



One Year Periodic Program Review Report

Academic Programs

Radiologic Technology Program

AAS – Radiologic Technology

Statement of Collaboration

The program faculty, college staff, students, and community members listed below collaborated in an open and forthright dialogue to prepare this Periodic Program Review. Statements included herein accurately reflect the conclusions and opinions of this group.

Participants in the review:

Department Faculty: Patty Gauthier, Katie Kogut

Non-discipline Faculty: None

Associate Faculty: Adriana Estrada

Student/Alumni: Angela Bower

Academic Support: Staff: Billie Seabolt

Date Submitted to the Dean of Instruction

4/29/2016

Authorization

After the document is complete, print just this page and submit it to the Office of Instruction for the Dean's signature.

Signature of Dean _____

1. Mission and Goals

MCC Radiologic Technology Program Mission Statement

Building upon the mission of Mohave Community College, the mission statement of the Radiologic Technology Program is to provide the students with the highest quality education and to prepare students to demonstrate competence at the entry-level as they perform radiologic procedures safely, ethically and compassionately.

Mohave Community College Mission Statement

The mission of Mohave Community College is to be a learning-centered institution, serving all constituencies, inspiring excellence through innovation and empowering students to succeed.

Goals of Mohave Community College Radiologic Technology Program	1. Educational	2. Cultural	3. Civic	4. Resources
Demonstrate effective communication skills during all interactions with clients, families, peers, faculty, and others.	√	√	√	√
Demonstrate an ability to perform the professional duties of a Radiologic Technologist: listen attentively to the patient's concerns, explain and help the patient through the procedure with an understanding of cultural diversity and age-specific care, and provide a compassionate approach to patients with disabilities.	√	√	√	√
Competently comply with departmental and institutional policies of completing procedures and producing quality diagnostic images.	√			√
Begin to use theory and evidence-based practice principles to formulate clinical judgments and enhance professional role development.	√	√		√
Work effectively as a valuable member of the health profession.	√	√	√	√

Mohave Community College Goals, Values & Vision Statement

Goals

Mohave Community College strives to provide high quality, affordable and accessible higher education to all who seek it.

Educational: Mohave Community College supports an academic learning-centered community through implementation of quality teaching initiatives, professional development, integration of learning technology, development of partnerships, delivery of effective student support services, and by providing accurate information and advising.

Cultural: Become a conduit between businesses, organizations, foundations and the arts to strengthen understanding of the world through education.

Civic: Promote active citizenship within the college community.

Resources: Provide resources needed to achieve the mission and vision

Values Statement

Building a Better Tomorrow through Learning: Learning is the core of the Mohave Community College mission. We acknowledge the importance of continuous learning to ensure the best possible future for everyone.

Accountability for the Future: The decisions made today affect individuals in the future. At Mohave Community College, we accept responsibility for our actions and decisions. We hold ourselves accountable to our students, our communities, and to the generations who come after us. MCC decisions will be designed to fulfill our vision for the future, aiming to achieve reliable, long-term improvements over short-term expediency.

Integrity: We remain committed to our values. Our decisions are consistently and courageously made in alignment with our convictions. We consciously foster an atmosphere of openness and trust, making data-driven decisions that are balanced by a cultivated sense of compassion.

Responsiveness: We take pride in flexibly responding to our changing environment, promptly providing programs that are needed by our students and communities.

Quality: We aim for excellence in all that we do while embracing the concept of efficiency.

Providing a Supportive Environment: Mohave Community College is committed to student success. We show respect to all and work to overcome barriers to honesty, trust and sincerity. We take pride in providing friendly service to our students and communities.

Having Fun: We embrace the concept of having fun and finding joy in our work and services.

These values govern our actions and our interactions with the members of our communities. This statement represents what we value most about the service provided by MCC.

Vision Statement

Mohave Community College is recognized as the center of educational, cultural and civic activities by the communities it serves.

Relationship

Based on the program goals and objectives of the program, the stated goals of the program are consistent with the mission, vision and goals of MCC. The program is directed at the appropriate level and addresses a valid occupational, basic skills, civic education, and life-long learning purpose.

Program Outcomes

As an entry-level radiologic technologist:

- The student will demonstrate written communication competence.
- The student will demonstrate effective oral communication skills.
- The student will critique radiographic images for positioning accuracy.
- The student will select appropriate technical factors.
- The student will differentiate factors affecting image quality and image production.
- The student will demonstrate critical thinking and problem solving skills in the clinical setting.
- The student will demonstrate professionalism, interpersonal skills, and initiative in the clinical setting.
- The student will summarize their professional obligations as a radiographer.

Certificates and Degrees

AAS – Radiologic Technology

2. Program Data and Trend Analysis

2.1. Data

2.1.1. Program Resources (Profit/Loss):

Radiologic Technology

	2012	2013	2014
Program (Prefix)	RAD	RAD	RAD
COUNTS			
Number of Sections	8	13	13
Unduplicated Student Headcount	14	28	25
Duplicated Student Enrollment	112	174	167
Credit Hours	378	602	507
REVENUE SOURCES			
Tuition	\$ 41,040	\$ 61,932	\$ 43,680
Course Fees (2014 includes Program Fees where applicable)	\$ -	\$ -	\$ 51,200
Program Fees: 2012 and 2013 only	\$ 18,200	\$ 37,700	
Instructional Income: Tuition + Course Fees + Program Fees	\$ 59,240	\$ 99,632	\$ 94,880
State Allocation based on hours	\$ 8,779	\$ 15,193	\$ 12,207
Revenues: Instructional Income + State Allocation	\$ 68,019	\$ 114,825	\$ 107,087
State Allocation as a % of Revenues	13%	13%	11%
EXPENSES			
Expenses	\$ 99,475	\$ 87,230	\$ 197,504
Net: Revenues – Expenses	\$ (31,456)	\$ 27,594	\$ (90,416)
Non-Faculty Costs: Those not related to faculty wages or benefits			\$ 87,635
2nd Net: Net + Non-Faculty Costs			\$ (2,781)

The data received from IR is difficult to interpret, and the Office of Instruction was not able to provide other data sources. The program resources have been adequate to provide instruction for students. Office space, classroom and lab space, as well as clinic space meet the program needs. Additionally, the clinic and its equipment have been in service for less than five years, making planning for future updates and replacements unnecessary at this time. The use of Foundation Legacy matched grants has enabled the program to obtain a high level of clinical technology.

2.1.2. *Student Metrics:*

RAD	
Radiologic Technology	
Demographic	2014
Ethnicity	Count
2 or more races	1
Asian	2
Black	0
Hispanic	4
Native American	0
Nonresident Alien	0
Pacific Islander/Hawaiian	0
Unknown	0
White	19
Age Group	
18-19	0
20-21	0
22-24	3
25-29	2
30-39	7
40-49	9
50-59	2
60-100	2
Gender	
Female	17
Male	8
Unreported	0

It is believed that this data is accurate. However, the program actively seeks to recruit male students, into what is typically a female oriented field. The Rad Tech class of 2015 graduated five male students. The Rad Tech program seems to attract white females.

2.1.3. *Instructional Productivity:* The Radiologic Technology program is a lock-step program which does not allow any student course choice. Courses must be taken when offered, therefore, only one section of each course is offered biannually.

2.1.4. *Enrollment Trends:* The Radiologic Technology program has focused on ensuring that the fall semester year one begins with a full cohort of students. As a result of declining applications, several students have been accepted who did not meet minimum standards or were able to maintain the rigors of the program. Unfortunately, this has resulted in an increase in attrition rates.

2.1.5. *Faculty Data Points:* The program director who was initially hired to launch the inaugural program was relieved of her duties before the first cohort completed the program. The new director was brought in to complete JCERT accreditation criteria and revamp program standards and admittance requirements. Since

2013, there have been 4 different technologists hired as ancillary instructors. The inconsistency seems to be a result in providing a salary commensurate with credentials and instructional responsibility. Additionally, the Clinical Coordinator resigned at the end of 2015 and a new coordinator was not hired until 2016. Also, the affiliated clinical education sites have consistent turnover rates with their technologists, having an impact on student success in their clinical education.

2.1.6. *Other Data Points:* The first two graduating cohorts, both had a 100% pass rate in ARRT certification. Two students failed the exam on the first attempt, however passed on a second and third attempt.

2.2. Strengths, Weaknesses, Opportunities, Threats (SWOT)

The following information was collected through meetings with students, the advisory committee and faculty and staff.

2.2.1. What are the strengths of your program as indicated in the above data?

- Cost
- Reputation of the Radiologic Technology program
- Experienced program leadership
- Instructor knowledge and experience
- Facility and equipment
- Team-oriented atmosphere
- Availability of instructional technology
- Small class size
- Accessibility/open door policy
- Increase employment rates
- Collaboration
- Clinical experience enable real world experience
- Curriculum

2.2.2. What are the weaknesses of your program as indicated in the above data?

- Newer generations of students are less prepared for college
- Unreliable MCC computers
- Limited IT staff for emergent computer issues
- Number of program applicants
- Number and location of clinical affiliate sites

2.2.3. What opportunities exist for your program based on the above data?

- Healthcare jobs survive economic difficulties
- Community outreach
- Various educational resources
- Ability to attract students from outside the area

- Career/college fairs
- Advisory committee
- Advanced modalities

2.2.4. What threats exist for your program based on the above data?

- Increased competition from other local programs
- Disease transmission
- Limited affiliated sites
- Sharing clinical sites with other local colleges
- JCERT regulations mandate limited student placement
- Injury
- More graduates make job placement more difficult
- Radiologic Technology job market

3. Assessment of Student Learning

3.1. What percentage of courses have identified student learning outcomes (SLOs)?

Considering the fact that the Radiologic Technology program was started in 2012, with the first cohort graduating in 2014, assessment data is limited. However, we participated in Writing Across the Curriculum in 2014-2015 in RAD 100, 130, 170, and 140.

3.2. What percentage of courses have ongoing SLO assessment? (comment on progress/lack of progress)

Four (4/12) Radiologic Technology courses have participated in SLO assessment projects, or 33%.

3.3. How has assessment of course level SLOs led to improvements in student learning and achievement?

Student instruction has been modified due to the feedback from ARRT results, particularly in the area of physics. Modifications have included introducing topics from the physics curriculum earlier in the program so that they can be applied to other radiologic technology concepts. Additionally, more assessments are including short answer and essay questions which encourage students to use writing skills developed through WACUM assessments which illustrates their thought processes and provides evidence of critical thinking skills.

3.4. How has assessment of program-level SLOs led to improvements in transfer or certificate/degree awards?

A stronger pathway has been developed for students to matriculate into 4 year programs and/or pursue advanced modalities at the completion of the Radiologic Technology program.

3.5. What challenges remain to make course and program level SLOs more effective?

Ensuring that adequate attention is available to meet all student needs, considering the limited staff.

4. Evaluation of Progress Toward Previous Goals

4.1. Evaluate steps taken to achieve goals established in the last periodic program review.

The Radiologic Technology program continues to maintain JRCERT accreditation.

4.2. In cases where resources were allocated towards goals, evaluate the efficacy of that spending.

N/A

5. Program Goals and Plan

5.1. Short-term Goals (2 year cycle):

Goal 1: Increase the number of program applicants that exceeds number of students that can be accepted to program according to JRCERT criteria.

Measurable Outcome: Number of applications received increases from past two years of 8 and 12 respectively and exceeds 14 making candidate selection more reflective of academic potential, readiness and proper occupational fit.

Plan: Increase number of annual, tri-campus informational sessions from 3-5. Have departmental representative attend all local HS career fairs. Work more closely with MCC student recruiter and multi-campus advisors to keep them informed of program requirements, changes and timelines.

Goal 2: Provide clinical environments that foster excellence in learning and encourage inquiry and creativity while strengthening relationships with community members and organizations.

Measurable Outcome: The number of educational clinical sites increase beyond the current six.

Plan: Research medical, clinical facilities, and out patient facilities which house imaging departments and are within 250 of MCC.

What specific aspects of these goals can be accomplished without additional financial resources?

Both goals can be accomplished without additional financial resources.

5.2. Long-term Goals (4 year cycle):

Goal 1: Increase retention rates. Retain the number of students from the start of the program to the end of the program with passing grades.

Measurable Outcome: Midterm grades and evaluations, follow-ups on plan of action sheets grades at end of semester at or above 82# and all cohort pass.

Plan: Use early alert system, mandate supplemental instruction, encourage use of Student success center and other college resources, provide "grade improvement sheets" and "plan of action sheets."

Goal 2: Improve graduate performance on national certification exam.

Measurable Outcome: ARRT results show scores 10% higher and above 76.

Plan: Begin section reviews before final semester, require additional mock tests taken, have commercial review session for all done by Kettering.

What specific aspects of these goals can be accomplished without additional financial resources?

These goals should be able to be accomplished without additional resources.

6. Requests for Resources N/A

7. Executive Summary

- Program benefit from instructor knowledge and experience, teamwork and collaboration. In addition, ongoing assessment and curriculum develop keeps the program on the cutting edge. The program has excellent reputations in the community.
- Please list 3 – 5 areas of enhancement for the program(s). The program would be enhanced by an update in IT services enabling the students to more seamlessly access technology used for electronic health records and digital radiography. The number of radiologic technology program applicants has decreased, therefore

reaching out to other rural areas is a priority. Employ Clinical Instructors through MCC to act as preceptors at the affiliated clinical sites.

- Please identify ways the department will address student learning (assessment efforts, curricular redesign, etc.). Returning to an emphasis on learning not just radiology skills but employability skills, such as professionalism, attendance and respect is required. Assessment efforts continue with a focus on Writing Across the Curriculum, Reading Across the Curriculum, maintaining ASRT curriculum standards, ARRT competency changes, and JRCERT accreditation requirements. Early identification of student difficulties has been an ongoing focus, with those students being offered tutoring both within and outside the program.
- Based on programmatic analysis, please list 2 – 3 specific questions or areas which you would like the program reviewers to comment on or make recommendations. What resources are available to assist instructors who are struggling with students who don't take responsibility for learning? What budget planning assistance is available should the program have less than 14 students?
- Identify any requests for resources that result from this review. N/A

Who to Call?

Questions about any report sections, resource allocations/budget requests.	Office of Instruction	Paula Norby, Dean of Instruction ext. 1918
Questions about assessment of student learning.	Office of Instruction	Jen Shumway, Director of Curriculum and Assessment
Need more data?	Institutional Research	Bob Faubert, IR Director ext. 1140