



WEBER STATE UNIVERSITY

**DR. EZEKIEL R. DUMKE COLLEGE of HEALTH PROFESSIONS**

**MASTER OF SCIENCE IN RADIOLOGIC SCIENCES  
FALL 2017 COHORT**

Courses are delivered in a hybrid format, which combines face-to-face learning with online learning. Students will be required to attend class on the WSU-Ogden campus 2-3 times per semester.

**Fall Semester 2017**

MSRS 6100	Research Methods	3
MSRS 6200	Health Behavior and Managerial Epidemiology	3
MSRS 6450	Managing Health Information	3
	<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>9</b>

**Spring Semester 2018**

MSRS 6120	Research and Statistics	3
MSRS 6130	Functional Hemodynamics	3
MSRS 6140	Clinical Laboratory Values	3
	<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>9</b>

**Fall Semester 2018**

MSRS 6463	Problem Patient Management	3
MSRS 6473	Vascular-Non-Invasive Imaging Procedures	3
MSRS 6863	Vascular-Invasive Imaging Procedures	3
	<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>9</b>

**Spring Semester 2019**

MSRS 6443	Clinical Pathways	3
MSRS 6900	Master's Clinical Fellowship and Portfolio	3
MSRS 6999	Master's Thesis	3
	<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>9</b>

The Master of Science in Radiologic Sciences is a step program, completing all course requirements in two-years, four-semester. Students must petition for an extension if they plan to go beyond three years in the program.

<b>MSRS 6100</b>	<b>Research Methods</b>	<b>3</b>
<p>This course assists students to critique, evaluate, and use research within their health science education careers. The research process including the theoretical/conceptual basis of health sciences research, methods, and critique strategies are examined in detail. There is a focus on evaluation of published research reports to evaluate the appropriateness of application of findings to clinical practice.</p>		
<b>MSRS 6120</b>	<b>Research and Statistics</b>	<b>3</b>
<p>This course focuses on the development of research skills used to evaluate data in support of the utilization of findings in clinical practice. Skills related to statistical analysis of quantitative data will be emphasized. Parametric and non-parametric methods of statistical analysis will be discussed.</p>		
<b>MSRS 6130</b>	<b>Functional Hemodynamics</b>	<b>3</b>
<p>This course offers the fundamental principles and indications for invasive hemodynamic monitoring. The indications, possible contraindications and possible complications involved with the insertion of central venous lines, arterial lines, pulmonary artery catheters and ICP monitoring with the expected CVP, RV, PAP, PCWP, CO, and CI reading, waveforms and troubleshooting.</p>		
<b>MSRS 6140</b>	<b>Clinical Laboratory Correlation</b>	<b>3</b>
<p>This course covers the concepts, analytical methods and clinical correlation of laboratory values as they relate to radiographic imaging, pathology, and patient history.</p>		
<b>MSRS 6200</b>	<b>Health Behavior and Managerial Epidemiology</b>	<b>3</b>
<p>This course addresses the integration of epidemiology into strategic planning and managerial decision-making in health services organizations. Epidemiological principles and tools of investigation from clinical and managerial perspectives are addressed. Course work includes environmental analysis of health behaviors and lifestyle that impact demand on health care delivery systems. The student will evaluate models for integration of health services, preventive programs, demand management, and policy issues affecting continuity of care.</p>		
<b>MSRS 6443</b>	<b>Clinical Pathways</b>	<b>3</b>
<p>Studying clinical pathways for patients based on disease processes and trauma.</p>		
<b>MSRS 6450</b>	<b>Managing Health Information</b>	<b>3</b>
<p>Various planning approaches, styles and theories are considered from a corporate decision-making perspective within the unique governance structures of health service organizations. Issues covered include strategic planning and resource allocation within integrated health systems. Environmental analysis explores national health care delivery policy, unique financing structures such as third party payment systems, and open vs. regulated markets and development of comprehensive marketing plans.</p>		
<b>MSRS 6463</b>	<b>Problem Patient Management</b>	<b>3</b>
<p>Determination of pathological conditions utilizing problem-solving case studies</p>		
<b>MSRS 6473</b>	<b>Vascular-Non-Invasive Imaging Procedures</b>	<b>3</b>
<p>Patient preparation and performance of medical imaging non-vascular-invasive procedures are presented.</p>		
<b>MSRS 6863</b>	<b>Vascular-Invasive Imaging Procedures</b>	<b>3</b>
<p>Patient preparation and performance of medical imaging vascular-invasive procedures are presented.</p>		
<b>MSRS 6900</b>	<b>Master's Clinical Fellowship and Portfolio</b>	<b>3</b>
<p>Experience in a Radiology department and Interventional Radiology coordinated by Weber State University, under the supervision of a Radiologist or other Medical Practitioner. Review and evaluation of student competencies, clinical performance, and professional development as required by certification.</p>		
<b>MSRS 6999</b>	<b>Master's Thesis</b>	<b>3</b>
<p>Students will enroll for this course as they complete their Master's thesis under the direction of the departmental graduate advisor. Departmental seminars and readings may also be assigned as part of this course. Students will finish their Master of Science in Radiologic Sciences degree by first completing a course of classroom or didactic study, then writing an original research monograph for their thesis. This course is to be used during the time the student is writing getting approval for the thesis.</p>		