

Weber State University
Annual Assessment of Evidence of Learning

Cover Page

Department/Program: Radiologic Sciences Graduate program
Academic Year of Report: 2015/16
Date Submitted: 12-6-16
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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:

Information is current; no changes required.

Information is not current; updates below.

In support of the Weber State University five core values, the Master of Science in Radiologic Sciences has established the following:

1. Learning through personalized experiences and shared inquiry, the MSRS program will:
 - provide learning opportunities for students through a variety of instructional methodologies in multiple settings;
 - identify essential knowledge and skills for imaging graduate students;
 - engage students through a variety of strategies to ensure growth in knowledge, learning processes and research skills;
2. Engaged in the community, the MSRS program will:
 - provide appropriate technologies in order for graduate students to access, gather, organize, and present information related to clinical, educational and professional research.
3. Providing access and opportunity for all, the MSRS program will:
 - assist and support graduate students in professional development and research to improve clinical based research and foundational professional research;
 - provide student orientation to community/campus support services.
4. Respect for people and ideas, the MSRS program will:
 - promote the recruitment and support of students from diverse backgrounds;
 - promote the recruitment and support of faculty from diverse backgrounds;
 - promote appropriate professional behavior, ethics, diversity, and respect for self and others.
5. Nurturing the potential within every individual, the MSRS program will:
 - assist and encourage faculty and graduate students to develop collaborative relationships with other professionals;
 - support and assist with scholarship and grant writing;
 - provide appropriate, accurate, and timely advisement for students within the program

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.

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

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:

 Information is current; no changes required.

XX **Information is not current; updates below**

Curriculum Grid

<i>SIX departmental competencies used for direct measurements of learning in ALL programs in the Department</i>	Patient Care and Education	Professional Development and Research	Biologic Effects and Safety	Clinical Competency and Medical Ethics	Procedures, Anatomy and Pathophysiology	Instrumentation and Quality Control
Masters of Science						
MSRS	MSRS 6443	MSRS 6100	Covered in undergraduate programs	MSRS 6900	MSRS 6130	MSRS 6450
	MSRS 6463	MSRS 6120			MSRS 6140	
	MSRS 6130	MSRS 6200			MSRS 6473	
	MSRS 6120	MSRS 6999			MSRS 6863	

The above grid is utilized for all direct measures of learning. All courses are step lock curriculum and are pre and post tested utilizing multiple choice questions, case studies, simulated clinical scenarios, and radiographic reconstructed and segmented images in each of the six measures as appropriate. All students will complete the pre and post testing each semester in each of the 6 categories. The comprehensive posttest each semester will become the pretest for the next semester.

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

Objective	Internal Measurement	External Measurement	Data Collection
Biologic effects of ionizing radiation.	Undergraduate education	Undergraduate education certification category scores 100 were 75% or higher	Certification required for admission into the MSRS program
Radiation protection procedures during diagnostic procedures.	Undergraduate education	Undergraduate education certification category scores 100 were 75% or higher	Certification required for admission into the MSRS program
Patient assessment, monitoring and management skills.	Successful completion of MSRS courses 6443, 6120 6230 and 6463	Graduate surveys and employer survey	Student course evaluations, graduate evaluations and employer evaluation
Patient education, safety and comfort skills.	Successful completion of MSRS courses 6443, 6120 6230 and 6463	Graduate surveys and employer survey	Student course evaluations, graduate evaluations and employer evaluation
Legal, professional and ethical responsibility.	Successful completion of MSRS Courses 6100, 6120,6200 and 6999	Completion of CITI, WSU IRB and Clinical institutional IRB if required. Data collection and research skills	Course papers and Master’s Thesis and student professional publications

Knowledge of anatomy, physiology and pathophysiology	Successful completion of MSRS 6130, 6140, 6473 and 6863	Graduate surveys and employer survey	Student course evaluations, graduate evaluations and employer evaluation
Responses to diverse patient populations	Completion of MSRS 6200	Graduate surveys and employer survey. Student best practice radiology based research	Epidemiologic health management paper and research
Knowledge and application of federal regulations	Successful completion of MSRS Courses 6100, 6120,6200 and 6999	Completion of CITI, WSU IRB and Clinical institutional IRB if required. Data collection and research skills	Course papers and Master's Thesis and student professional publications
Professionalism and desire to learn	Completion of MSRS 6900	Graduate surveys and employer survey	Number of poster, presentations and publication that result from the student research. Professional and clinical changes that occur from the research
Continued competency through lifelong learning	Completion of MSRS 6900	Graduate surveys and employer survey	Number of students that enter Doctoral programs.

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

The curriculum grid was utilized for all direct measures of learning. All courses are step lock curriculum and were pre and post tested utilizing multiple choice questions, case studies, simulated clinical scenarios, and radiographic reconstructed and segmented images in each of the six measures as appropriate. All students will complete the pre and post testing each semester in each of the 6 categories. The comprehensive posttest each semester will become the pretest for the next semester.

Each Student should score 75% or higher on the comprehensive posttest each semester.

Patient Care and Education 94% of all students in the program scored 75% or higher at the end of each course in the sequence

Professional Development and Research 92% of all students in the program scored 75% or higher at the end of each course in the sequence

Biologic Effects and Safety 95% of all students in the program scored 75% or higher at the end of each course in the sequence

Clinical Competency and Medical Ethics 100% of all students in the program scored 75% or higher at the end of each course in the sequence

**Procedures, Anatomy
and Pathophysiology**

92% of all students in the program scored 75% or higher at the end of each course in the sequence

**Instrumentation
and Quality Control**

89% of all students in the program scored 75% or higher on the post test for this course.

Note--the Biological effects and Safety was obtained from previous certification scores.

In the MSRS 6900: Capstone: Clinical Fellowship & Portfolio, each of the five competencies listed above will be evaluated using course content from all courses in the program. These evaluations will consist of case studies that will evaluate a student's critical thinking skills as it relates to research, problem patient management, appropriateness of imaging procedure, patient management and patient assessment. The student will complete a comprehensive examination in this course;

**2014-15 was the first year that this was given and the 100 of students scored 75% or higher on the cases studies and examination.
2015-16 the test will be administered in early spring semester and will be reported next year**

We also collect the following measurements of student learning and program effectiveness:

- Graduates employment**
- Employer surveys reporting on their impressions of Weber State graduates they employ**
- Graduate surveys reporting on their experiences in the program**
- Regular institutional program review**
- Advisory board review**
- Student course evaluations**
- Student exit evaluations**
- Collection of student artifacts of learning**

Appendix

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	
With Doctoral Degrees (Including MFA and other terminal degrees, as specified by the institution)	
Full-time Tenured	4
Full-time Non-Tenured (includes tenure-track)	
Part-time	1
With Master's Degrees	
Full-time Tenured	2
Full-time Non-Tenured	1
Part-time	
With Bachelor's Degrees	
Full-time Tenured	
Full-time Non-tenured	
Part-time	
Other	
Full-time Tenured	
Full-time Non-tenured	
Part-time	
Total Headcount Faculty	7
Full-time Tenured	
Full-time Non-tenured	
Part-time	

- 1) Based on your program's assessment findings, what subsequent action will your program take?
during the next year the program will add expand the course offerings as outlined in this report**

Strengths and Weaknesses

Strengths

- Clinical-based curriculum
- Dedication of faculty and staff
- Strong undergraduate programs at Associate and Bachelor levels
- Strong support from community partners
- Collaborative student working groups
- Diverse student population

Weaknesses

- Current program is focused on cardiac imaging

Ameliorating Weaknesses 2015-16

- Add course work in MSK ultrasound
- Add options for Osseous System and Chest
- Offer Osseous, Chest and MSK as Inter-professional education courses
- Add course work to for continued registration and publication assistance
- Add course work on grant writing
- Sponsor workshop on Radiology Coding

- Need for additional faculty and resources

Ameliorating Weaknesses 2015-16

- Hire adjunct faculty to develop and teach MSK courses
- Hire adjunct radiologist to teach the osseous and Chest course

-Non-focused research agenda

Ameliorating Weaknesses 2015-16

- Obtain grant funding to create 3D imaging research agenda
- Publish more faculty and Student research
- Consider graduate research and publication assistants
- Better utilize the writing center on campus
- Sponsor a writing boot camp for the students
- Obtain a 75 thousand endowed graduate publication and research fund

Enhancing strengths 2015-16

- Expand the course offerings
- Hire new faculty as appropriate
- Continue to expand partnerships around the country
- Comprehensive national student recruitment plan
- Expand student recruitment for a diverse student population
- Work with WSU administration and the Dean of International students to recruit more international students

2) ***We are interested in better understanding how departments/programs assess their graduating graduate students. Please provide a short narrative describing the practices/curriculum in place for your department/program. Please include both direct and indirect measures employed.***

The graduating graduate students from the Masters of Sciences, Radiologic Sciences are evaluated in a variety of ways

1. In the final semester of the program the student have a qualifying exam that test their knowledge base for all previous course work as outlined on the curriculum. This exam is part of the MSRS 6900 course.
2. Each student does an exit interview with their respect faculty advisor. The student also may request to have an exit evaluation with the department chair. During this interview the program of study is reviewed to including such things as textbooks, program delivery, testing, time and course content, application to clinical practice, availability and helpfulness from faculty and staff and employment at the time of graduation is also reviewed.

3. We do follow up graduate surveys and employer surveys every three years.

The information obtain is review by the faculty assigned to the specify course of study, the department chair and our advisory committees. Any trends are discussed by the entire faculty and staff and if appropriate our community partners. If there are issue that need to be addressed with other student in the department then the department chair will discuss these issues with students to assure that any issue they might have can be addressed before graduation.