

MASTER OF SCIENCE IN RADIOLOGIC SCIENCES

Department of Radiologic Sciences

STUDENT HANDBOOK



**WEBER STATE
UNIVERSITY**

Dumke College
of Health Professions

Student Handbook

Unlike the Weber State University catalog, the prevailing Student Handbook provides students with information regarding MSRS policies and procedures. To avoid unnecessary delays and/or misunderstandings, students are advised to read the Handbook carefully, as well as becoming familiar with any updated policies and procedures.

It is the policy of WSU to provide equal opportunity in all its programs and activities in compliance with State and Federal equality requirements. The Master of Science in Radiologic Sciences program is open to all students or applicants for admission without regard to race, age, color, religion, gender, national origin, handicap, or marital status. Individuals who believe that they have been discriminated against should contact the Office of Equal Opportunity, Administration Building, Weber State University, Ogden, Utah 84408, telephone (801) 626-6239; or the Office for Civil Rights, Department of Education, Denver Region.

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MASTER OF SCIENCE IN RADIOLOGIC SCIENCES

The goals of the Master of Science in Radiologic Sciences program are accomplished through hybrid courses (face-to-face and online), seminars, independent study, cooperative learning groups, individual and group assignments, and projects that emphasize a practical application of theory to the imaging environment. Classes held on the Weber State University-Ogden campus are scheduled 2-3 times per semester during Fall and Spring semesters.

The 36-hour program of study consists of professional core requirements. A portion of the core requirement is the completion of a Master's thesis report, a practical application of knowledge and research.

Mission Statement

To support the University, Dr. Ezekiel R. Dumke College of Health Professions, and Department of Radiologic Sciences, the mission of the Master of Science in Radiologic Sciences program is to extend the professional knowledge, skills, and attitudes of imaging professionals, including those in medical facilities, research labs, industry, and higher education. The program is designed to advance the theoretical and practical applications of imaging of the cardiovascular system.

Simply stated, *we provide the best*: the best education for our students, the best support for our faculty, the best resources for our healthcare partners and the best partnership with our community.

Program Goals

The Master of Science in Radiologic Sciences (MSRS) program is founded on the following concepts:

- a. Program outcomes are based on national and state standards and grounded in current theory and best medical practice;
- b. Structured to foster understanding, collaboration, and clinical and/or applied research; and
- c. Geared toward increasing student achievement and research in Radiologic Sciences.

The components, understanding, collaboration, and research serve as a framework for organizing course work and program development. The goals of the curriculum reflect an emphasis on preparing technologists.

In support of Weber State University's five core values, the MSRS program has established the following goals:

1. Learning through personalized experiences and shared inquiry, the MSRS program will:
 - a. Provide learning opportunities for students through a variety of instructional methodologies in multiple settings;
 - b. Identify essential knowledge and skills for imaging graduate students;
 - c. 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:
 - a. 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:
 - a. Assist and support graduate students in professional development and research to improve clinical-based research and foundational professional research;
 - b. Provide student orientation to community/campus support services.
4. Respect for people and ideas, the MSRS program will:
 - a. Promote the recruitment and support of students from diverse backgrounds;
 - b. Promote the recruitment and support of faculty from diverse backgrounds;
 - c. Promote appropriate professional behavior, ethics, diversity, and respect for self and others.
5. Nurturing the potential within every individual, the MSRS program will:
 - a. Assist and encourage faculty and graduate students to develop collaborative relationships with other professionals;
 - b. Support and assist with scholarship and grant writing;
 - c. Provide appropriate, accurate, and timely advisement for students within the program;
 - d. Provide funding for faculty, staff and graduate students in professional growth and scholarship-related activities.

ADMINISTRATIVE STRUCTURE

The Master of Science in Radiologic Sciences (MSRS) program is part of the Department of Radiologic Sciences in the Dr. Ezekiel R. Dumke College of Health Professions at Weber State University. The program is administered by a) a program director; b) a MSRS Program and Policy Committee; and c) an Advisory Council consisting of representatives from Radiologic Sciences, other campus departments, hospitals and clinics, and the MSRS student body and graduates.

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COURSES/CURRICULUM

Graduate courses are taught in a step format and are taught during Fall and Spring semesters (no courses are taught during the Summer semester). Additionally, availability of courses are only offered during the specific semester in which that course is assigned, i.e. a course taught during the Fall semester may not be taken during the Spring semester, and vice versa.

At the time of completion of the program, no course may be older than three years. Students must petition with the program director to take courses beyond three years from the time they were admitted to the program.

Graduates from Weber State University's RPA/RA will have the second year, Fall semester courses waived due to credit received through their baccalaureate degree and apply them toward the MSRS degree.

Candidate Status

University graduate students are classified as full-time students if they register for nine (9) or more semester credit hours. However, for the purpose of financial aid, full-time status is six (6) semester credit hours. Students are required to complete 36 credit hours of professional core requirements. A portion of the core requirement is the completion of a Master's thesis report, a practical application of knowledge and research.

Curriculum Structure

Fall Semester – 1st Year

MSRS 6100 Research Methods (3)

MSRS 6200 Health Behavior and Managerial Epidemiology (3)

MSRS 6450 Managing Health Information (3)

Spring Semester – 1st Year

MSRS 6120 Research and Statistics (3)

MSRS 6130 Functional Hemodynamics (3)

MSRS 6140 Clinical Laboratory Values (3)

Fall Semester – 2nd Year

MSRS 6463 Problem Patient Management (3)

MSRS 6473 Vascular-Non-Invasive Imaging Procedures (3)

MSRS 6863 Vascular-Invasive Imaging Procedures (3)

Spring Semester – 2nd Year

MSRS 6443 Clinical Pathways (3)

MSRS 6900 Master's Clinical Fellowship and Portfolio (3)

MSRS 6999 Master's Thesis (3)

Course Descriptions

MSRS 6100: Research Methods (3)

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.

MSRS 6120: Research and Statistics (3)

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.

MSRS 6130: Functional Hemodynamics (3)

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.

MSRS 6140: Clinical Laboratory Correlation (3)

This course covers the concepts, analytical methods and clinical correlation of laboratory values as they relate to radiographic imaging, pathology, and patient history.

MSRS 6200: Health Behavior and Managerial Epidemiology (3)

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.

MSRS 6440: Clinical Pathways (3)

Studying clinical pathways for patients based on disease processes and trauma.

MSRS 6450: Managing Health Information (3)

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.

MSRS 6473: Vascular-Non-Invasive Imaging Procedures (3)

Patient preparation and performance of medical imaging non-vascular-invasive procedures are presented.

MSRS 6863: Vascular-Invasive Imaging Procedures (3)

Patient preparation and performance of medical imaging vascular-invasive procedures are presented.

MSRS 6900: Master's Clinical Fellowship and Portfolio (3)

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.

MSRS 6999: Master's Thesis (3)

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 monography for their thesis. This course is to be used during the time the student is writing getting approval for the thesis.

ADMISSIONS PROCESS

Admission to the Master of Science in Radiologic Sciences (MSRS) program also qualifies students for admission to Weber State University.

Applicants admitted to the program are those who show promise of being the most successful candidates and educators. Applicants must complete an online application from the following website to be considered for acceptance to the program: www.weber.edu/msrs.

Program Eligibility

Qualified applicants to the MSRS program should have the following:

1. Bachelor's degree from a regionally accredited college/university or a Weber State University accepted equivalent;
2. Certification in an imaging profession (Radiologic Technology, Sonography, CT, MRI, etc.);
3. Healthcare experience; and
4. An undergraduate and professional grade point average of a 3.0 or higher.

Applicants who have a bachelor's degree but do not have certification in an imaging profession are encouraged to apply for Weber State University's Radiologic Technology/Radiography program first before pursuing the MSRS program. Visit weber.edu/radsci for more information.

Admission Requirements

Admission to the MSRS program takes place once a year for a Fall semester start date. Applications for admission to the MSRS program should be completed online by the potential applicant and received by the MSRS Enrollment Director prior to the May 1 priority deadline. Applying by the priority deadline allows admitted students time to register for courses prior to the start of the Fall semester. Applications will continue to be accepted beyond the priority deadline, however, will be viewed on a first-come, first-serve basis until a qualified class may be fully formed.

Applicants should include the following information when applying to the MSRS program:

1. Complete an online application, found at weber.edu/msrs. As part of the online application, attach or provide the following information:
 - a. Application Fee. Before the application is submitted, pay a \$60 non-refundable application fee.
 - b. Reference Forms. Provide an email for three (3) references who will submit a reference form electronically.
 - c. Essays. Respond to questions asked on the application and attach the responses to the online application.

- d. Resume. A professional resume should also be attached to the online application.
2. Submit official transcripts from each college/university attended to the MSRS office. Weber State University graduates do not need to submit WSU transcripts or any transcripts from previously attended colleges/universities, as the MSRS office will have access to them.

Additional information that cannot be attached to the MSRS online application, including official transcripts, may be sent to the MSRS Enrollment Director at 3891 Stadium Way Dept. 3925, Ogden, UT 84408-3925.

Additional Application Requirements for International and ESL Applicants

In addition to the required admission material, international and ESL applicants should also include the following information with their MSRS application:

1. Transcripts showing bachelor's degree and all individual courses evaluated into the equivalent of American credits and letter grades from one of the five foreign credential evaluation services listed in the following section.
2. Official verification of a minimum TOEFL score of 550 on a paper-based test, 213 on the computer-based test, *or* official verification of a minimum combined-band IELTS score of 6.5 or higher.

International and ESL applicants are strongly encouraged to contact Weber State University's International Student and Scholar Center at 801-626-6853 or sis@weber.edu regarding additional information needed for admission to Weber State University (financial guarantee, etc.).

Foreign Credentials Evaluation Services

Contact the agency of your choice to determine procedures and fees required. The agency's report will be accepted by Weber State University at face value.

AACRAO Foreign Credentials Evaluation
International Education Service
1 Dupont Circle, NW, Suite 520
Washington, DC 20036-1135
(202) 296-3359 Fax: (202) 822-3940
Website: www.aacrao.org/credential

Academic Credentials Evaluation Institute
P.O. Box 6908
Beverly Hills, CA 90212
(800) 234-1597 or (310) 275-3530
Website: www.acei.com

Educational Credential Evaluators, Inc.
P. O. Box 17499
Milwaukee, WI 53217
(414) 289-3400
E-mail: eval@ece.org

Global Credential Evaluators, Inc.
P.O. Box 9203
College Station, TX 77842
(800) 517-4754 Fax: (512) 528-9293
E-mail: gce@gceus.com
Website: www.gcevaluators.com/index.asp

World Education Services
Old Chelsea Station
PO Box 745
New York City, NY 10011
(800) 937-3895 or (212) 966-6311
Website: www.wes.org

Selection Criteria

A total of 30 positions are available each Fall semester, and each applicant is accepted on an individual first-come, first-serve basis. Criteria to be considered for acceptance include the following:

- Professional GPA
- Overall GPA
- Professional and Research Experience
- Recommendation Forms

Special Circumstances

Applicants who do not meet the standard admissions criteria but believe they have equivalent qualifications may appeal to the MSRS Program and Policy Committee after consultation with the program director.

Deferment

Any applicant who is accepted to the program may defer to the following application cycle. Deferment is only valid for one year; if students do not start the program following the deferred year, the student must then reapply to the program.

FINANCIAL ASSISTANCE AND SCHOLARSHIPS

Non-Resident Tuition Waivers

Non-Resident tuition waivers are available to students, which waives the out-of-state portion of tuition. Waivers do not pay activity, registration or other student fees. These waivers are based on specific criteria set by the MSRS program, including maintaining a GPA of a 3.5 or higher.

Non-resident students will be required to apply for the tuition waiver each academic year (two times during the duration of the program). The scholarship application can be access through the student's eWeber account (www.weber.edu) and has a priority deadline during the month of January; however, applications are accepted beyond the deadline date and your waiver will be secure.

Please note that tuition waivers do not reflect on the student's bill until two weeks before the start of Fall semester.

THESIS REPORT

Advisement begins when prospective applicants make first inquiries about the Master of Science in Radiologic Sciences (MSRS) program with the MSRS Enrollment Director. The Enrollment Director will provide prospective applicants with information regarding admission guidelines, time frames and course schedules. This information can also be found on the MSRS website: weber.edu/msrs.

When the prospective applicant is admitted to the program, the program director is the temporary advisor for the MSRS thesis. By the time the student has accrued no more than 18 credit hours, they should have selected a thesis committee and the chair of that committee becomes the principal advisor for the thesis (a timeline of activities related to the thesis report can be found in the *Graduate Thesis* section of the handbook).

Thesis Committee

The student's thesis committee must be formalized before the completion of the second semester and should be selected based on a general area of co-interest in the topic of the thesis report.

The thesis committee consists of three persons: Two faculty members from the Department of Radiologic Sciences or Dumke College of Health Professions, one of who will be designated the committee chair; and the third member from the Department of Radiologic Sciences, Dumke College of Health Professions, a healthcare facility, or other outside organizations. All committee members must hold at least a master's degree and have a willingness to read and critique the paper during the proposal and final approval processes.

Following the selection of the thesis committee, key times for advisement occur at the following points:

- **Approval of the thesis proposal:** The student convenes with the committee to discuss and approve the proposal. Committee members are furnished with copies of the proposal. Following the review, corrections need to be made by the student to obtain formal committee approval. Depending on the amount of recommendations, multiple drafts may be submitted before final approval is given.
- **Development of the thesis:** The student works closely with the thesis committee chairperson and other committee members during the development of the report. The chairperson generally sees multiple drafts of the project, and meets with the student a number of times before the report is ready for its dissemination to other committee members. Depending on the nature of the thesis, the report may take one or two semesters to complete.

- Final presentation of the thesis: The student gives a final presentation and defense of his/her research during the final semester of the program.
- Approval of final thesis: The student will again convene with the thesis committee to discuss and approve the final report. Depending on the amount of recommendations, multiple drafts may be submitted before final approval is given. The student will receive signatures from committee members when the report is approved, then print off copies of the report to be bound.

The committee chairperson, member, program director and program enrollment director keep a log of contacts with the student. These contacts are ultimately reflected in the student's file housed in the MSRS office.

Committee Chairperson

It is the responsibility of the committee chairperson to:

- a) Have adequate time available and be accessible to the student;
- b) Meet with the student to discuss and determine feasibility of a topic;
- c) Have primary responsibility to guide and provide continuing feedback on the student's development of the thesis report by providing input on the intellectual appropriateness of the proposed activities, the reasonableness of report scope, and acquisition of necessary resources and expertise;
- d) Assume the role of 'principal investigator' when the student's research involves human or animal subjects;
- e) Determine when the proposal is ready for committee review and approval;
- f) Act as the student's advocate at the final presentation; and
- g) Oversee and approve the final thesis copy, and determine when the final report is once again ready for committee review and approval.

Committee Members

It is the responsibility of the committee member to:

- a) Have adequate time available and be accessible to the student;
- b) Meet with the student to discuss and determine feasibility of a topic, and guide and encourage development of the thesis;
- c) Read and critique the proposal draft, approving the methodology and any instrument or questionnaire used in the data collection, which ensures the student's work conforms to the highest standards of scholarly performance;
- d) Read and critique final thesis draft; and
- e) Approve of the final thesis by signing the student's title pages.

Assignment of the Thesis Committee

The student discusses his/her master's thesis report interest with the program director and possible committee members are discussed. Based upon recommendations and available faculty, tentative committee members, including the committee chairperson, are identified based on interests and/or expertise that best match the area of the candidate's proposal.

The candidate discusses the topic of the thesis report with prospective committee members and invites them to serve on the committee. After consulting with the chairperson and committee members, the student will then submit the names of all committee members to the MSRS Enrollment Director. The Enrollment Director will then verify with the committee that they are able to serve on the committee and understand their role in the process.

Student Responsibilities

While it is expected that students receive guidance and support from the thesis committee, the student is responsible for defining, carrying out, and completing the thesis report. It is expected that the student assumes the leadership role in all aspects of the thesis. Within this context, students have the following responsibilities:

- a) Formally establish a thesis committee by the end of the first year, second semester of the MSRS program;
- b) To respond to and act on feedback from the thesis committee in a timely and constructive manner; and
- c) To know, understand and follow deadlines.

It is the responsibility of the student to communicate with the thesis committee for approval of the thesis proposal and final report. Refer to the *Thesis Timeline* to ensure appropriate guidance and deadlines during the thesis process.

The Master's thesis report is an opportunity for the student to critique, evaluate and make practical application of newly acquired knowledge and research within their careers. Research is an essential component of graduate education. It is expected that the report be supported by a substantial review of appropriate literature, and it is ultimately the student's responsibility for making adequate progress toward completion of his/her thesis and for producing high quality work.

The Master of Science in Radiologic Sciences (MSRS) *Content and Style Requirements for Papers and Projects* and American Psychological Association (APA) requirements should be used as guidelines for formatting and writing the proposal and final thesis report.

CITI and IRB Approval

In designing reports that involve human subjects, students must complete the Collaborative Institutional Training Initiative (CITI) certification and then receive approval on the research proposal from the Weber State University Institutional Review Board (IRB) Human Subjects Committee. In addition to permission from the WSU IRB Committee, students will need to obtain permission to conduct research or gather data on human subjects from their facility or agency. *No data can be gathered until IRB approval has been granted by both WSU and the agency.* The NIH training and WSU IRB application can be found from the following websites:

CITI Human Subjects Training: <http://apps.weber.edu/wsuiimages/IRB/CitiTraining.pdf>
WSU Institutional Review Board (IRB): www.weber.edu/IRB/application_form.html

After completion of the second semester, students should have a topic selected for the thesis report. This report is described in detail in a formal proposal that is presented to the thesis committee for approval.

The Proposal

The proposal describes the thesis and should be developed by the student in cooperation and consultation with his/her thesis committee.

When the thesis committee chairperson deems the proposal ready for approval by the entire committee, the student then forwards a copy of the proposal to the rest of the thesis committee. The proposal must be approved by the committee no less than one semester prior to the student's final semester (refer to the *Thesis Timeline* section).

After the thesis committee approves of the proposal, the student must complete the NIH online training on the protection of human research participants, and then complete the WSU and agency (if applicable) IRB application in order to conduct research. No research on human subjects is to begin until approval from both IRB applications has been given. Any research conducted prior to IRB approval will be void.

The Thesis

After the student completes his/her research, they then begin to write the results and discussion portions of the thesis report. When those added portions are completed, the student then forwards his/her draft to the thesis committee chairperson for review. This process may need to be repeated multiple times until the chairperson deems the report appropriate for committee review.

When the chairperson views the final draft ready for approval by the entire committee, the student then forwards a copy of the final draft to the rest of the thesis committee. Upon updating committee recommendations and approval from the thesis committee, the student

should then receive signatures from the thesis committee on the final copy of the thesis title pages. A minimum of three title pages require signatures – for each required copy to be bound. Additional title pages may also need signatures for each copy the candidate wishes to have bound.

As part of the MSRS 6999 Master's Thesis course, students must also present his/her findings in a formal defense presentation, addressing the nature of the problem, research found, and answering questions from the thesis committee, graduate peers and university community.

Thesis Examples

Copies of previously completed and approved MSRS thesis reports can be found in the MSRS Library, room 358 of the Marriott Health Science Building and at the Weber State University Stewart Library Circulation desk. Copies of thesis reports in the MSRS Library may not be checked out; however, students may check-out copies of thesis reports from the WSU Stewart Library Circulation desk.

Thesis Timeline

The following timeline summarizes some of the major steps in the thesis process. To ensure that students complete the thesis report prior to their final semester in the program, it is encouraged that students adhere to the following deadlines. Failure to complete the thesis report prior to the end of the final semester may result in delayed receipt of diploma and official posting of degree received on Weber State University transcripts, which could affect students who wish to apply for doctoral school:

1st – 2nd Semesters:

Determine an area of research interest

- a) Formulate a question that will guide the review of literature.
- b) Locate research articles and other relevant, scholarly materials related to research questions (find current research within the last five (5) years).
- c) Arrange your research articles in a logical manner and write your literature review.

2nd Semester:

Establish a Thesis Committee

- a) Approach faculty and/or coworkers with an interest in the research topic to serve on the thesis committee. Refer to the *Thesis Committee* section for additional information related to the assignment of the thesis committee.

2nd Semester – Summer:

Write a review of literature, which summarizes information related to the initial research interest

- a) What does the literature indicate needs further research?

- b) What does the literature indicate has never been researched?

2nd Semester – Summer:

Write the purpose and objectives

- a) Based on what was found in the literature review, write the purpose statement for the intended report. Potential MSRS thesis reports may include:
 - i. Replication of a study based on recommendations of the initial researchers for further study.
 - ii. A unique research question based on an area identified in the literature review.
- b) Based on the purpose of the intended report, write research objectives.
- c) Determine research methods.
 - i. Is the research going to be quantitative, qualitative, or mixed method?
- d) Identify an appropriate population to study.
 - i. Thoroughly describe the population to be studied.
- e) Write your methods section to describe exactly how you are going to conduct your research.
 - i. State the kind of methods to be used.
 - ii. Create a timeline of research events.
 - iii. Describe each data gathering method to be used and when they will be used.

Summer – 3rd Semester:

Present the proposal to the committee chairperson for suggestions and approval

- a) Complete all requested changes in the proposal that were suggested by the committee chairperson (and members of the thesis committee, if their assistance in writing your proposal was requested).
- b) Obtain permission from the committee chairperson to distribute the formal proposal to the remaining committee members.
- c) Obtain proposal approval from the thesis committee to pursue IRB approval.

3rd Semester:

Complete IRB approval

- a) IRB approval is necessary and includes both obtaining the NIH approval and IRB approval from Weber State University.
- b) In addition to WSU IRB approval, various hospitals/clinics may also require a separate IRB application in order to obtain patient data from their facility.

3rd – 4th Semester:

Conduct the research

- a) Do *not* begin research until IRB approval from WSU and the healthcare facility has been given.
- b) Proceed with the research according to what was proposed in the method section.

- c) Gather data and analyze it.

4th Semester:

Write the thesis report

- a) Be sure to change the method section to reflect past tense (“I will...” should be reworded to “I did...”).
- b) Write the results section.
 - i. Format findings to clearly answer the proposed research objectives.
 - 1. Use tables to show data findings, if a statistical analysis.
 - 2. Use text tables or other formatting techniques to show what was discovered. If using text to show findings, organize the findings by research objective and specific questions investigated for each research objective.
- c) Write your discussion section.
 - i. Discuss findings by research objective.
 - ii. Discuss weaknesses of the research.
- d) Write recommendations for future research.

4th Semester:

Submit research defense document (thesis report) to the committee chairperson

- a) Upon recommendations and approval from the committee chairperson, forward the thesis report draft to committee members for revisions.
- b) Make any changes recommended by the thesis committee.

End of 4th Semester:

Defend the research

- a) During the last on-campus class session, present, defend and answer questions about the literature and research findings in front of the thesis committee, graduate peers, and university community.

End of 4th Semester:

Update any added corrections needed to complete the final draft of the report

End of 4th Semester:

Obtain signatures

- a) After final approval from the thesis committee, obtain signatures for the thesis title pages from each of the thesis committee members. A minimum of three title pages will require signatures; however, more title pages may need signatures depending on the amount of additional reports to be bound.

Prior to Commencement:

Submit copies of the final, completed thesis report to the MSRS office for binding.

- a) Refer to *Finalizing the Thesis* to ensure proper submission of the thesis report

Finalizing the Thesis

After obtaining approval and signatures from the thesis committee on the final thesis, the student is responsible for the printing and payment of binding of the report. The binding is completed through Weber State University and should not be bound by any outside source. A minimum of three (3) hard-bound copies of the thesis report are required: Two for the Stewart Library Archives and Circulation, and one for the MSRS Library. Students may produce as many hard-bound copies for themselves as they wish in addition to the minimum three required. Members of the graduate committee may request hard- or spiral-bound copies, and the student is responsible for printing and binding all committee-signed copies of the report.

Preparing the Thesis for Printing and Binding

Items to remember when preparing and printing the thesis reports for binding:

1. Include a title page for each copy to be bound, including signatures of approval from the chairperson and committee members. The student name and report title printed on the title page will be used as the names printed on the hard-bound cover.
2. Copies for binding must be computer-generated, and be printed on a laser-quality printer on acid-free, non-yellowing paper.
3. Make sure the thesis is in order and no pages are upside down; the bindery will bind copies as submitted.
4. Separate each copy of the thesis report with a sheet of colored paper to distinguish where one copy begins and ends.

The WSU Copy Center in the Shepherd Union Building has paper and facilities to print the Master's thesis. Out-of-state students may have their reports printed through the WSU Copy Center by emailing them a copy of the report and paying for the copies over the phone. Contact the WSU Copy Center at 801.626.6738 for more information.

Payment of Binding

Bound thesis reports are \$13 per copy. Payment for binding can be made online at library.weber.edu or at the Stewart Library Circulation Desk. Do not submit bindery payment to the MSRS Office. Make a copy of the receipt and attach to the thesis reports to be bound.

If paying online, click on *My Library Account*, then *Library Payment Center*, then select *Master of Science in Radiologic Sciences Thesis*.

Submitting Thesis Reports

Copies intended for hard-binding should not be bound in any fashion, rather placed in an envelope or box with each set separated by a colored sheet of paper or cardboard. Along with all copies of the thesis report and receipt of bindery payment, submit your reports to the MSRS Enrollment Director, room 363 of the Marriott Health Science Building. If not able to submit copies to be bound in-person, mail the copies to the following address:

Weber State University
Master of Science in Radiologic Sciences
3891 Stadium Way, Dept. 3925
Ogden, UT 84408-3925

Bound reports will be returned in approximately 6-8 weeks, when students will then be notified to pick them up in the MSRS Office.

ASSESSMENT OF GRADUATE STUDENTS

Program Assessment

Graduates of the Master of Science in Radiologic Sciences program demonstrate:

Scholarly Knowledge

- Knowledge of the history and philosophy of imaging;
- Knowledge of issues related to differences among groups of people and individuals and the impact on imaging;
- Knowledge of important theories of learning and development and the implications for imaging;
- Knowledge of current techniques of imaging as well as alternative clinical practices that facilitate effective learning.

Scholarly Skills

- Ability to use writing to meet scholarly and professional goals;
- Ability to use highly developed verbal communication in presentations, questioning and discussions;
- Ability to analyze and critique research;
- Ability to find and report on a significant research question that has usefulness and applicability through the development of a written thesis;
- Ability to critically and reflectively synthesize personal and professional experiences in the graduate program through the development of the thesis report and portfolio.

Disposition

Evidence of the following dispositions: Reflective, teachable, ethical, collegial, inquisitive, persistent, self-directed, collaborative and respectful.

Grading

The MSRS program has no quota governing the issuing of grades. The professional judgment of the instructor is honored. However, it is expected that grading criteria be forthright and defensible and that the students have written access to these expectations at the beginning of the course.

The grading policy is A, B, C, D, and E with pluses and minuses; UW for unofficial withdrawal, and I for Incomplete. All core courses must be completed with a grade of 'B' or higher. In the event a student receives less than a 'B' in a core course, students must seek remediation within six months. Any other case is seen individually by the program director.

Attendance

The MSRS faculty expect students to attend all classes for which they have registered. Registration in a course is regarded as an agreement between the student and the institution, the fulfillment of which depends on regular and punctual class attendance.

The attendance policy will be clearly stated in each MSRS course syllabus by the respective faculty member. If there is to be an unavoidable absence, the student should inform the instructor in advance and be responsible for making up all work that is missed regardless of the reason for the absence.

In addition to the attendance policy stated on an instructor syllabus for grading purposes, students are required to attend all classes on the WSU-Ogden campus 2-3 times per semester. Failure to attend class will result in missing vital information that affects student progress in each class and with the thesis report. Excessive absences (more than one a semester, or multiple absences spanning multiple semesters) will result in automatic probation from the program.

If excessive absences continue beyond the notice of probation, the student may then be suspended from the program for one year.

Thesis

Students who do not complete the thesis report prior to commencement will receive an Incomplete (I) grade for the MSRS 6999 Master's Thesis course and have their diploma and posting of the degree held until the thesis is approved by all three committee members and copies of the report are delivered to the MSRS Office for binding (*not having the degree posted on transcripts may affect a student's application to doctorate programs*).

If a student fails to complete the thesis report prior to the start of the following Fall semester, they will receive an 'E' grade and be required to re-register for the MSRS 6999 Master's Thesis course. Upon approval and submission of the report copies, the grade will then be changed and graduation hold lifted.

Ethics

Failure to maintain academic ethics/academic honesty, including the avoidance of cheating, plagiarism, collusion and falsification of documents will result in an 'E' grade for the course. Charges may be issued, with hearings and/or sanctions imposed.

All assignments and written work turned in for credit must be the candidate's work, unless otherwise directed by the instructor. Students must use their own language. Cite any text taken from another source, which is especially important when writing the thesis report. Plagiarism is defined in Webster's Universal College Dictionary (1997) as:

"The unauthorized use of the language and thoughts of another author and the representation of them as one's own."

Cheating on exams, plagiarism, using the same assignment for more than one class or unauthorized collaboration of any kind on written assignments is prohibited. Students found in violation of this standard will be subject to a failing grade for the course and referred to the MSRS Program and Policy Committee for disciplinary action, which may include suspension from the program.

Grievance Procedure

Students should attempt to resolve grievances with the person directly involved. If this unsuccessful, they may appeal progressively to the next higher administrative body: a) program director, b) Program and Policy Committee, c) Dean of the Dumke College of Health Professions.

Retention/Dismissal Policy

The University Code will strictly be adhered. A faculty member or program director may refer a student on the basis of professional or ethical dispositions or for academic deficiencies. The faculty member or program director will inform the student of the referral. The faculty and/or staff member responsible for writing the referral will submit documentation to the MSRS office and stay in the student's file, and an appointment with the program director will be made. Depending on the circumstance, the referral may be brought before the Program and Policy Committee to determine the proper recourse. If the student fails a course, the instructor submits a referral to the MSRS office.

Program Evaluation

During the final semester in the program, students will be asked to complete an evaluation of the MSRS program. The purpose of the evaluation is to identify the effectiveness the program has on working professionals. Students are asked to identify skills learned and explain how the program has helped them grow as a professional.

PROCEDURES

Student File

Each admitted student has an official file located in the MSRS office. This file contains the application packet, IRB approval, and other pertinent information. Faculty members have access to these files, however, the file should be returned promptly (within 24 hours). Original copies of transcripts are forwarded to the WSU Admissions Office, for university admission, although copies are kept with the students' file. Originals of all other official documents should be kept in the MSRS file; however, copies may be made to update faculty records. The MSRS student files are discarded five years after program completion.

Registration

MSRS students register through the same process as undergraduates. Detailed registration information is printed in the WSU Catalog or can be found online from the following website: weber.edu/registration. A list of courses to register for will be emailed to students and can also be access from the online MSRS Bulletin Board: weber.edu/msrs. Tuition and fees follow the policy established by WSU and the Utah Board of Regents for graduate students.

It is also the responsibility of the student to withdraw from any courses due to non-attendance; your classes will not automatically drop for non-attendance. Not withdrawing from courses may result in required payment of the course(s).

Graduation

All candidates for the MSRS degree, whether or not commencement ceremonies are attended, must submit a completed graduation application during the semester they plan to finish the program. There is no graduation application fee. Students should check with the MSRS office prior to making graduation application to ascertain compliance with requirements for the MSRS degree by the respective commencement ceremony date. It is the sole responsibility of the student to verify all requirements for the degree.

Follow-up of Graduates

There is an ongoing process to maintain contact with graduates. Program evaluation surveys are emailed to graduates one and three years following the awarding of the degree. The MSRS faculty and staff appreciate all students, both those working toward the degree and also those who have earned their degree, keeping their contact information current.