

Weber State University
Annual Assessment of Evidence of Learning

Cover Page

Department/Program: Radiologic Sciences Undergraduate
Academic Year of Report: 2014/15
Date Submitted: 11/17/2015
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A. **Brief Introductory Statement:**

Please review the Introductory Statement and contact information for your department displayed on the assessment site:

<http://www.weber.edu/portfolio/departments.html> - if this information is current, please place an 'X' below. No further information is needed. We will indicate "Last Reviewed: [current date]" on the page.

XX Information is current; no changes required.

Information is not current; updates below.

Update:

B. Mission Statement

Please review the Mission Statement for your department displayed on the assessment site: <http://www.weber.edu/portfolio/departments.html> - if it is current, please indicate as much; we will mark the web page as “Last Reviewed [current date]”. No further information is needed. If the information is not current, please provide an update:

XX__ Information is current; no changes required.

__ Information is not current; updates below.

C. Student Learning Outcomes

Please review the Student Learning Outcomes for your department displayed on the assessment site:

<http://www.weber.edu/portfolio/departments.html> - if they are current, please indicate as much; we will mark the web page as “Last Reviewed [current date]”. No further information is needed.

If they are not current, please provide an update:

___ **Information is current; no changes required.**

___ **Information is not current; updates below.**

Additionally all courses of study will be evaluated using the following grid which is appropriate for benchmarking with other programs in the Radiologic Sciences.

Radiography Program

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Radiography Program the student will be able to;			
Identify the biological effects of radiation.	<u>Successful Completion of:</u> Radtec 1303; 3403	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment	1. Annually 2. Annually 3. Every semester
Demonstrate proper radiation protection procedures during diagnostic procedures.	<u>Successful Completion of:</u> Radtec 1022; 3403; 1502/1601; 1512/1621; 1522/1641; 1532/1661; 1542/1681 <u>Clinical Evaluations:</u> Radtec 2861-2865	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment	1. Annually 2. Annually 3. Every semester

<p>Demonstrate proper use and understanding of radiation exposure monitors and diagnostic radiation equipment.</p>	<p><u>Successful Completion of:</u> Radtec 1303, 2403, 3443; 1502/1601; 1512/1621; 1522/1641; 1532/1661; 1542/1681 <u>Clinical Evaluations:</u> Radtec 2861-2865</p>	<p>1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment</p>	<p>1. Annually 2. Annually 3. Every semester</p>
<p>Demonstrate, select, accurately explain and produce diagnostic quality radiographs.</p>	<p><u>Successful Completion of:</u> Radtec 1303; 2403; 3443; 1502/1601; 1512/1621; 1522/1641; 1532/1661; 1542/1681 <u>Clinical Evaluations:</u> Radtec 2861-2865</p>	<p>1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Employer Surveys 4. Clinical Evaluation & Personal & Professional Growth Assessment</p>	<p>1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Every semester</p>
<p>Demonstrate repeated competency in accurately explaining the proper radiographic film processing technique.</p>	<p><u>Successful Completion of:</u> Radtec 1303; 2403; 3443; 1502/1601; 1512/1621; 1522/1641; 1532/1661; 1542/1681 <u>Clinical Evaluations:</u> Radtec 2861-2865</p>	<p>1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Job placement rates 4. Employer Surveys 5. Clinical Evaluation & Personal & Professional Growth Assessment</p>	<p>1. Annually 2. Annually 3. Annually 4. Every 3 years (next 2018) 5. Every semester</p>
<p>Demonstrate and accurately interpret quality assurance testing.</p>	<p><u>Successful Completion of:</u> Radtec 1303; 2403; 3443; 1542/1681 <u>Clinical Evaluations:</u> Radtec 2861-2865</p>	<p>1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment</p>	<p>1. Annually 2. Annually 3. Every semester</p>

Demonstrate proper evaluation and critique of radiographic positioning, technical factors, anatomy, physiology and pathology.	<u>Successful Completion of:</u> Radtec 1502/1601; 1512/1621; 1522/1641; 1532/1661; 1542/1681; <u>Clinical Evaluations:</u> Radtec 2861-2865	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment	1. Annually 2. Annually 3. Every semester
Demonstrate legal and professional responsibility.	<u>Successful Completion of:</u> Radtec 3003; 3403; 2043; 3423; 1022 <u>Clinical Evaluations:</u> Radtec 2861-2865	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment	1. Annually 2. Annually 3. Every semester
Demonstrate appropriate patient education, safety and comfort skills.	<u>Successful Completion of:</u> Radtec 1022; 2043; 3003; 2263; 1502/1601; 1512/1621; 1522/1641; 1532/1661; 1542/1681; <u>Clinical Evaluations:</u> Radtec 2861-2865	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment	1. Annually 2. Annually 3. Every semester
Demonstrate acceptable methods of infection control and prevention.	<u>Successful Completion of:</u> Radtec 1022; 2043; 3003; 2263; 1502/1601; 1512/1621; 1522/1641; 1532/1661; 1542/1681 <u>Clinical Evaluations:</u> Radtec 2861-2865	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment	1. Annually 2. Annually 3. Every semester
Demonstrate proper patient monitoring during radiographic procedures.	<u>Successful Completion of:</u> Radtec 2043; 3003; 2263	1. Utah State Practical Technician results Examination	1. Annually 2. Annually

	<u>Clinical Evaluations:</u> Radtec 2861-2865	2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment	3. Every semester
Demonstrate appropriate responses to diverse patient populations.	<u>Successful Completion of:</u> Radtec 3003; 3023 <u>Clinical Evaluations:</u> Radtec 2861-2865	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Clinical Evaluation & Personal & Professional Growth Assessment 4. Employer Surveys 5. Graduate Surveys	1. Annually 2. Annually 3. Annually 4. Every 3 years (next 2018) 5. Every 3 years (next 2018)
Demonstrate a sense of professionalism and desire to learn.	<u>Successful Completion of:</u> Radtec 1022; 3003; 2866 Student acceptance into specialty programs	1. Utah State Practical Technician results Examination 2. ARRT Examination results 3. Employer Surveys 4. Graduate Surveys 5. Exit interviews 6. Clinical Evaluation & Personal & Professional Growth Assessment	1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Every 3 years (next 2018) 5. Annually 6. Every semester
Demonstrate continued competency through lifelong learning.	Student acceptance into specialty programs	1. Employer Surveys 2. Graduate Surveys 3. Exit Interviews 4. Clinical Evaluation & Personal & Professional Growth Assessment	1. Every 3 years (next 2018) 2. Every 3 years (next 2018) 3. Annually

			4. Every semester
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Advanced Radiography, Imaging Specialties and Radiation Therapy

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Advanced Radiography, Imaging Specialties & Radiation Therapy Program, the student will be able to;			
Identify the biologic effects of ionizing radiation.	<u>Successful Completion of:</u> RT 3403, 3443	Certification examination results	Annually
Demonstrate proper radiation protection procedures during diagnostic procedures.	<u>Successful completion of:</u> RT 4863 – CT; RT 4861&4862 – Mammo RT 5861, 5862, 5863, 5864 & 5865 – RPA NM 4861, 4862, 4863 RTH 4861, 4862, 4863	1. Certification examination results 2. Employer Surveys	1. Annually 2. Every 3 Years (next 2018)
Demonstrate patient assessment, monitoring and management skills.	<u>Successful completion of:</u> RT 3243 & RT 3253 RT 3263, RT 4303 RT 5363 & 4423 -- RPA RTH 4425– Rad Therapy <u>Clinical evaluations</u>	1. Certification examination results 2. Employer Surveys	1. Annually 2. Every 3 Years (next 2018)
Demonstrate appropriate patient education, safety and comfort skills.	<u>Successful completion of:</u> RT 3003, RT 3043 RT 4203, RT 4223 RT 4572-- Mammography RTH 4425– Rad Therapy <u>Clinical evaluations</u>	1. Certification examination results 2. Employer Surveys	1. Annually 2. Every 3 Years (next 2018)

Demonstrate legal, professional and ethical responsibility.	<u>Successful completion of:</u> RT 3003, RT 3043 RT 4253, RT 4233 <u>Clinical evaluations</u>	Certification examination results	Annually
Demonstrate knowledge of anatomy, physiology and pathophysiology	<u>Successful completion of:</u> RT 3023, RT 3123	1. Certification examination results 2. Employer surveys	1. Annually 2. Every 3 years (next 2018)
Demonstrate appropriate responses to diverse patient populations	<u>Successful completion of:</u> RT 3003, RT 4203, RT 3243 RT 3253, RT 5363 <u>Clinical evaluations</u>	1. Certification examination results 2. Employer surveys 3. Graduate surveys	1. Annually 2. Every 3 years (next 2008) 3. Every 3 years (next 2018)
Demonstrate knowledge and application of federal regulations	<u>Successful completion of:</u> RT 3043, RT 3423 RT 4243, RT 4253 RT 4213 Clinical evaluations	1. Certification examination results 2. Employer surveys	1. Annually 2. Every 3 years (next 2018)
Demonstrate a sense of professionalism and desire to learn	<u>Successful completion of:</u> RT 4803, RT 4933 RT 4943, RT 4922, RT 4942, RT 4992 Active participation in professional organizations; acceptance into graduate programs	1. Exit interviews 2. Graduate surveys 3. Employer surveys	1. Annually 2. Every 3 years (next 2018) 3. Every 3 years (next 2018)
Demonstrate continued competency through lifelong learning	Active participation in professional organizations Acceptance into graduate school	1. Maintenance of active certification status 2. Employer surveys 3. Employment rate 4. Graduate surveys	1. Every 3 years (next 2018) 2. Every 3 years (next 2018) 3. Every 3 years

			(next 2018) 4. Every 3 years (next 2018)
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Computerized Tomography/Magnetic Resonance Imaging (CT/MRI)

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Computerized Tomography/Magnetic Resonance Imaging Program, the student will be able to;			
Demonstrate proper use of imaging equipment.	<u>Successful Completion of:</u> RT 4603, RT 4623, RT 4663, RT 3463 <u>Clinical evaluations:</u> RT 4863	1. Certification examination results 2. Employer surveys 3. Graduate surveys	1. Annually 2. Every 3 years (next 2018) 3. Every 3 years (next 2008)
Demonstrate proper selection of technical factors to produce diagnostic imaging.	<u>Successful completion of:</u> RT 4633, RT 4643 RT 4613, RT 4653 RT 4911, RT 4912 <u>Clinical evaluations:</u>	1. Certification examination results 2. Employment rate 3. Graduate surveys	1. Annually 2. Annually 3. Every 3 Years (next 2018)
Demonstrate and accurately interpret quality assurance testing.	<u>Successful completion of:</u> RT 3443, RT 4603 RT 4663 <u>Clinical evaluations:</u>	1. Certification examination results 2. Employer surveys	1. Annually 2. Every 3 Years (next 2018)
Demonstrate proper evaluation and critique of diagnostic images for accuracy of technical factors, patient positioning, anatomy, contrast injection and pathology.	<u>Successful completion of:</u> RT 4633, RT 4643	1. Certification examination results 2. Employer surveys	1. Annually 2. Every 3 Years (next 2018)

	RT 4613, RT 4653 RT 4623, RT 4911 and RT4912	3. Employment rate 4. Graduate surveys	3. Annually 4. Every 3 Years (next 2018)
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Cardiovascular-Interventional Technology (CVIT)

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Cardiovascular-Interventional Technology Program, the student will be able to;			
Demonstrate proper use of imaging equipment.	<u>Successful Completion of:</u> RT 3463, RT 4913, ARRT certification <u>Clinical evaluations:</u> RT 4863	1. Certification examination results 2. Employment rates	1. Annually 2. Annually
Demonstrate proper use of technical factors to produce diagnostic images.	<u>Successful completion of:</u> RT 4313, RT 4333, RT 4343 <u>Clinical evaluations:</u>	Certification examination results	Annually
Demonstrate and accurately interpret quality assurance testing.	<u>Successful completion of:</u> RT 3443, RT 3463 ARRT certification	Certification examination results	Annually

	<u>Clinical evaluations:</u>		
Demonstrate proper evaluation and critique of diagnostic images for accuracy of technical factors, patient positioning, anatomy, contrast injection and pathology.	<u>Successful completion of:</u> RT 4313, RT 4333 and RT4343	1. Certification examination results 2. Employment rate 3. Employer surveys	1. Annually 2. Annually 3. Every 3 Years (next 2018)

Mammography

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Mammography Program, the student will be able to;			
Demonstrate proper use of imaging equipment	<u>Successful Completion of:</u> RT 4563 <u>Clinical evaluations:</u> RT 4861, RT 4862	1. Certification examination results 2. Employment rate 3. Employer surveys	1. Annually 2. Annually 3. Every 3 Years (next 2018)
Demonstrate proper selection of technical factors to produce diagnostic images	<u>Successful Completion of:</u> RT 4553, RT 4563 <u>Clinical evaluations:</u> RT 4861, RT 4862	1. Certification examination results 2. Employment rate 3. Employer surveys	1. Annually 2. Annually 3. Every 3 Years (next 2018)
Demonstrate and accurately interpret quality assurance testing.	<u>Successful completion of:</u> RT 4583 <u>Clinical</u>	1. Certification examination results 2. Employer surveys	1. Annually 2. Every 3 Years (next 2018)

	<u>evaluations:</u> RT 4861, RT 4862		
Demonstrate proper evaluation and critique of diagnostic images for accuracy of technical factors, patient positioning, anatomy, contrast injection and pathology.	<u>Successful completion of:</u> RT 4553, RT 4563 and RT4572 <u>Clinical evaluations:</u> RT 4861, RT 4862	1. Certification examination results 2. Employer surveys 3. Employment rate	1. Annually 2. Every 3 Years (next 2018) 3. Annually

Diagnostic Medical Sonography

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Diagnostic Medical Sonography Program, the student will be able to;			
Demonstrate proper use of imaging equipment	<u>Successful Completion of:</u> DMS 4103, 4641, 4642, 4643, 4644, 4645 <u>Clinical evaluations:</u> DMS 4861, 4862, 4863, 4864, 4865, 4866, 4867	1. Certification examination results 2. Employer surveys 3. Exit interviews 4. Employment rate	1. Annually 2. Every 3 years (next 2018) 3. Annually 4. Annually
Demonstrate proper selection of technical factors to produce diagnostic images	<u>Successful Completion of:</u> DMS 4103, 4303, 4323, 4343, 4403, 4503, 4523 <u>Clinical evaluations:</u>	1. Certification examination results 2. Exit Interviews 3. Employer surveys 4. Employment rate	1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Annually

Demonstrate and accurately interpret quality assurance testing.	<u>Successful completion of:</u> DMS 4103, 4143 <u>Clinical evaluations:</u>	Certification examination results	Annually
Demonstrate proper evaluation and critique of diagnostic images for accuracy of technical factors, patient positioning, anatomy, contrast injection and pathology.	<u>Successful completion of:</u> DMS 4303, 4323, 4343, 4403, 4503, 4523 <u>Clinical evaluations:</u>	1. Certification examination results 2. Exit Interviews 3. Employer surveys 4. Graduate surveys 5. Employment rate	1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Every 3 years (next 2018) 5. Annually

Nuclear Medicine

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Nuclear Medicine Program, the student will be able to;			
Demonstrate proper use of imaging equipment	<u>Successful Completion of:</u> RT 3463, NM 4303, 4333 <u>Clinical evaluations:</u> NM 4861, 4862, 4863	1. Certification examination results 2. Employer surveys 3. Graduate surveys 4. Employment rate	1. Annually 2. Every 3 years (next 2018) 3. Every 3 years (next 2018) 4. Annually
Demonstrate proper selection of radiopharmaceuticals and technical factors to produce diagnostic images	<u>Successful Completion of:</u> NM 4103, 4203, 4213, 4303, 4333, 4223 <u>Clinical evaluations:</u>	1. Certification examination results 2. Employer surveys 3. Graduate surveys 4. Employment rate	1. Annually 2. Every 3 years (next 2018) 3. Every 3 years (next 2018) 4. Annually

Demonstrate and accurately interpret quality assurance testing.	<u>Successful completion of:</u> NM 4303, 4333 ARRT certification in radiography	1. Certification examination results 2. Employer surveys	1. Annually 2. Every 3 years (next 2018)
Demonstrate proper evaluation and critique of diagnostic images for accuracy of technical factors, patient positioning, anatomy, nuclide injection and pathology.	<u>Successful completion of:</u> NM 4103, 4203, 4213, 4223 <u>Clinical evaluations:</u>	1. Certification examination results 2. Employer surveys	1. Annually 2. Every 3 years (next 2018)

Radiation Therapy

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Radiation Therapy Program, the student will be able to;			
Demonstrate proper use of treatment equipment	<u>Successful Completion of:</u> RTH 4330, 4342, 4444 <u>Clinical evaluations:</u> RTH 4861, 4862, 4863	1. Certification examination results 2. Employer surveys 3. Graduate surveys 4. Employment rate	1. Annually 2. Every 3 years (next 2018) 3. Every 3 years (next 2018) 4. Annually
Demonstrate proper interpretation of treatment prescriptions, treatment fields and procedures	<u>Successful Completion of:</u> RTH 4410, 4412, 4414, 4444 <u>Clinical evaluations:</u> RTH 4861, 4862, 4863	1. Certification examination results 2. Employer surveys 3. Graduate surveys 4. Employment rate	1. Annually 2. Every 3 years (next 2018) 3. Every 3 years (next 2018) 4. Annually
Demonstrate and accurately interpret quality assurance testing.	<u>Successful completion of:</u>	1. Certification examination results	1. Annually 2. Every 3 years

	RTH 4330, 4446 ARRT certification in radiography	2. Employer surveys 3. Graduate surveys 4. Employment rate	(next 2018) 3. Every 3 years (next 2018) 4. Annually
Demonstrate proper evaluation and critique of treatment simulation and delivery, patient positioning and protection, anatomy, and pathology.	<u>Successful completion of:</u> RTH 4342, 4410, 4412, 4414, 4444 <u>Clinical evaluations:</u>	1. Certification examination results 2. Employer surveys 3. Graduate surveys 4. Employment rate	1. Annually 2. Every 3 years (next 2018) 3. Every 3 years (next 2018) 4. Annually

Radiology Practitioner Assistant

Objective	Internal Measurement	External Measurement	Data Collection
Upon completing the Radiology Practitioner Assistant Program, the student will be able to;			
Demonstrate proper use of imaging equipment.	<u>Successful Completion of:</u> RT 3443, 3463, 5403, 5413, 5423, 5433, 5453 <u>Clinical evaluations:</u> RT 5861, 5862, 5863, 5864, 5865, 5867	1. Certification examination results 2. Employment rate 3. Employer survey 4. Graduate Survey	1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Every 3 years (next 2018)
Demonstrate efficient use of imaging and fluoroscopic equipment to produce diagnostic images.	<u>Successful Completion of:</u> RT 5403, 5413, 5423, 5433, 5453 <u>Clinical evaluations:</u>	1. Certification examination results 2. Employment rate 3. Employer survey 4. Graduate Survey	1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Every 3 years (next 2018)

<p>Demonstrate and accurately interpret quality assurance testing.</p>	<p><u>Successful Completion of:</u> RT 3443 ARRT certification in radiography</p>	<p>1. Certification examination results 2. Employment rate 3. Employer survey 4. Graduate Survey</p>	<p>1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Every 3 years (next 2018)</p>
<p>Demonstrate proper evaluation and critique of diagnostic images for accuracy in technical factors, patient positioning, anatomy, contrast injection and pathology.</p>	<p><u>Successful Completion of:</u> RT 5403, 5413, 5423, 5433, 5453 <u>Clinical evaluations:</u></p>	<p>1. Certification examination results 2. Employment rate 3. Employer survey 4. Graduate Survey</p>	<p>1. Annually 2. Annually 3. Every 3 years (next 2018) 4. Every 3 years (next 2018)</p>

D. Curriculum

Please review the Curriculum Grid for your department displayed on the assessment site: <http://www.weber.edu/portfolio/departments.html> - if it is current, please indicate as much; we will mark the web page as “Last Reviewed: [current data]”. No further information is needed. If the curriculum grid is not current, please provide an update:

- XX** Information is current; no changes required.
- ___ Information is not current; updates below

Curriculum Map

	Department/Program Learning Outcomes							
	Learning Outcome 1	Learning Outcome 2	Learning Outcome 3	Learning Outcome 4	Etc...			
Core Courses in Department/Program								

Note^a: Define words, letters or symbols used and their interpretation; i.e. 1= introduced, 2 = emphasized, 3 = mastered or I = Introduced, E = Emphasized, U = Utilized, A = Assessed Comprehensively; these are examples, departmental choice of letters/numbers may differ
Note^b: Rows and columns should be transposed as required to meet the needs of each individual department

Additional Information (if needed)

E. Assessment Plan

Please review the Assessment Plan for your department displayed on the assessment site: <http://www.weber.edu/portfolio/departments.html> - if the plan current, please indicate as much; we will mark the web page as “Last Reviewed [current date]”. No further information is needed.

The site should contain an up-to-date assessment plan with planning going out a minimum of three years beyond the current year. Please review the plan displayed for your department at the above site. The plan should include a list of courses from which data will be gathered and the schedule, as well as an overview of the assessment strategy the department is using (for example, portfolios, or a combination of Chi assessment data and student survey information, or industry certification exams, etc.).

Please be sure to include your planned assessment of any general education courses taught within your department. This information will be used to update the General Education Improvement and Assessment Committee’s planning documentation.

Assessment plan:

The assessment plan is current, up-to-date and meeting the departments undergraduate expectation

F. Report of assessment results for the most previous academic year:

All courses in the Department of Radiologic Sciences are offered on a step lock semester basis. All courses listed under (as found in the curriculum grid) the above six competencies are evaluated every semester using pre and post testing while building on the knowledge from the previous semester. The final direct measurement of the six competencies is national certification score of all undergraduate programs.

Utilizing the pre and post testing model the following has occurred:

PATIENT CARE AND EDUCATION

AAS (Radiography) 94% of all students in the Radiography program scored above 70% at the end of each course in the sequence.

BS

--Advance Radiography 92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Cardio Interventional No students in this program last year
--CT 87% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS medical 95% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS cardiac 90% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS vascular 86% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--MRI 90% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Nuclear Med. 87% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--RA no students currently enrolled in this program
--Rad. Therapy 92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Women's Imaging 100% of all students in the Radiography program scored above 70% at the end of each course in the sequence

Outcomes, Changes and Planning

1. Students overall appear to be retaining critical inform semester to semesters that is required for successful completion of the program of study and clinical practice.
2. The required course is preparing students appropriately for clinical placement, success in gaining competencies and passing national certification and state licensing.
3. Lab courses continue to evolve to reflect changes directly related to patient care skills that are required for certification and clinical practice.
4. Clinical education requirements for patient care and education reflect a competency and re-competency model for continued competencies
5. Course and clinical competencies are being developed to reflect patient satisfactions scores as required by clinical education sites and compliance with federal and state healthcare laws.

6. Additional lab assistants have been employed to assist with more one on one instruction with students in a mock clinical environment.

PROFESSIONAL DEVELOPMENT AND RESEARCH

AAS (Radiography)	90% of all students in the Radiography program scored above 70% at the end of each course in the sequence on the directed readings and research courses.
BS	
--Advance Radiography	96% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.
--Cardio Interventional	no students were enrolled in this program
--CT	80% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.
--DMS medical	93% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.
--DMS cardiac	92% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.
--DMS vascular	94% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.
--MRI	95% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.
--Nuclear Med.	82% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.
--RA	No students were enrolled in this program.
--Rad. Therapy	94% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.

--Women's Imaging 97% of all students in the Radiography program scored above 70% at the end of RADT 4933 (research methods course) and successfully completed a Bachelor's thesis project.

Outcomes, Changes and Planning

1. Students overall appear to be retaining critical information from semester to semester on the pre and posttests related to how to complete design and execute an undergraduate research program.
2. Students have been required to join the appropriate professional organizations to stay current with national trend and develop lifelong learning skills.
3. Directed readings, research methods, and Bachelors thesis projects have become required in all programs.
4. Many students still struggle with conducting and writing at a publishable level with under graduate research. The department will investigate the development of a departmental research agenda and the possible part-time/adjunct position to assist the undergraduate students with research that can be transitioned into the graduate programs.

Biologic Effects and Safety

AAS (Radiography) 89% of all students in the Radiography program scored above 70% at the end of each course in the sequence.

BS

--Advance Radiography 93% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Cardio Interventional No students are currently enrolled
--CT 92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS medical 92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS cardiac 92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS vascular 92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--MRI 94% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Nuclear Med. 92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--RA No students are currently enrolled
--Rad. Therapy 96% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Women's Imaging 91% of all students in the Radiography program scored above 70% at the end of each course in the sequence

Outcomes, Changes and Planning

1. On the pre and post testing this section tested very well with the student retaining critical information from one semester to another in all courses of study.
2. There appears to be a disconnection between theory and clinical practice. The students tend to model themselves after clinical personnel and which do not seem to have the same standards related to shielding, protection and safety.
3. Additional information has been added to this section in digital imaging, dose reduction methods.
4. Labs have been improved to test students understanding of safety and quality improvement measures.

Clinical Competency and Medical Ethics

AAS (Radiography) 100% of all students in the Radiography program scored above 70% at the end of each course in the sequence.

BS

--Advance Radiography	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Cardio Interventional	no students are currently enrolled
--CT	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS medical	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS cardiac	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS vascular	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--MRI	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Nuclear Med.	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--RA	no students are currently enrolled
--Rad. Therapy	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Women's Imaging	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence

Outcomes, Changes and Planning

1. Each student must complete required competencies and re-competencies each semester (100%). Several students were unable to complete the requirements and were placed on warning or dismissed from program for failing to meet the critical levels of professional competencies and/or professional ethics.
2. Test retest lab procedures were also established (where appropriate) to further evaluate students ability to perform at appropriate clinical and professional levels.
3. Critical thinking assessments are being added to assist the students with ethical and professional judgment.

Procedures, Anatomy and Pathophysiology

AAS (Radiography)	95% of all students in the Radiography program scored above 70% at the end of each course in the sequence.
BS	
--Advance Radiography	94% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Cardio Interventional	no students are currently enrolled
--CT	87% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS	94% of all students in the Radiography program scored above 70% at the end of each course in the sequence medical
--DMS cardiac	92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS vascular	96% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--MRI	94% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Nuclear Med.	89% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--RA	No students are currently enrolled
--Rad. Therapy	92% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Women's Imaging	100% of all students in the Radiography program scored above 70% at the end of each course in the sequence

Outcomes, Changes and Planning

1. The students overall were more successful with the pre and post testing in this section. With the direct correlation with these courses and clinical internships these findings were expected.
2. Competencies are being implemented to test students' ability to evaluate pathology and its relationship to imaging and patient care.
3. An excellent correlation was also found with the student's final competency requirements in the clinical setting and Campus labs.

Instrumentation and Quality Control

AAS (Radiography)	83% of all students in the Radiography program scored above 70% at the end of each course in the sequence.
BS	
--Advance Radiography	80% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Cardio Interventional	No students are currently in the program

--CT	78% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS	81% of all students in the Radiography program scored above 70% at the end of each course in the sequence medical
--DMS cardiac	81% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--DMS vascular	81% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--MRI	80% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Nuclear Med.	79% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--RA	No students are currently in this program
--Rad. Therapy	83% of all students in the Radiography program scored above 70% at the end of each course in the sequence
--Women's Imaging	82% of all students in the Radiography program scored above 70% at the end of each course in the sequence

Outcomes, Changes and Planning

1. In 2013 this section tested flat from semester to semester on the pre and post testing. This is the most difficult section of the programs and is more difficult to make a direct connection to clinical practice. We have reviewed the course(s) content in these sections and have added additional clinical, classroom and lab activities to increase the scores in this area. Although this section met the criteria the score are still lower than the department would like. We have seen significant improvement in this section with the use of new textbooks and changes in the required task analysis for certifications

National Certification Scores:

National Certification scores will also be used as a direct measure of learning at the end of course of study. The six departmental competencies used for direct measurements of learning in ALL programs in the Department of Radiologic Sciences.

Radiography	100 pass rate with an averages score of 88%
CT	100% pass rate with an average score of 84%
MRI	100% pass rate with an average score of 87%
DMS medical	100% pass rate with an average score of 85%
DMS cardiac	100% pass rate with an average score of 83 %
Radiation therapy	100% pass rate with an average score of 89%
Nuclear medicine	96% pass rate with an average score of 83%
Mammography	100% pass rate with an average score of 95%

All national certification scores for the department are at or above national standards as reported by certification agencies.

Indirect Measurements:

In addition to the direct measurements the department collects, analyses and makes programmatic changes based on the following list of indirect assessment measures:

1. Clinical competency evaluations
2. Personal and Professional growth evaluations
3. Student program exit evaluations
4. Clinical site evaluations
5. Employer surveys
6. Employment rates
7. Graduate surveys
8. Final competency evaluations

The data collected is reviewed regularly in the following manner:

1. All assessment information is discussed at regularly Department faculty meetings.
2. Twice annually, the Department holds an all-day planning meeting to discuss changes and improvements to the programs within the Department.
3. Advisory Committee meetings are held each semester.
4. Individual clinical site issues are discussed regularly with clinical faculty.
5. Appropriate information is shared with students annually during student orientation, during the semester as warranted and/or with student organization leadership.

Some Implications Over The Last Five Years These Results Have Had On The Department And Changes Made:

1. The Diagnostic Medical Sonography program continues to upgrade and facilitate better clinical, lab and didactic time frames for the students and learning outcomes. Additional new sonography equipment has been purchased this past year. We hired additional lab assistants to help with the load and time commitment in these labs. These changes in the program have made it easier and more efficient for student sonographers to enter clinical in the second semester of the program.
2. In 2014, the department employs 6 adjuncts and 5 lab assistants that have helped with faculty load.

3. The clinical competency evaluation system requiring the verification of clinical competency by the radiologist or the supervising technologist is reviewed and revised annually to meet certification agencies requirements and programmatic requirements.
4. New 3D software has been purchased and implemented by the Department to be used within the PACS and RIS systems and has now been implemented into 3 courses and with more being added in 2016.
5. A collaborative project with Dental Hygiene and Radiologic Sciences is currently be implemented and course work is now being offered to local Dentists Hygienists and Radiographer's.
6. The electronic bulletin board has been updated and refined to post information for students and clinical faculty. The student handbook and clinical information is also available to the clinical faculty to assist with clinical education
7. Student evaluations of clinical education sites have been reviewed with each of the clinical sites and changes made to better facilitate the clinical education for students and provide appropriate clinical education that is required for ARRT clinical competencies.
8. The independent study program has reviewed all files and contacted student to re-activate their file for degree completion. In 2014 104 students returned or joined to the program
9. The curricula for the programs were reviewed and appropriate changes made. The faculty is preparing significant changes to all offerings in the department. Most will be ready for curriculum in the fall of 2016.
10. The computer lab and clinical energized labs have been update with new technology and software.
11. Perkins funds were obtained to upgrade computers in the lab.

Please provide the following information about the full-time and adjunct faculty contracted by your department during the last academic year (summer through spring). Gathering this information each year will help with the headcount reporting that must be done for the final Five Year Program Review document that is shared with the State Board of Regents.

Faculty	
Headcount	7
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)	2
Full-time Tenured	2
Full-time Non-Tenured (includes tenure-track)	0
Part-time	0

With Master's Degrees	5
Full-time Tenured	3
Full-time Non-Tenured	2
Part-time	
With Bachelor's Degrees	0
Full-time Tenured	0
Full-time Non-tenured	0
Part-time	0
Other	0
Full-time Tenured	0
Full-time Non-tenured	0
Part-time	0
Total Headcount Faculty	7
Full-time Tenured	5
Full-time Non-tenured	2
Part-time	0

Please respond to the following questions.

- 1) Based on your program's assessment findings, what subsequent action will your program take?

The department maintain a strategic plan that takes annual review into consideration as we develop new programs, purchase educational material, hire new staff and faculty and position the department and our graduates for future success

- 2) Are there assessment strategies within your department or program that you feel are particularly effective and/or innovative? If so, what are those strategies and what do you learn about your students by using them?