," please provide an explanation/definition.

0	<input checked="" type="checkbox"/> Books	36	<input checked="" type="checkbox"/> Book Reviews	0	<input checked="" type="checkbox"/> Creative Publications
1	<input checked="" type="checkbox"/> Journal Articles	0	<input checked="" type="checkbox"/> Performances	0	<input checked="" type="checkbox"/> Patents
12	<input checked="" type="checkbox"/> Conference Presentations	0	<input checked="" type="checkbox"/> Exhibitions	0	<input checked="" type="checkbox"/> Grants-funded and non-funded
1	<input checked="" type="checkbox"/> Sabbaticals	0	<input checked="" type="checkbox"/> Fullbright	13	<input checked="" type="checkbox"/> Book Chapter
	<input checked="" type="checkbox"/> Other (related to discipline)				

Appendix H

Faculty Vitae for BAS Program

Faculty Vitae for BAS Program

LaJuana Ehlers, MEd, RT(R)(M) - Assistant Professor

Lauren Huffman, MAEd, RT(R)(CT) - Part-Time Instructor

Bette Schans, PhD, RT(R) - Part-Time Faculty, Tenured Professor

Name:

First LaJuana M Last Ehlers

Start Year: 2008

Program:

Radiologic Technology

Department:

Health Sciences

Faculty Rank

Professor

Assistant Professor

Associate Professor

Instructor

Highest Degree

MED



Institution Colorado State University

Discipliner Education & Human Resource Studies

Year 2000

Education: (List all degrees beginning with most recent-include post docs and external certificates)

M.Ed., Education and Human Resource Studies, Colorado State University— Denver, 2000

B.S., Radiologic Technology, Northern Arizona University, --Flagstaff, 1978

Certificate, Harper Hospital School of Radiologic Technology,--Detroit, Michigan

Certified Registered Radiologic Technologist in Radiography & Mammography, American Registry Radiologic Technology, 1978-present

Teaching 2003-Present:

Courses Taught

RTEC 320, Informatics in Radiologic Technology

RTEC 325, Cross Sectional Anatomy I

RTEC 327, Cross Sectional Anatomy II

RTEC 365, Advanced Patient Care

RTEC 450, Mammography I

RTEC 470, Mammography II

RTEC 456, Magnetic Resonance I

RTEC 476, Magnetic Resonance II

RTEC 494, Capstone in Radiologic Science

RTEC 480/490, Clinical Specialization

Evidence of Continuous Improvement

2013- The Symposium for Teaching and Learning with Technology

2013 Conference of the Association of Collegiate Educators in Radiologic Technology

Session: Meeting students where they learn

Session: Seven principles of good practice

Session: Tools and techniques to integrate the ASRT viewer into your presentations

Session: Diversity cognizance and cultural competence: improving workplace relationships and patient care

Session: Are we heading into an educator workforce shortage tsunami?

Session: Creating a culture of learning



Full-time Faculty Vita

LaJuana Ehlers – *continued*

Session: The radiographer's trifecta
Session: Faster, wiser, effective ways to grade papers
Session: Collaborative learning
Session: Maintaining passion in our profession
2012- Quality Matters peer review course certificate and completed applying the quality matters rubric course
2012 Conference of the Association of Collegiate Educators in Radiologic Technology
Session: World is leaving me behind: technology, faculty & multigenerational classroom
Session: Linking course content, learning objectives, assignments & assessment
Session: Powerful questioning
Session: Reflective journaling for clinical practice
Session: Certification applications: my signature, ARRT's expectations
Session: Implementing team-based learning in radiography courses
Session: Working effectively with the obese patient
Session: Transitioning to the digital radiology lab
Session: Academic partnership: A collaborate model engaging academia & employers
Session: Role of dialog in distance education: a dissertation study
Session: Art of combining anatomy & function in the management of cancer patients
2011 Conference of the Association of Collegiate Educators in Radiologic Technology (ACERT)
Session: Draft Revisions to the American Society Radiologic Technology (ARRT) Radiography Curriculum
Session: Radiation in the Headlines
Session: Sharing Shareware: Gaming for Student Success
Session: Implementation of an Audio/Visual Approach to Learner-Centered Teaching
Session: JRCERT Update
Session: ARRT & You, the Educator
Session: Discover the Benefits of E-Learning Tools for Radiography Programs
Session: Image Wisely: Radiation Safety in Adult Medical Imaging
Session: Clinical Assessment: Who is Accountable?
Session: Does Faculty Evaluation Enhance Teaching & Learning?
Session: Arsenic, Mustard Gas & Tanning Beds: What Do These Have in Common?

2010 Conference of the Association of Collegiate Educators in Radiologic Technology (ACERT) - 2/10-2/12
Session: Imaging Integrity: Bridging the Gap Between the Classroom & "The Real World"
Session: Using Google Apps to Infuse Collaboration, Reflection & Communication
Session: Multi-Discipline Simulation as a Teaching Strategy in Radiologic Technology
Session: Collaborative Imaging: Education is "NICE"
Session: Ethics Revisited
Session: Charles Jacobi Memorial Lecture: Who Will Follow Us & How Do We Prepare Them for the Future?
Session: Vygotsky and Collaborative Learning
Session: What About My Needs? Generational Differences in Today's Economy
Session: Image Gently
Session: Proposed Changes in the Standards for An Accredited Educational Program in the Radiologic Sciences
Session: Digital Image Quality
Session: Interprofessional Education in Action: Assessment & Outcomes

American Society of Radiologic Technologists Department of Continuing Education Online Self-Learning Activities
Breast Cancer in Men 4/7/2010
Understanding Breast Cancer Risk 6/17/2010
Radiation Dose in Computed Tomography 6/17/2010

2009 Conference of the Association of Collegiate Educators in Radiologic Technology (ACERT) 2/4-2/6
Annual Issues Forum: New Degree Requirements in Radiologic Technology
Designing Alternative Assessments
Digital DICOM
Developing Critical Thinking Skill in Clinical Part II
Cooperative Learning
Professional Ethics: You Be the Judge
Coaching and Mentoring

LaJuana Ehlers - *continued*

Transitioning the Change in Your Teaching Styles or Why Do We Not Want To Try Something Different?
Proposed Changes in the Standards For An Accredited Educational Program in the Radiologic Sciences
Equipment Operation and Quality Control for the Utterly Confused
Trends in Medical Imaging: A Comparison of Two Large Metropolitan Areas
Protecting Human Subjects in Research

American Roentgen Ray Society Continuing Education for Radiologic Technologists Online Self-Learning Activity
MRI: Safety Update 12/16/2008

Innovative Materials/Activities

2008

Developed three new online courses for BAS program

2009

Developed three additional online courses for BAS program

2010

Developed two new online courses for BAS program

Developed a template for student portfolios for BAS program. It is also used by other programs in the Health Sciences Department

Supervision of Student Research/Project(s)

Scholarship and Creative Work, 2003-Present:
Scholarship Related to Discipline

Books

Journal Articles

Conference Presentation

Book reviews

2010 - served as a reviewer for two textbooks

Technical Reports

Book Chapters

2010-2011 Co-authored a chapter on PACS in a course medical informatics textbook

Other

Scholarship Related to Pedagogy in Discipline

Books

Journal Articles

Conference Presentation

Book reviews

Technical Reports

Book Chapters

Other

LaJuana Ehlers - *continued*

Creative Work Related to Discipline

Performances

Exhibits

Publications

Other:

Grants

Patents

Unpublished research

Sabbaticals

Fullbright

Professional Memberships

American Registry of Radiologic Technologists (ARRT)

American Society of Radiologic Technologists (ASRT)

Colorado Society of Radiologic Technologists (CSRT)

Colorado Mammography Society (CMS)

Association for Distance Education and Independent Learning (ADEIL)

Service 2003-Present:

University

2011 - present Distance Learning Committee

Department

2008 - Participated on health science distance education committee

2009 - Participated on health science distance education committee

2010 - Promoted the BAS program to community colleges in the Denver area, which resulted in an articulation agreement between CMU and CCD.

Community

2009 - Participated in Denver career fair to promote CMU health science programs

2009 -2011 Served on City of Lakewood Public Arts and Culture Committee

2010 - Participated in Denver career fair to promote CMU health science programs

2010 - Served as volunteer of local summer diversity festival

2010-2011 Engaged in a fundraising effort to raise educational funds for student financial aid

2012- Denver career fair

2013- City of Lakewood Traffic Court volunteer

2013- American Society Radiologic Technology RT Advocacy subcommittee participant

National

2011 - 2013 Elected Board member to Association for Distance Education and Independent Learning (ADEIL)

2012- Participated on the Mammography curriculum revision workgroup

Regional

Local

Advising 2003-Present:

University level

LaJuana Ehlers - *continued*

Department level

Assisted with advising for online student in the BAS program
Worked closely with students wishing to challenge courses in development of course portfolios
Facilitated new student orientation and WebCT orientation for all new BAS students
Helped new online students to navigate and to understand WebCT
Readily available to students in the online learning environment for online office hours

Honors and Awards 2003-Present:

National

Regional

Local

Professional Experience:

Please record the number "items/events" you have listed above in the following categories.

If you specify items/events under "other," please provide an explanation/definition.

<input type="checkbox"/> Books	2	<input type="checkbox"/> Book Reviews	<input checked="" type="checkbox"/> Creative Publications
<input type="checkbox"/> Journal Articles		<input type="checkbox"/> Performances	<input checked="" type="checkbox"/> Patents
<input type="checkbox"/> Conference Presentations		<input type="checkbox"/> Exhibitions	<input checked="" type="checkbox"/> Grants-funded and non-funded
<input type="checkbox"/> Sabbaticals		<input type="checkbox"/> Fullbright	1 <input type="checkbox"/> Book Chapter
<input type="checkbox"/> Other (related to discipline) <input type="text"/>			

Name:

Lauren A Huffman

Start Year: 2012

Program:

Radiologic Technology

Department:

Health Sciences



Lecturer Vita

Highest Degree

MA	<input type="button" value="▼"/>	Muskingum University	Education	2009
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Education: (List all degrees beginning with most recent-include post docs and external certificates)

Master of Arts in Education, Muskingum University, 2009

Certified Computed Tomography Technologist, American Registry of Radiologic Technologists, 2003-present

Bachelor of Science, Radiologic Sciences in Computed Tomography, Kent State University, 2003

Certified Radiologic Technologist, American Registry of Radiologic Technologists, 2000-present

Associate of Applied Science, Radiologic Technology, Kent State University, 2000

Teaching 2003-Present:

Courses Taught

RTEC 454, Computed Tomography I

RTEC 474, Computed Tomography II

Innovative Materials/Activities

I have narrated powerpoints using Camtasia and have converted those into an mp4 video.

Critical thinking assignment with identification of image artifacts.

Prior Professional Experience Relevant to Current Position: (Include year(s) of employment, employer, position title and responsibilities)

Year(s) of Employment	Employer	Position Title	Position Responsibilities
2013-present	Zane State College, Zanesville, Ohio	Program Director & Assistant Professor	Instruction of students and program administration
2005-2013	Zane State College, Zanesville, Ohio	Clinical Coordinator & Assistant Professor	Instruction of students and clinical liaison
2000-2005	Salem Community Hospital, Salem, Ohio	Staff radiographer	Patient care in radiography and computed tomography

Name:

Bette A Schans

Start Date: July, 1994

Program:

Radiologic Technology

Department:

Health Sciences

Faculty Rank

Professor

Assistant Professor

Associate Professor

Instructor

Highest Degree

PhD Colorado State University

Discipline Education and Human Resource Studies Year 2003

Education: (List all degrees beginning with most recent-include post docs and external certificates)

PhD Education and Human Resource Studies 2003

M.S. Management and Organization 1994

BS. Health Care Management 1982

A.A.S. Radiologic Technology 1973

Teaching 2003-Present:

Courses Taught:

RTEC 114, Radiographic Clinical Experience I

RTEC 120, Introduction to Radiologic Technology and Patient Care

RTEC 122, 122L Principles of Radiographic Exposure/Exposure Lab

RTEC 123, Digital Imaging

RTEC 132L Imaging Equipment Lab,(prior to 2009

RTEC 133, 133L Imaging Equipment and Imaging Equipment Lab (after 2009)

RTEC 135, Radiation Biology and Protection

RTEC 214, Clinical Experience III

RTEC 224, Clinical Experience IV

RTEC251, Radiographic Pathology

RTEC 255, Radiographic Assessment I

RTEC 261, Radiographic Review

265, Radiographic Assessment II

RTEC 460, Quality Management and Health Care Law

RTEC 480.490, Clinical Specialization I and II

RTEC 494 Independent Study



Full-time Faculty Vita

Bette Schans – *continued*

Did 6 credit hour teaching overload in fall and spring semester 2008-09 due to colleague's sabbatical leave.

Evidence of Continuous Improvement:

Attend the Association of Collegiate Educators in Radiologic Technology Educator's Conference every year

August, 2012 Ken Bain What the Best College Teachers Do

January, 2012 Paul Gaston The Degree Qualifications Profile

January, 2011 Dr. Jessica Herrick Workshop on Assessment

October, 2011 Quality Matters

October, 2011 Sonia Brandon LASSE

October, 2011 Desire 2 Learn sessions

January, 2010 Patricia Phelps Restoring the Joy in Teaching, Ways to Promote Learning

January, 2009 Barbara Millis, Using Groups and Academic Games for Learning and Assessment

May, 2008 Ed Neil Workshop on Critical Thinking

January 2008 Diane Nyhammer Workshop on Assessment

Attended the American Society of Radiologic Technologists Educational Conferences, 2004, 2008, 2009

Attended University of North Carolina workshop: Digital Imaging for Educators, 2008

Attend Program Assessment and Accreditation Workshops presented by the Joint Review Committee on Education in Radiologic Technology 2007, 2010

Innovative Materials/Activities:

2010 Developed the course, HSCI 101: Introduction to Health Care Professions which was approved by the curriculum committee

2010 Received grant monies to purchase new x-ray equipment for the lab.

2010, Wrote the interim report for continued accreditation and received full continuance until 2013.

2008 Received grant monies to put up-to-date digital imaging equipment in the Radiology Lab. This enabled students to practice on the equipment prior to using it in the clinical setting.

2008-09 Developed and successfully started the all-online Bachelor of Applied Science in Radiologic Technology program

2006 Prepared the self-study for JRCERT accreditation renewal and hosted on-campus Site Visit - received the highest, 8-year renewal

Supervision of Student Research/Project(s):

Every year students write research essays and submit the essays for competition at the ACERT conference.

Scholarship and Creative Work, 2003-Present:

Scholarship Related to Discipline

Bette Schans - *continued*

Books

2011 Co-Author a chapter revision on pediatric imaging in "Textbook of Radiographic Positioning and Related Anatomy"

2007 Co-Authored chapter revision on pediatric imaging in "Textbook of Radiographic Positioning and Related Anatomy"

2004, 2007 Reviewed and revised information in all chapters concerning Radiologic procedures and exams for textbook, "Medical-Surgical Nursing"

Journal Articles

2004 "Radiologic Technologists and Ethical Reasoning", in Radiologic Technology March/April, peer reviewed.

Conference Presentations:

2011 "Radiation Protection in Digital Imaging", CSRT Annual Conference, May, Estes Park.

2008 "Elevated Clinical Admission Requirements", ACERT, Las Vegas, NV

2007 "Ethics in Digital Imaging" WSSRT fall conference, Grand Junction, CO.

2005 "Ethical Reasoning in Students and Graduates of Radiologic Technology Programs", Hawaiian International Educators Conference, Honolulu, HI.

2004 "Breast Cancer - A Patient's Perspective", WSSRT spring conference, Grand Junction, CO.

2004 "Ethics", February, Association of Collegiate Educators in Radiologic Technology, Annual Conference, Las Vegas, NV.

2003 "Ethics in Theory and Practice: A Review", May, CSRT Annual Conference, Breckinridge, CO.

Book reviews Reviewed the following textbooks:

2007 "Mosby's Comprehensive Review"

2007 "Radiographic Pathology for Technologists".

2007 "Introduction to Radiologic Technology".

Technical Reports

Other

Scholarship Related to Pedagogy in Discipline

Books

Journal Articles non-peer reviewed,

2010 "Mentoring Radiologic Science Writers".

Bette Schans – *continued*

2009 "Finding Resources for Research"

Conference Presentations

2013- "Meeting Students Where They Learn", Practice Makes Perfect?", Developing Critical Thinking Skills Part 1 and 2", ACERT Annual Conference, February, Las Vegas, NV

2012- "Are You a Professional?", CSRT Annual Conference, May, Estes Park, Colorado

2012- "The World is Leaving Me Behind - Technology and the Multigenerational Classroom", ACERT Annual Conference, February, Las Vegas, NV

2011 "Continuing Education and Lifelong Learning in Mammography", Colorado Mammography Society Seminar, September, Steamboat Springs

2008 "Research and Writing Resources", ASRT Research and Writing Workshop, September, Boston, MA

2008 "Creating that First Examination", ACERT Annual Conference, February, Las Vegas, NV

2007 "Research and Writing Resources", ASRT Research and Writing Workshop, June, Albuquerque, NM

2007 "Test Writing, Construction and Validation 4-hour Workshop", Gateway Community College, June, Phoenix AZ

2007 "Test Construction and Validation", ACERT Annual Conference, February, Las Vegas, NV

2006 "Effective Teaching in the Clinical Setting", ACERT Annual Conference, February, Las Vegas, NV

2006 "Evidence-Based Education" and "Clinical Education" University of Kuwait, June, Kuwait

2005 "How to Publish a Research Paper" and "I'm in the Classroom, Now What Do I Do?", Association of Collegiate Educators in Radiologic Technology Annual Conference, Las Vegas, NV.

2004 "Learning Styles", Association of Collegiate Educators in Radiologic Technology, Annual Conference, Las Vegas, NV

Book reviews

Technical Reports

Other

2004-2010 Peer-reviewed 15 articles for Radiologic Technology, the journal for our profession.

Presented three lectures to the local Veteran's Administration Hospital personnel on Radiation Safety, 2007

Creative Work Related to Discipline

Performances

Exhibits

Bette Schans - *continued*

Publications

Other:

Grants

Acquired two grants: 2006 First grant for digital and PACS equipment -\$62,000.
2009 Second grant for new x-ray equipment and table - \$50,000.

Patents

Unpublished research

Professional Memberships

International Society of Radiographers and Radiologic Technologists

American Society of Radiologic Technologists

Association of Collegiate Educators in Radiologic Technology

Colorado Society of Radiologic Technologists

Western Slope Society of Radiologic Technologists

Service 2003-Present:

National • The American Society of Radiologic Technologists

2004- 2010 Editorial Review Board, Radiologic Technology

2004- 09 Research and Grants Advisory Panel - Educational Foundation

2000-03 Baccalaureate Curriculum Project

1999-03 Taskforce on Governmental Re-Structure

Association of Collegiate Educators in Radiologic Technology

2011- Conference Management Committee- Continuing Education

2009-2011 Board Chair

2007-2009 President

2006-2007 President-Elect

2003-06 Secretary-Treasurer

Lambda Nu - the National Honor Society for Radiologic Technology

2010-present Board of Directors

* Site Visitor for the Joint Review Committee on Education in Radiologic Technology
1999-Present

* Served as an External Examiner for the Radiologic Sciences Program, Kuwait University 2005 and 2006

Regional Western Slope Society of Radiologic Technologists 2003-2008 Vice President

Bette Schans - *continued*

University:

2012-13

HLC Steering Committee - Criterion 4 Committee Chair

Served on search committee 6/13

2011

HLC Steering Committee - Criterion 4 Committee Chair

Pre-Tenure Review Committee

2 Search committees

2010

PreTenure Review Committee

Faculty Appeal Committee

2009

Assessment Committee

Student Success and Retention Initiative Taskforce

2008

Assessment Committee

Distinguished Faculty Committee

Tenure and Promotion Committee

Panel on Teaching Effectiveness for new faculty orientation

Chaired three search committees

2007

Assessment Committee

2006

Assessemnt Committee

Merit Taskforce

Tenure and Promotion Committee

Distinguished Faculty Committee

2005

Assessment Committee

Bette Schans - *continued*

2004

2003

Academic Policies Committee

Tenure and Promotion Committee

Distinguished Faculty Committee

Department committees:

Advising -yearly

Assessment- yearly

Curriculum - yearly

Serve as mentor for tenure-track faculty in the department,

Advising 2003-Present:

University level

2013 - no longer advising students

2011

Advised over 60 students in AAS and BAS programs, have 100+ advisees listed

7 Orientation sessions

1 Mesa Experience

2010

Advised over 70 students in AAS and BAS programs, have listed over 100 advisees

6 orientation sessions

Mesa Experience

Community Job Fair

Western Slope High School Counselors visit

Mash Camp

2009

Advised over 60 students in AAS and BAS programs, have over 90 advisees listed

4 student orientation sessions

1 Mesa Madness

District 51 Career Exploration Fair

Mesa Experience Fair

Advisor for Radiology Club

Bette Schans - *continued*

Advisor for Lambda Nu and Americorp

Marketed the BAS program regionally and nationally

Mash Camp

2008

3 SOAR sessions

1 Mesa Madness event

1 Mav Scholar event

Advisor for Lambda Nu

Advisor for Americorp

Advisor for Radiology Club

2007

Advised over 40 students in the AAS program

3 college orientation sessions

Held 4 program advising sessions for students interested in the program

College Job Fair

Advisor for Lambda Nu and Americorp

2006

Advised over 40 students in AAS program

2 SOAR sessions

1 Career Day

Advisor for Lambda Nu

MASH Camp

2005

6 SOAR sessions

1 Career Day

Advisor for Lambda Nu

2004

2003

Honors and Awards 2003-Present:

National 2010 Outstanding Educator Award, Association of Collegiate Educators in Radiologic Technology

2004 Jean I Widger Distinguished Author Award, American Society of Radiologic Technologists

Regional

Local

Professional Experience:

There is no formal terminal degree in Radiologic Technology. The Joint Review Committee on Education in Radiologic Technology (our programmatic accrediting agency) states that program directors must have a master's degree in R.T. or related fields such as education or management. At the time I received my master's degree, there was only 1 master's program in radiologic science. When I attained my PhD, there were no formal doctoral programs in radiologic science. Both of my degrees are in related fields, my master's is in Management and Organization and my PhD is in Education and Human Resource Studies.

Please record the number "Items/events" you have listed above in the following categories.

If you specify items/events under "other," please provide an explanation/definition.

2 <input checked="" type="checkbox"/> Books	3 <input checked="" type="checkbox"/> Book Reviews	<input checked="" type="checkbox"/> Creative Publications
3 <input checked="" type="checkbox"/> Journal Articles	<input checked="" type="checkbox"/> Performances	<input checked="" type="checkbox"/> Patents
22 <input checked="" type="checkbox"/> Conference Presentations	<input checked="" type="checkbox"/> Exhibitions	2 <input checked="" type="checkbox"/> Grants-funded and non-funded
<input checked="" type="checkbox"/> Other (related to discipline)		

**EXTERNAL PROGRAM REVIEW
COLORADO MESA UNIVERSITY
DEPARTMENT OF HEALTH SCIENCES
AAS RADIOLOGIC TECHNOLOGY PROGRAM AND
BAS RADIOLOGIC TECHNOLOGY PROGRAM**

The reviewer received electronic files with the purpose of the external review, the reviewer's responsibility, a proposed campus schedule, documents for both the AAS and BAS programs, and the Academic Program Review Self-Study.

On March 14, 2014, the reviewer conducted a onsite campus visit to Colorado Mesa University which included a tour of the program classroom, lab, faculty offices, and the campus organization providing support services to the program. The onsite visit included interviews and evaluative comments regarding the program with the following:

Dr. Patti Ward, Professor of Radiologic Technology
Olga Grisak, Clinical Coordinator of AAS Program
Dr. Debra Bailey, Director of Health Sciences
Dr. Gillian McKnight-Tutein AVPAA/Director of Distance Education
Dr. Steven Werman, Ph.D., Assistant Vice President, Academic Affairs
Jeremy Brown Executive Director, Information and Communication Technology
Barbara Borst and Sylvia Rael, Library Staff
Suzanne Lay, Assessment Committee
Dr. Carol Futhey, Provost and Vice President of Academic Affairs

These four students representing the two different programs were interviewed:

1 student enrolled in 2nd Semester of BAS program
1 student enrolled in 2nd Year AAS program
2 students enroll in 1st Year AAS program

The reviewer did not interview clinical instructors/supervisors, program alumni, employers of graduates, or members of the advisory committee.

The reviewer verified the accuracy included in The Academic Program Review Self-Study and commends the author(s) in providing the information. To avoid redundancy, the excellent detail and comment included in the self-study are not repeated in the reviewers report. If clarification is needed, it is recommended the first 19 pages of the self-study serve as an additional reference source.

The reviewer's report is sequenced with the evaluation of the AAS Program, the evaluation of the BAS Program, and a closing summary.

AAS PROGRAM IN RADIOLOGIC TECHNOLOGY

MISSION STATEMENT

The Mission of the AAS in Radiologic Technology Program is clearly defined and includes a curriculum that enables the graduate to achieve the mission. The mission of the program supports and is appropriate to the mission of the university.

CURRICULUM

The AAS program demonstrates a well-planned curriculum with an ongoing systematic process to thoroughly review the course sequence and the course content. The curriculum is consistent with the mission of the program. The program has many campus and community resources to support the delivery of the curriculum, the number of students in the program, and the number of graduates. The available resources and support from the program faculty and the college administration is a strength of the program. Course requirements are sequenced to allow the students to advance and be ready for the national certification examination.

STUDENT LEARNING OUTCOMES AND ASSESSMENT

Outcome assessment is recognized at the university, department, and program level as the essential first step employed to make any necessary modifications to meet the student needs in learning professional competencies. The expected knowledge, skills, and behaviors of students at graduation is appropriate. These outcomes are directly linked and applied to the curriculum in all courses. Assessment measures are being systematically applied on a regular basis. The assessment processes are evolving with measureable outcomes gathered for didactic courses, laboratory experiences, and clinical education. The program maintains a systematic review of the number of applicants, the number of students selected, the number of program graduates, the number of graduates successfully earning the radiography credential, and the number of graduates employed as radiographers. The program also collects data with a graduate survey and an employer survey.

ACADEMIC ADVISING

Strategies for advising students are defined, followed, and continually assessed for their effectiveness. All faculty participate as academic advisors for students in the program regarding program progress as well as providing career ladder recommendations. The students reported confidence in receiving accurate career and academic advisement.

FACULTY

As a faculty member, the Program Director provides stability and a standard of educational excellence for the program. In addition, the Program Director received excellent mentoring from the former program director and provides a high degree of mentoring to the new faculty (Clinical Coordinator), to other full- and part-time faculty, and to the clinical instructors. There is evidence of ongoing assessment of teaching effectiveness and evaluation of faculty members. The Department Head verified there is a formal, ongoing, annual review of faculty.

The Clinical Coordinator demonstrates confidence, motivation, and an interest in maintaining the high standards in the program. As a new faculty member, Ms. Grisak explained her teaching, scholarship, service, and advisement roles for the tenure track and she looked forward to a yearly review to improve her contribution to university. Ms. Grisak also identified that a well-defined rotation schedule in clinical education was a strength in the program because it provides the students with diverse learning experiences.

PROGRAM SUPPORT

The Department of Health Sciences has two secretaries to provide support to approximately 50 faculty. Several full-time faculty and part-time faculty share office space. Over the past few years, the funding for program faculty professional development is minimal to absent. The program faculty and students interviewed did not comment on if the level of support was adequate to meet the mission and educational goals of the program. The classroom and laboratory equipment currently do support meeting the mission and educational goals of the program. A future expenditure to secure direct digital equipment will provide campus equipment that better mirrors the equipment students use in the clinical environment.

EXTERNAL COMMUNITY RELATIONSHIPS

Relationships with health care facilities for clinical learning experiences which are external to the university have formal affiliation agreements that clearly define their role. Further, the external advisory committee provides input to the program at its regularly scheduled meetings and offers input periodically throughout the year. The health care community support is to be commended in providing clinical opportunities to the students, an advisory committee, and clinical instructors. The program faculty are also to be commended for maintaining and promoting this relationship.

Table 3. Executive Summary Template for External Reviewer's Observations

Program Review Element	Check the appropriate selection				Provide explanation if not agree with element and/or why unable to evaluate
	Agree	Not Agree	Unable to Evaluate	Not Applicable	
The program's self-study is a realistic and accurate appraisal of the program.	✓				
The program's mission and its contributions are consistent with the institution's role and mission and its strategic goals.	✓				
The program's goals are being met.	✓				
The curriculum is appropriate to the breadth, depth, and level of the discipline.	✓				
The curriculum is current, follows best practices, and/or adheres to the professional standards of the discipline.	✓				

Program Review Element	Check the appropriate selection				Provide explanation if not agree with element and/or why unable to evaluate
	Agree	Not Agree	Unable to Evaluate	Not Applicable	
Student demand/enrollment is at an expected level in the context of the institution and program's role and mission.	✓				Note: Enrollment reflects the number of positions available in the clinical learning centers and the number of students maintaining the programs academic standards.
The program's teaching-learning environment fosters success of the program's students.	✓				
Program faculty members are appropriately credentialed.	✓				
Program faculty members actively contribute to scholarship, service and advising.	✓				
Campus facilities meet the program's needs.	✓				
Equipment meets the program's needs.	✓				
Instructional technology meets the program's needs.	✓				
Current library resources meet the program's needs.	✓				
Student learning outcomes are appropriate to the discipline, clearly stated, measurable, and assessed.	✓				
Program faculty members are involved in on-going assessment efforts.	✓				
Program faculty members analyze student learning outcome data and program effectiveness to foster continuous improvement.	✓				
The program's articulation of its strengths and challenges is accurate/appropriate and integral to its future planning.	✓				

September 7, 2012

RECOMMENDATIONS

Equipment: As radiography technology continues to evolve, there needs to be a system in place for on-going evaluation of laboratory equipment as it is an essential part of the curriculum. It will be necessary to begin active planning to add direct digital capabilities to the campus lab classroom.

Students: It was a student's recommendation to add activities that bring together first and second year students. With different campus and clinical schedules, creating events for the two groups may provide opportunities for some second year students to mentor first years students, may foster student study groups, and may provide opportunities to work together to support community service projects.

EXEMPLARY ELEMENT

The enthusiast Program Director has incorporated mentoring and experience to provide excellent program administration and teaching. She is a professional role-mode to the students, faculty, and clinical instructors. Dr. Ward is active in evaluating her performance in utilizing her expertise to enhance the program.

The program has a low student attrition rate, a higher than national average certification passing rate, and is experiencing a high percentage of graduates employed as radiographers in health care.

IMPROVEMENT DURING REVIEW CYCLE

As the university continues to gather program outcomes and assessment plans, the program should be in a position to clearly identify how that process is directly related to the standards for program enhancement.

An important improvement to provide continued program stability is for the university and department to determine how to create and advertise a faculty position that is appealing and attractive to the professional community to increase the number of applicants to be in a position to select a qualified faculty member to fill either full-time or part-time vacancies in a short period of time.

BAS PROGRAM IN RADIOLOGIC TECHNOLOGY

MISSION STATEMENT

The Mission of the BAS in Radiologic Technology Program is now more clearly defined and includes a curriculum that enables the graduate to achieve the mission. The mission of the program supports and is appropriate to the mission of the university. This was accomplished by the recent requirement for enrolled students to complete the university's general education requirements prior to completing the program requirements.

CURRICULUM

The BAS program curriculum demonstrates a well-planned, career-laddering that supports the AAS level graduates to advance their education. The campus Desire2Learn resources are commendable in providing diverse support and experience for the online delivery of the curriculum. The reviewer evaluated eight courses prior to the campus visit. The courses provided current and relevant content. The self-introduction and discussion board assignments are well thought out and quickly engage the students. The course syllabi and rubrics provide the student with clear direction. The diverse learning experiences include textbook readings, videos, presentations, journal articles, and testing. Course requirements are sequenced to allow for the students to advance with professional competencies and to be prepared to complete post-primary national certification examination.

STUDENT LEARNING OUTCOMES AND ASSESSMENT

Like the AAS program, outcome assessment is recognized at the university, department, and program level as the essential first step employed to make any necessary modifications to meet the student needs in learning professional competencies. The expected knowledge, skills, and behaviors of students at graduation are appropriate. The Program Director provided a progress report and document listing the learning outcomes and assessment for each of the courses in the BAS program. The assessment processes are evolving with measureable outcomes gathered for the courses. The program maintains a systematic review of the number of students selected, the number of program graduates, and the numbers of graduates successfully earning a post-primary certification. It is noted that accepted students who already have the post-primary certification are required to demonstrate academic competencies to earn the course credit.

ACADEMIC ADVISING

Strategies for advising students are defined, followed, and continually assessed for their effectiveness. Faculty living in the campus geographic area are the most active participants for academic advisors to the students enrolled in the program.

FACULTY

The program maintains a group of faculty that provides a high caliber experience with on-line course delivery. The strength of the program includes compiling a diverse faculty group with the expertise in specific areas. The diverse faculty are well-prepared with academic degrees and experiences appropriate for their teaching assignments. All faculty members and all courses are evaluated by students on the effectiveness of both the faculty and the course.

PROGRAM SUPPORT

The university, department, and program provide support and expertise to meet the mission and educational goals of the program. The online services and delivery methods use advanced technology.

EXTERNAL COMMUNITY RELATIONSHIPS

Relationships with health care facilities for clinical learning experiences which are external to the university have formal affiliation agreements that clearly define their role. Further, the external advisory committee provides input to the program at its regularly scheduled meetings and offers input periodically throughout the year. The health care community support is to be commended in providing clinical opportunities to the students, an advisory committee, and clinical instructors. The program faculty are also to be commended for maintaining and promoting this relationship.

Table 3. Executive Summary Template for External Reviewer's Observations

Program Review Element	Check the appropriate selection				Provide explanation if not agree with element and/or why unable to evaluate
	Agree	Not Agree	Unable to Evaluate	Not Applicable	
The program's self-study is a realistic and accurate appraisal of the program.	✓				
The program's mission and its contributions are consistent with the institution's role and mission and its strategic goals.	✓				Note: As the program requires completion of general education requirements, the number of graduates will increase.
The program's goals are being met.	✓				
The curriculum is appropriate to the breadth, depth, and level of the discipline.	✓				
The curriculum is current, follows best practices, and/or adheres to the professional standards of the discipline.	✓				
Student demand/enrollment is at an expected level in the context of the institution and program's role and mission.	✓				
The program's teaching-learning environment fosters success of the program's students.	✓				
Program faculty members are appropriately credentialed.	✓				
Program faculty members actively contribute to scholarship, service and advising.					Note: The areas are covered by on-campus full-time faculty. These areas are not completed by one full-time, tenure-track assistant professor and one part-time instructor living away from the geographic area.
Campus facilities meet the program's needs.	✓				
Equipment meets the program's needs.	✓				
Instructional technology meets the program's needs.	✓				
Current library resources meet the program's needs.	✓				

Program Review Element	Check the appropriate selection				Provide explanation if not agree with element and/or why unable to evaluate
	Agree	Not Agree	Unable to Evaluate	Not Applicable	
Student learning outcomes are appropriate to the discipline, clearly stated, measurable, and assessed.	✓				
Program faculty members are involved in on-going assessment efforts.	✓				
Program faculty members analyze student learning outcome data and program effectiveness to foster continuous improvement.	✓				
The program's articulation of its strengths and challenges is accurate/ appropriate and integral to its future planning.	✓				

September 7, 2012

RECOMMENDATIONS

Design a method for the full-time and part-time faculty members not living in the geographic area of the campus to assist in providing student advising by email, online forum, telephone, text messaging, etc.

For the purpose of increasing enrollment, recruit experts to evaluate and promote methods to increase the awareness and benefits of the BAS program. One of the major benefits is students do not need to relocate or travel to gain the advanced degree and education.

EXEMPLARY ELEMENT

The enthusiast Program Director has incorporated mentoring and experience which provides the BAS program with the follow-up to obtain and evaluate student learning and the outcome assessments. As a professional role-model, Dr. Ward provides the students with academic and program advisement. Dr. Ward is also committed to continue to build and enhance the program.

The campus Desire2Learn resources are commendable. The courses available for the reviewer to evaluate provided current and relevant content using diverse learning methods to complete the required course assignments and examinations.

IMPROVEMENT DURING REVIEW CYCLE

As the university continues to gather program outcomes and assessment plans, the program should be in a position to clearly identify how that process is directly related to

the standards for program enhancement. This review cycle had little evidence since the program has received only a few completed graduate surveys.

The data collection from student learning, outcomes, curriculum assessment, national certification results, and graduate employment should be available for evaluation prior to the next review cycle. The next program review should evaluate how the data was collected, analyzed, and the results were implemented to enhance the program.

SUMMARY

It is the reviewer's hope the evaluation report of the AAS and BAS programs in Radiologic Technology assists the Colorado Mesa University's administration in appraising its educational effectiveness and identifying methods in which its endeavors can be strengthened. This review of the two programs based on the program's self-study, evaluation of eight online courses, and interviews with faculty, staff, administrators, and students. The reviewer applauds the Program Director and faculty for their use of expertise and experience to make a substantive contribution to the university, department, medical community, and to the profession.

If there are any questions, concerns, or comments regarding this report, please contact me. Thank you for inviting me to have this opportunity.

Respectfully submitted,



Diane M. Kawamura, Ph.D., RT(R), RDMS, FAIUM, FSDMS
April 2, 2014

From: Ward, Patti
Sent: Friday, April 11, 2014 12:33 PM
To: Werman, Steve
Subject: Re: FW: Emailing: CMU Report External Reviewer Rad Tech AAS-BAS

Hi Steve, I don't know if this is the type of comment desired...

The only section that I have a comment about regards the BAS Program under the External Community Relationships section:

"Further, the external advisory committee provides input to the program at its regularly scheduled meetings and offers input periodically throughout the year. The health care community support is to be commended in providing clinical opportunities to the students, an advisory committee, and clinical instructors. The program faculty are also to be commended for maintaining and promoting this relationship."

The BAS program does not have an advisory committee. Because the program is online, we have many students at clinical sites in and out of state. We do have good relationships with the local health care community.

I appreciated the thoroughness of the external reviewer.

Please let me know if you have questions or concerns.

Patti