Rehabilitation Sciences Policies and Procedures Manual

2023-24

Faculty of Rehabilitation Medicine University of Alberta revised: June 2023



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1. Introduction - Graduate Programs in Rehabilitation Science

1.1 History and Overview

The Rehabilitation Science graduate programs provide training for future rehabilitation scientists who seek to discover, integrate, and apply knowledge to improve the health and wellness of people with health conditions and disabilities. Applicants to the graduate programs include clinicians in the rehabilitation medicine professions (occupational therapy, physical therapy, speech-language pathology, and audiology), physical medicine (physiatry and orthopedics), as well as kinesiologists and engineers with special interests in rehabilitation. Applicants also have interests in health care ethics, health policy, health systems, Indigenous health, clinical service delivery and program management. The graduate programs benefit from the expertise of the supervisors within Rehabilitation Medicine as well as the research plan within the faculty with research foci in three areas including: Brain and Mind (Leading Research in Neuroscience and Mental Health), Living Well (Leading Research in the Prevention and Management of Chronic Conditions), and Early Years (Leading Research in Prevention and, and Children's Health and Wellness).

The Faculty of Rehabilitation Medicine, within the College of Health Sciences, offers PhD and Masters programs in Rehabilitation Science, as well as combined programs that provide the opportunity for highly qualified students to complete clinical and research training at the same time. All programs are designed to train students to be researchers who can work in a variety of settings, including but not limited to academic, not-for-profit, private, government and industry settings.

1.2 Program Administration

The Faculty of Graduate Studies and Research oversees all graduate programs at the University of Alberta. The Rehabilitation Science graduate programs are directly administered by the Dean of the Faculty of Rehabilitation Medicine, through the Chair of the Rehabilitation Science Graduate Program Committee (the Associate Dean- Graduate Studies). The Academic Advisor-Rehabilitation Science (RS), provides day-to-day support for operation of the programs. The student's first point of contact in the program is the Academic Advisor-RS.

Primary Contacts:

Angela Libutti, Academic Advisor - Rehabilitation Science - angela.libutti@ualberta.ca

Mary Roduta Roberts, PhD OT Associate Dean, Graduate Studies (Chair Rehabilitation Science Graduate Program Committee)

The FGSR Graduate Program manual (found at <u>link</u>) provides information about all aspects of graduate programs, including the minimum standards for graduate programs at the University of Alberta. Information in the FGSR Graduate Program manual is often

linked to Calendar information specific to graduate programs. **This** manual is specific to the Faculty of Rehabilitation Medicine graduate programs, and meets the minimum requirements set by the FGSR. Throughout this manual, the Rehabilitation Sciences eClass site is referred to. Once admitted, students receive access to the eClass site.

2. General Information

2.1 Admission Requirements and Deadlines

Eligible applicants must meet all FGSR requirements (see the FGSR Graduate Program Manual), as well as the following Faculty of Rehabilitation Medicine requirements:

- 1. **PhD program:** a master's degree or the equivalent of an honours BSc degree in a rehabilitation discipline or a related field. Trained medical doctors or clinicians (OT, PT, SLP, Audiology) may apply directly to the PhD program and if accepted will be expected to complete an in lieu of thesis;
 - **MSc program:** a bachelor's degree or equivalent or a previous graduate degree in a rehabilitation discipline or related field;
 - **Combined programs:** applicants must meet the application requirements of both programs, for more information see <u>Combined Programs</u>
- 2. a *minimum* GPA of 3.0 on the University of Alberta 4-point grading system or an equivalent standing from another recognized institution during the last 2 years of full-time study;
- 3. acceptable scores on an approved test of competency in the English language. The requirements are: Pearson Test of English, (PTE Academic), no score lower than 70; TOEFL internet score 100; IELTS 7.5 (with no band lower than 7).
- 4. identify a faculty member within the Faculty of Rehabilitation Medicine who has agreed to supervise the applicant's program;
- 5. submit three references from individuals who are knowledgeable about the applicant's academic and research potential and capabilities;
- 6. submit a current *curriculum vitae*;
- 7. submit a research statement using the directions: Please write a short description of the research interests you discussed with your potential supervisor. Explain how the proposed research relates to your career goals, listing your academic, research and professional plans. Talk about how your background (academic training and work experience) make you a suitable candidate to complete research in this field. Also, discuss why you've chosen to apply to the Rehabilitation Science program at the University of Alberta (word limit 500 words).

On the admission application system, you will be prompted to complete the research statement. The student (not the proposed supervisor) must write the statement. It is acceptable if your research interests are fairly broad at the

application stage. As you work with your supervisory committee, your research questions will be refined.

The final decision regarding *suitability/acceptability* of the applicant for either the PhD or MSc Program in Rehabilitation Science lies with the Rehabilitation Science – Graduate Program Committee (RS-Graduate Program Committee). The final decision regarding *admission* of an acceptable applicant to the PhD or MSc Program lies with the FGSR. Admission application fees are non-refundable.

Admission deadlines are April 15 (1st round) and June 1 (2nd round) for Fall admission and September 15 for Winter Admission. All documents, including reference letters, must be received by the admission date in order for the application to be considered. The RS-Graduate Program Committee considers applications once the deadline has passed, with admission decisions generally made and communicated within 30 days after the admission deadline. In compelling circumstances, it may be possible to apply after the admission deadline – please contact the Associate Dean for information. Students who do not meet admission deadlines will not be eligible for faculty level funding (e.g., graduate research assistantships provided by the Faculty of Rehabilitation Medicine) in their first term.

2.2 Registration

Students must be registered full time. If, at the time of admission, students would like to request part time registration status they must demonstrate one of the following: an offer of full time employment or medical/family or other circumstances that prevent them from working on their program full time. A change to part-time status must be approved by FGSR. It is expected that students who register part time will take longer to complete their programs. As such, while fees are lower for students registered part time, they will be expected to have paid the equivalent of 1 year of full time fees for MSc students, and 3 years of full time fees for PhD students at the time of graduation.

2.3 Academic Standing

All students must maintain a grade point average ≥ 3.0, throughout their program. Student progress in the program is monitored. Course, program or general performance, below the expectations set out for graduate students may result in academic probation. Read more at: Academic Standing and Academic Probation

2.4 Funding

In Rehabilitation Medicine, we work with supervisors and students to create a funding package that will support students throughout their programs. Funding packages typically include supervisor and faculty funding (research assistantship, teaching assistantship), as well as studentship funding (i.e., through tri-council awards).

At this time, we guarantee up to \$18,000 funding for PhD students in Year 1 and 2, and \$15,000 for MSc students in Year 1. Incoming students with a GPA greater than 3.5 may be eligible for a recruitment scholarship. To be eligible for faculty funding, students must be registered full time, show evidence of applications for external awards (within the 1st year), and work less than 2 days per week (16 hours) in activities not related to their graduate studies.

Scholarships and Awards:

PhD and MSc students are expected to apply, with the help of their supervisors, for studentships or fellowships from the Natural Sciences and Engineering Research Council (NSERC), the Social Sciences and Humanities Research Council (SSHRC), or the Canadian Institutes for Health Research (CIHR), as well as provincial agencies (Alberta Innovates). In addition, the Graduate Program Committee may nominate eligible, newly admitted doctoral students for FGSR University of Alberta Recruitment Scholarships.

Students and supervisors are encouraged to read the information about these and numerous other awards in the University of Alberta Calendar, on the FGSR website under "Awards and Funding" and in the FGSR Graduate Program Manual. Links can be found on the Rehabilitation Science eClass site.

3. PhD Program

3.1 Learning Outcomes

The Rehabilitation Sciences Program Committee worked with Faculty and students to document expected learning outcomes from our programs. The Rehabilitation Science Learning Outcomes can be found on the Rehabilitation Sciences eClass site.

3.2 Required Components

- 1. A minimum of 18 units of course weight at the graduate level, (i.e., four required courses and at least two, 3-credit elective courses)
- 2. The Candidacy Examination
- 3. The PhD Thesis (including prospectus meeting and final examination)
- 4. Training in Ethics and Academic Citizenship <u>link</u> (i.e., registration and completion of INTD 710 and INTD 720)
- 5. FGSR Professional Development Requirement

3.3 Courses

Required Courses (12 credit units):

- **REHAB 600 (3 cu)** Theory and Issues in Rehabilitation Science. An orientation to the theoretical bases of rehabilitation science and its historical development.
- **REHAB 601 (3 cu)** Research Design in Rehabilitation Science. An orientation to the unique features of rehabilitation science that have an impact on research methodology, design, ethical issues, measurement and statistical analysis.
- **REHAB 603 (1 cu)** Seminars in Rehabilitation Science. A seminar designed to acquaint students with the scope of research, as well as other issues in professional development, in rehabilitation science. PhD students must enrol for 2 offerings of Rehab 603 (total 2 cu).
- **REHAB 606 (1cu)** Essentials for Graduate Studies. This course provides the student with foundational research knowledge and skills to accelerate their ability to be productive and successful in research endeavors.
- Graduate-level research analysis course

Unusual circumstances may warrant that a student substitutes another course for 1 of the 3 required courses within the Faculty of Rehabilitation Medicine (REHAB 600, 601 & 603). In cases where substitution appears to be warranted in a student's <u>plan of study</u>, a formal request from the student and supervisor must be submitted in writing to the Chair, RS-GPC. That request should include identification of appropriate alternative coursework (in the Faculty of Rehabilitation Medicine or elsewhere on campus), explicit evidence that the substitution is an appropriate equivalent (e.g., course outlines, letters from instructors, etc.) and an academically sound rationale for the substitution in the student's program. Normally only 1 required-course substitution will be allowed in a student's PhD program.

Elective Courses (6 credit units):

Elective courses include those that pertain to an area of specialization determined by each student's background, needs and interests. Choices for elective courses are normally made within the first year of doctoral studies and should be included in the student's plan of study. Subsequent, reasonable revisions to the elective coursework on a student's plan of study are allowable and will be reviewed for approval by the Chair, RS-Graduate Program Committee and the Graduate Program Committee (as indicated).

3.4 Supervisory Committee

A PhD student's program is directed by a Supervisory Committee of at least 3 full-time staff members, one of whom is the student's Supervisor and chair of the supervisory committee. The committee is appointed within the first 12 months. The FGSR *Graduate Program Manual* provides detailed information about who may serve, and in what capacity.

Once the Supervisory Committee's membership is finalized, the supervisor forwards the names of the committee members to the Chair, RS-Graduate Program Committee via the Academic Advisor, RS (alibutti@ualberta.ca). A form documenting this finalized committee is then forwarded to FGSR. If the membership of the Supervisory Committee requires revision, the Chair, RS-Graduate Program Committee must be notified, and the committee composition will be resubmitted to FGSR.

3.5 Plan of Study and Progress in the Program

The <u>Plan of Study</u> document should be used by students and supervisors to plan for course work and completion of program milestones (courses, professional development and ethics requirement, candidacy, prospectus). The document should be used iteratively.

The Supervisor and the Supervisory Committee shall provide direction to the PhD student at all stages of the program; and will have a formal meeting with the student *at least once a year.* A summary of this annual meeting, which will include a discussion of student progress and plans for the coming year, will be documented in the Student's Annual Progress Report. This report is initiated from FGSR and goes initially to the student. There is no Rehabilitation Medicine requirement for a progress report, beyond completion of the FGSR progress report.

Students in doctoral programs must complete all program requirements (courses, candidacy, professional development, ethics), other than the thesis, within 3 years of the start of their program. The *maximum* period of time permitted to complete all requirements for a PhD degree is 6 years. When unusual circumstances have prevented timely completion of the degree or degree requirements, students may petition for an extension of the time allotted to complete the requirements of the program.

3.6 Candidacy Examination

Background Information about Candidacy (from FGSR)

The Candidacy Examination will be conducted according to the regulations specified in the Calendar (link). In brief, the FGSR mandates that the candidacy examination is an oral examination. Each department offering a doctoral degree is responsible for establishing detailed examination policies and procedures for candidacy examination. These documents should be publicly available. The overarching purpose of the Candidacy Examination, as stated in the *Calendar*, is to determine whether students have adequate knowledge to conduct research at a doctoral level. Specifically, in a candidacy examination students must demonstrate to the satisfaction of the examining committee that they possess:

- 1. An adequate knowledge of the discipline and of the subject matter relevant to the thesis;
- 2. The ability to pursue and complete original research at an advanced level;
- 3. The ability to meet any other requirements found in the departments' published policy on candidacy examinations.

Candidacy Examination Policies and Procedures in the Faculty of Rehabilitation Medicine

A. General Information

The Rehabilitation Sciences candidacy examination normally takes place in the student's second year in the program and is an opportunity for the student to demonstrate the knowledge and skills of an independent researcher. The candidacy exam should be completed before the student commences their doctoral research work. In the FRM, the candidacy examination has two parts (written examination and oral examination). The research prospectus meeting, where the student presents their proposed doctoral research, is separate and held in the three months after candidacy completion.

In FRM, a student who passes the candidacy exam demonstrates: 1) knowledge of a specific research area and the ability to articulate a gap in knowledge (both orally and in writing); 2) knowledge of the theoretical foundations of the research (both orally and in writing); and 3) knowledge/skills specific to the methodology proposed for doctoral research. The knowledge tested varies depending on the student's research interests as well as the supervisory committee.

The Candidacy exam is conducted by the Candidacy Examination Committee which consists of the Supervisory Committee plus two arm's length members (see link). The arm's length members (i.e., faculty members who have not been involved with the student's program prior to the candidacy exam) must not have worked with the student previously in any capacity. Students should not contact arm's length examiners prior to the candidacy examination.

Knowledge of the proposed research will allow the reading list and written questions in Part 1 of the candidacy exam to sufficiently address the stated purpose of the candidacy exam (i.e., assess the student's knowledge related to the proposed thesis work, and their ability to conduct original research).

B. Part I (Written Examination)

At least 2 months before the date of written examination, the Supervisory Committee (with input as appropriate from the two additional members of the Candidacy Committee), will agree on a reading list that guides the student's preparation. Using the reading list, as well as knowledge of the proposed thesis research, members of the Candidacy Examination Committee collaborate to develop three questions. These three questions comprise the take-home written examination the student will complete. The take-home written examination is an individual examination. Each question will be answered in extended essay format (maximum 10 double-spaced pages in 12-point font) and completed in 7 days. Appendices are not allowed. Supervisors and students are directed to the eClass site for more detailed information about candidacy plan development.

Upon completion of the written examination, the student will return the examination, along with a two page abstract describing the tentative plan for PhD research, to the Chair, RS-Graduate Program Committee. The student's responses, and the abstract, will be forwarded to each member of the Candidacy Examination Committee *at least two weeks* prior to the oral component of the candidacy exam. Committee members will independently assess the student's written answers prior to the oral examination. The student may share the questions and the responses to the questions with others (e.g., for the purpose of preparing for the oral portion of the candidacy exam) only if consent of the supervisor is obtained.

C. Part II (Oral Examination)

Part II is an oral examination that provides students with the opportunity to respond to questions about their written answers generated in Part I and to demonstrate their ability to pursue and complete original research at an advanced level. The oral examination will be scheduled for a 2.5-hour time slot with approximately 2 hours of direct examination, and the remaining time for committee introduction and post-exam deliberation. During the oral examination, examiners will follow-up on the written answers (e.g., ask for clarification, probe for greater depth). At the oral examination, questions unrelated to the written answers can be included, if they address the learning outcomes of the candidacy exam.

A chair will be assigned for the oral examination by the Associate Dean's office. The detailed procedures followed during this meeting are found at:

■ Guidelines for Chairing Candidacy Exams (GENERIC)

In the Faculty of Rehabilitation Medicine, the outcome of the Candidacy Examination is based on the written and oral examination. The possible outcomes the examination committee will consider are:

- Adjourned
- Pass
- Conditional pass
- Fail and repeat the candidacy
- Fail with a recommendation to terminate the doctoral program or change of category to a master's program.

The explanation of the different outcomes, as documented in the the Calendar is:

Adjourned: A majority of examiners must agree to an outcome of Adjourned. The candidacy examination should be adjourned in the event of compelling, extraordinary circumstances such as a sudden medical emergency taking place during the examination or possible offenses under the Code of Student Behaviour after the examination has started.

Pass: All or all but one of the examiners must agree to an outcome of Pass. If the student passes the candidacy examination, the Faculty completes the Report of Completion of Candidacy Examination form and submits it to the FGSR.

Conditional Pass: A Conditional Pass is appropriate when the student has satisfied the committee in all but a very discrete area of deficiency that can be addressed through a reasonable requirement (e.g., coursework, literature review, upgrading of writing skills). Reworking of the candidacy proposal is not an acceptable condition and the examiners should consider the options available for a student that has failed the examination.

A majority of examiners must agree to an outcome of Conditional Pass. If the candidacy examining committee agrees to a conditional pass for the student, the chair of the examining committee will provide in writing within five working days to the Dean, FGSR, the graduate coordinator and the student:

- the reasons for this recommendation,
- the details of the conditions.
- the timeframe for the student to meet the conditions, but which should be no less than six weeks and no more than six months.
- the approval mechanism for meeting the conditions (e.g., approval of the committee chair or supervisor, or approval of the entire committee, or select members of the committee), and
- the supervision and assistance the student can expect to receive from committee members

Conditions are subject to final approval by the Dean, FGSR. At the deadline specified for meeting the conditions, two outcomes are possible:

- All the conditions have been met. In this case, the department will complete the Report of Completion of Candidacy Examination form and submit it to the FGSR; or
- If the conditions are not met by the deadline, the outcome of the examination is a fail and the committee must be reconvened to make the recommendation as described in the following section

Fail: All or all but one of the examiners must agree to an outcome of Fail.

The options available to the examining committee when the outcome of a student's candidacy exam is "Fail" are

Repeat the Candidacy: Repeating the Candidacy is not an option after a second
failed examination. A majority of examiners must agree to an outcome of Fail and
Repeat the Candidacy. If the student's first candidacy exam performance was
inadequate but the student's performance and work completed to date indicate
that the student has the potential to perform at the doctoral level, the examining
committee should consider the possibility of recommending that the student be
given an opportunity to repeat the candidacy exam. Normally, the composition of

the examining committee does not change for the repeat candidacy exam. If the recommendation of a repeat candidacy is formulated by the examining committee and approved by the FGSR, the student and graduate coordinator are to be notified in writing of the student's exam deficiencies by the chair of the examining committee. The second candidacy exam is to be scheduled no later than six months from the date of the first candidacy. In the event that the student fails the second candidacy, the examining committee shall recommend one of the following two options to the department:

- Change of Category to a Master's Program: All or all but one of the examiners
 must agree to an outcome of Fail and Change of Category to a Master's Program.
 This outcome should be considered if the student's candidacy examination
 performance was inadequate and the student's performance and work completed
 to date indicates that the student has the potential to complete a master's, but not a
 doctoral, program; or
- **Termination of the Doctoral Program:** All or all but one of the examiners must agree to an outcome of Fail and Terminate the Doctoral Program. If the student's performance was inadequate, and the work completed during the program is considered inadequate, then the examining committee should recommend termination of the student's program.

If the candidacy examining committee agrees that the student has failed, the committee chair will provide the reasons and the recommendation to the faculty. The graduate coordinator will then provide the report, together with the faculty's recommendation, to the Dean, FGSR, and to the student.

For failed candidacy examinations, an Associate Dean, FGSR, normally arranges to meet with the student (and others as required) before acting upon any Faculty recommendation.

3.7 Research Prospectus Meeting

A meeting and public presentation will be scheduled to consider the Candidate's PhD thesis proposal. This meeting must be held within 3 months of Part II of the candidacy (oral examination). The supervisor chairs this meeting, following the procedures outlined below. The prospectus meeting is attended by the supervisory committee and the arm's length examiners (if desired). Participation of the full candidacy examination committee is not required.

In preparation for the prospectus meeting, the candidate will write a substantive and complete thesis proposal. The thesis proposal should present a comprehensive literature review with articulation of the gap in knowledge, rationale, research questions, detailed methods including proposed analyses, and expected outcomes. Where appropriate, the candidate may also include preliminary data. The thesis proposal should be written at a level of detail to support an ethics application or replication of the study. The thesis proposal document is limited to 50 pages (double-spaced), excluding references, tables,

figures, and appendices, acknowledging that the number of pages will vary depending on the subject matter and proposed project. The candidate should provide the thesis proposal to the committee at least 2 weeks before the public presentation.

At the prospectus meeting, the candidate will provide a 15-20-minute public presentation. Following the public presentation, the candidate meets with the supervisory committee to discuss the proposal to clarify and enhance the proposed research work. The proposal should be revised (if needed) based on the discussion at the prospectus meeting. The supervisory committee must sign the Prospectus Meeting Approval Form.pdf indicating the outcome of the meeting. Options for outcome include: approve (research can commence); approve with revisions (research can commence once revisions complete); approval withheld (changes/concerns are such that committee recommends 2nd proposal meeting prior to research commencing).

3.8 Final Doctoral Examination

The Final Doctoral Examination is an oral exercise, based on the doctoral thesis. The examination is arranged by the Supervisor and the Faculty, not by the student, and must conform to FGSR regulations. All logistical aspects of the exam (scheduling, booking rooms etc. is done by the Academic Advisor - RS). Important information about thesis requirements, and procedures and timelines related to the exam are below.

A. Thesis Requirements

The FGSR has assigned the following title to the degree in this program: Doctor of Philosophy in Rehabilitation Science, Faculty of Rehabilitation Medicine. This should appear on the title page of the doctoral thesis and will be so designated on the diploma. Otherwise, for guidance regarding thesis preparation students should refer to the FGSR website – Thesis Preparation, Requirements & Deadlines section found here. In the Faculty of Rehabilitation Medicine, you have the option of doing a traditional or a paper-based thesis. A traditional thesis generally has separate chapters for an introduction, literature review, methods, results, and discussion. By contrast, a paper-based thesis will have 3-4 'papers'. These will be similar to manuscripts sent for submission (i.e., a self-contained introduction, methods, results and discussion specific to the paper).

FRM Thesis guidelines (with links to information about FGSR regulations and copyright) can be found at <u>link</u>. Students and supervisors can view examples of previous Rehabilitation Medicine theses on the ERA: Educational and Research Archive (<u>See ERA</u>). Use the search field to identify the work of students in Rehabilitation Medicine.

B. Final Doctoral Examining Committee

The Final Thesis Examination Committee will consist of a minimum of 5 persons: the members of the Supervisory Committee (usually 3), plus 2 arm's length examiners (1 of which is the external examiner). For details on committee membership see the Calendar.

C. The procedures and timelines related to the final doctoral examination are:

- a. **Supervisor recommends an external examiner** to be a part of the final doctoral examination committee. This person should be a senior researcher with expertise in the thesis area. They must be from outside the University of Alberta, and not have a conflict with the supervisor or the student (i.e., should not have worked with either in the previous 6 years). The supervisor should:
 - a. informally approach the proposed external examiner to determine their willingness to serve. Provide them with information about when you expect the exam to occur. Information and template can be found at:
 - **■** Inviting an External Examiner
 - b. Ask for a brief *curriculum vitae of the proposed external examiner* and forward to Associate Dean's office (Angela alibutti@ualberta.ca).
 - c. After the examiner's name and CV have been received, the *Request to Invite External Examiner form* will be submitted to FGSR. The Chair, RS-Graduate Program Committee will officially invite the external examiner to serve. The external examiner should be confirmed at least 2 months in advance of the proposed defense. The student and the supervisor should not have contact with the arm's length or external examiner after participation is confirmed.
 - d. External examiners will normally participate via teleconference.
- b. **Supervisory committee members provide preliminary approval** of the thesis prior to the thesis going to the external examiner
 - Preliminary Acceptance of Thesis Form.pdf . Signing off on this form means that the student and their thesis proceed to the final examination; it does not restrict the examination outcomes available to the committee at defense.
- c. **Send completed thesis** to the academic advisor at least 4 weeks in advance of the examination. The academic advisor will send the thesis to all examining committee members (including the external examiner).
- d. **Notify FGSR**. Once the membership of the Final Doctoral Examination Committee, including the external examiner, has been confirmed, the Academic Advisor-RS will notify the FGSR. This occurs no later than *3 weeks* prior to the Final Doctoral Examination date.
- e. **Final Doctoral Examination.** At the final examination, the public presentation of the thesis (15-20 minutes), precedes the oral examination. The final doctoral examination, including the public presentation, should not exceed 3 hours. A chair will be assigned for the Final Doctoral Examination. The detailed procedures followed during this meeting are found at:
 - (PhD)Guidelines for Chairing Thesis Defenses (Generic)

f. **Final Doctoral Examination Outcomes**. The decision of the examining committee will be based both on the content of the thesis and on the student's ability to defend it. The final examination may result in one of the following outcomes: Pass, Pass subject to revisions, Fail, Adjourned. There is no provision for a final examination to be "passed subject to major revisions". For a further explanation of expectations regarding the outcomes go to FRM Guidance for Thesis Defense Recommendations.

g. Follow up activities.

- 1. Immediately after the Final Doctoral Examination it is the responsibility of the Chair, RS-Graduate Program Committee to advise the FGSR of the examining committee's decision by means of the form, "Report of Completion of Final Oral Examination."
- 2. If adjourned, the Chair, RS-Graduate Program Committee must send a memorandum that accompanies this form to explain the decision.
- 3. If the examining committee agrees to a "Pass subject to revisions", the chair of the examining committee must provide in writing, within five working days of the examination, to the Dean, FGSR, the graduate coordinator and the student:
 - the reasons for this outcome.
 - the details of the required revisions,
 - the approval mechanism for meeting the requirement for revisions (e.g., approval of the examining committee chair or supervisor, or approval of the entire examining committee, or select members of the committee)
 - the supervision and assistance the student can expect to receive from committee members.

Normally, if the student successfully completes the Final Doctoral Examination (i.e., the decision is pass or pass subject to revisions), they should make the appropriate revisions within 30 days of the Final Doctoral Examination as per the recommendations of the examining committee. The student is officially required to make the revisions within 6 months of the final examination. Once the required revisions have been made and approved, the supervisor and student indicate to the Chair, RS-GPC that the changes have been made. The Chair, RS-GPC will then submit a completed Thesis Approval/Program Completion Form to the FGSR. If the required revisions have not been made and approved by the end of the 6-month deadline, the outcome of the examination is a Fail.

All theses must be submitted electronically. Please visit the FGSR website at <u>Thesis</u> preparation, requirements and deadlines

h. **Student Responsibilities related to completion of the program**. Students must ensure that they are registered in THESIS at the time of their thesis defense and up to the point when their final thesis is submitted to FGSR.

4. MSc Program

4.1 Required Components

- 1. A minimum of 15 units of course weight at the graduate level (i.e., three required courses and at least two, 3-credit elective courses)
- 2. The MSc Thesis including prospectus meeting and final examination (thesis defense)
- 3. Training in Ethics and Academic Citizenship (enrolment and completion of <u>INT D</u> 710: Ethics and Academic Citizenship | Faculty of Graduate Studies and Research
- 4. FGSR Professional Development Requirement

4.2 Courses

Required Courses (9 credit units)

• REHAB 500 - Conducting Rehabilitation Research

Preparation of a plan to conduct research including writing a proposal. Students will critically discuss various aspects, such as the selection of the problem, the review of the literature, the research hypothesis, the collection and analysis of the data, and the significance of the research. Note: this course is delivered in an Online format.

REHAB 512 – Theories and Issues in Rehabilitation Science

An orientation to the theoretical bases of rehabilitation science and its historical development. Note: this course is delivered in an Online format.

Both Rehab 500 and Rehab 512 are offered in Fall semester. New master's students should take those two courses in their first semester.

- **REHAB 606 (1cu)** Essentials for Graduate Studies. This course provides the student with foundational research knowledge and skills to accelerate their ability to be productive and successful in research endeavors. **Masters students are strongly encouraged to take Rehab 606 in the first semester of enrollment.
- Graduate-level course in research methods/analysis.

Unusual circumstances may occasionally warrant that a student substitute another course for 1 of the 2 required courses within the Faculty of Rehabilitation Medicine (REHAB 500 & 512). In cases where substitution of a required course appears to be warranted in a student's plan of study, a formal request from the student and supervisor must be submitted in writing to the Chair, RS-Graduate Program Committee. That request should include identification of appropriate alternative coursework (in the Faculty of Rehabilitation Medicine or elsewhere on campus), explicit evidence that the substitution is

an appropriate equivalent (e.g., course outlines, letters from instructors, etc.) and an academically sound rationale for the substitution in the student's program. Typically only 1 required-course substitution will be allowed in a student's MSc program.

Elective Courses (6 credit units):

Elective courses include those that pertain to an area of specialization determined by each student's background, needs and interests. Choices for elective courses normally should be made within the first year of MSc studies and should be included in the student's plan of study. Subsequent, reasonable revisions to the optional coursework on a student's plan of study are allowable, and will be reviewed for approval by Chair, RS-Graduate Program Committee and the RS-Graduate Program Committee (as indicated).

4.3 Supervisory Committee

An MSc student's program is directed by a Supervisory Committee of at least 2 full-time staff members, one of whom is the student's Supervisor and chair of the supervisory committee. The committee is appointed within the first 12 months. The Calendar provides detailed information about who may serve, and in what capacity.

As soon as the Supervisory Committee's membership is finalized, the supervisor must forward the names of the committee members to the Chair, RS-Graduate Program Committee via the Academic Advisor-RS (alibutti@ualberta.ca). If the membership of the Supervisory Committee needs to be revised, the Chair, RS-Graduate Program Committee must be notified.

4.4 Plan of Study and Progress in Program

The <u>Plan of Study</u> document should be used by students and supervisors to plan for course work and completion of program milestones (courses, professional development and ethics requirement, candidacy, prospectus). The document should be used iteratively.

The Supervisor and the Supervisory Committee shall provide direction to the MSc student at all stages of the program; and will have a formal meeting with the student *at least once a year.* A summary of this annual meeting, which will include a discussion of student progress and plans for the coming year, will be documented in the Student's Annual Progress Report. This report is initiated from FGSR and goes initially to the student. There is no Rehabilitation Medicine requirement for a progress report, beyond completion of the FGSR progress report.

Student progress in the program, as set out in the plan of study, is monitored by the program and through the FGSR progress report. Course (grade point average \leq 3.0), program or general performance, below the expectations set out for graduate students, may result in academic probation. Read more at: <u>Academic Standing</u> and <u>Academic Probation</u>.

The maximum period of time permitted to complete the requirements for an MSc degree is 4 years (see FGSR Graduate Program Manual). When unusual circumstances have prevented timely completion of the degree or degree requirements, students may petition for an extension of the time allotted to complete the requirements of the program.

4.5 The MSc Thesis (Prospectus Meeting and Thesis Defense)

Prospectus Meeting: A meeting is required to consider the Candidate's MSc thesis proposal. The Academic Advisor-RS (**alibutti@ualberta.ca**) will assist with scheduling the meeting if needed. The supervisor chairs the prospectus meeting which is attended by the supervisory committee. The prospectus meeting is an informal meeting designed to give the student the opportunity to present and defend their proposal.

In preparation for the prospectus meeting, the student will write a thesis proposal that includes a literature review, rationale, research questions and proposed methods, and preliminary data where appropriate. The thesis proposal is limited to 30 pages, excluding references and appendices. It should be provided to the committee at least 2 weeks prior to the meeting.

At the prospectus meeting. The student will provide a 15-20 minute presentation (publically or to the committee only). A public presentation is optional at the Master's level. Master's students are encouraged to use the opportunity to practice presenting publically, as the presentation at the final defense will be public. Please contact the Academic Advisor for assistance scheduling a public presentation (if planned). After the presentation, the student will meet with the supervisory committee to discuss and defend the proposal, and be prepared to make changes as indicated. A consensus among the supervisory committee must be reached about changes to be made to the proposal on the basis of this meeting. The supervisory committee must sign the Prospectus Meeting Approval Form indicating the outcome of the meeting. Options for outcome include: approve (research can commence); approve with revisions (research can commence once revisions complete); approval withheld (changes/concerns are such that committee recommends 2nd proposal meeting prior to research commencing).

Final MSc Examination: The Final MSc Examination is an oral exercise, based largely on the master's thesis. The examination is arranged by the Academic Advisor, in collaboration with the Supervisor, not by the student, and must conform to FGSR regulations (Graduate Program Manual). All logistical aspects of the exam (scheduling, booking rooms etc.) is done by the academic advisor. Important information about thesis requirements, and procedures and timelines related to the exam are below.

A. Final MSc Examination Committee

The examination committee consists of the committee and one arm's length examiner. The arm's length examiner must be external to the student and the project (i.e., has not worked with the student or been involved in the Master's project in any way). They do not have to be external to the supervisor and can be from Rehabilitation Medicine or from another faculty at the University of Alberta. It is possible for arm's length examiners to be from outside the University of Alberta with appropriate rationale for that choice. At least half of the examiners must be from the University of Alberta. The supervisor should forward the name of the arm's length examiner to the Rehabilitation Science Academic Advisor at least 4 weeks prior to the defense. A form providing the names of the examination committee (minimum of 3 people in total, supervisory committee plus 1 arm's length examiner added at the time of defense) will be forwarded to FGSR. Once the committee is set, the academic advisor will work with the supervisor and committee members to schedule the defense.

B. Thesis Preparation and Requirements

The FGSR has assigned the following title to the degree in this program: Masters of Science in Rehabilitation Science, Faculty of Rehabilitation Medicine. This should appear on the title page of the thesis and will be so designated on the diploma. FRM Thesis guidelines (with links to information about FGSR regulations and copyright) can be found at link. Students and supervisors can view examples of previous Rehabilitation Medicine theses on the ERA: Educational and Research Archive (See ERA). Use the search field to identify the work of students in Rehabilitation Medicine.

All theses must be submitted electronically. Use the Thesis Submission Checklist found <a href="https://hee.com/heec.com/heee.com/heec.com/heee.com/heee.com/heee.com/heee.com/heee.com/heee.com/heec.com/heee.com/heee.com/heee.com/heee.com/heec.com

C. Procedures and Timelines related to the final MSc examinations are:

- a. Before a date for the Final Masters Examination is determined *the members* of the Supervisory Committee must declare in writing that the thesis is of adequate substance to warrant that the student proceed to the final examination or that the thesis is unsatisfactory and the student should not be allowed to proceed to the final oral examination. Signing off on the **Preliminary Acceptance of Thesis**
 - Preliminary Acceptance of Thesis Form.pdf form means that the student and their thesis proceed to the final examination, it does not restrict the examination outcomes available to the committee at defense. This happens at least one month prior to defense.
- b. The Final MSc Examination will be conducted according to the regulations specified by the Faculty of Graduate Studies and Research (listed in the Calendar).
- c. At the final examination, the public presentation of the thesis (15-20 minutes), precedes the oral examination. The final examination, including the public presentation, should not exceed 2.5 hours. A chair will be assigned, by the Associate Dean's office, for the final examination. The detailed procedures followed during this meeting are found at:
 - (MScRS)Guidelines for Chairing Thesis Defenses (Generic)

- d. Examination outcomes. The decision of the examining committee will be based both on the content of the thesis and on the student's ability to defend it. The final examination may result in one of the following outcomes: Adjourned, Pass, Pass subject to revisions, Fail. There is no provision for a final examination to be "passed subject to major revisions". For a further explanation of expectations regarding the outcomes go to FRM Guidance for Thesis Defense Recommendations.
- e. Follow up activities. Immediately after the Final MSc Examination, it is the responsibility of the Chair, RS-Graduate Program Committee to advise the FGSR of the examining committee's decision by means of the form, *Report of Completion of Final Oral Examination*.

If the examining committee agrees to adjourn, pass subject to revisions, or fail, the chair of the examining committee must provide in writing, within five working days of the examination, to the Dean, FGSR, the graduate coordinator and the student:

- the reasons for this outcome,
- the details of the required revisions,
- the approval mechanism for meeting the requirement for revisions (e.g., approval of the examining committee chair or supervisor, or approval of the entire examining committee, or select members of the committee), and
- the supervision and assistance the student can expect to receive from committee members.

Normally, if the student successfully completes the Final MSc Examination (i.e., the outcome is pass or pass subject to revisions), the student should make the appropriate revisions within 30 days of the Final Master's Examination. The student is officially required to make the revisions within 6 months of the final examination. Once the required revisions have been made and approved, the supervisor and student indicate to the Chair, RS-GPC that the changes have been made. The Chair, RS-GPC will then submit a completed Thesis Approval Form to the FGSR. If the required revisions have not been made and approved by the end of the 6-month deadline, the outcome of the examination is a Fail.

Student Responsibilities related to completion of the program: Students must ensure that they are registered in THES at the time of their thesis defense and up to the point when their final thesis is submitted to FGSR.

5. ETHICS AND ACADEMIC CITIZENSHIP REQUIREMENT

Graduate students at the University of Alberta are required to complete at least 8 hours of training in academic integrity and ethics. Students starting their Rehabilitation Science programs in Fall 2021 or later will be required to enrol in INTD710, to meet their 8 hours of ethics requirement. See Ethics and Academic Citizenship for more information.

Students must complete this course within the first year of study and it is strongly recommended that it be completed in the first semester of study.

6. Professional Development Requirement

Graduate students must complete the University of Alberta Professional Development Requirement which includes an Individual Development Plan and 8 hours of Professional Development Activities. Please see the following link for detailed information: https://www.ualberta.ca/graduate-studies/professional-development.

The Rehabilitation Sciences eClass site has a section where you will find forms and information required to complete professional development activities.

7. Special Plans of Study

7.1 Fast-Tracking from MSc to PhD

Graduate students in the MSc in Rehabilitation Science program may apply to enter the PhD in Rehabilitation Science program prior to completing the MSc-RS degree. Fast-tracking is reserved for outstanding students and the decision regarding change of category to the PhD program rests with the Graduate Program Committee. Minimum eligibility to apply for fast-track admission to the PhD program includes the following:

- 1. between 12 and 18 months full time enrollment in the MSc Program
- 2. an average GPA of 3.8 or higher in all courses while enrolled in the MSc program
- 3. evidence of research potential, including at least one manuscript (submitted at a minimum) or a presentation at a conference during the MSc program.
- 4. a written document describing results or progress from research work in the MSc, as well as a proposed plan for doctoral research (generally 5 pages or less)
- 5. a presentation of the doctoral plan to the supervisory committee (up to 20 minutes), followed by a discussion.
- 6. strong endorsement of the MSc supervisory committee, provided in writing.

Note: supervisor and committee can carry forward to PhD if appropriate.

If you are considering fast-tracking, please schedule a meeting with the Associate Dean-Graduate Studies (supervisor and student together) to discuss the process and whether fast-tracking is right for you.

7.2 Combined Clinical/Research programs (MScSLP/PhD and MScPT/PhD)

The combined programs bring together two programs to achieve efficiencies that help exceptional students seamlessly complete combined clinical and research studies. You will find information about the combined programs in SLP and PT at the following links:

MScSLP/PhD program information

MScPT/PhD program information

7.3. Specialism in Surgical Design and Simulation (MSc program)

This program is for students who are interested in working as part of a surgically based team to apply advanced digital technology to surgical design and simulation and contribute significantly to the work of a research team focused in Rehabilitation Science. For more information go to <u>link</u>.

7.4 In-Lieu-of-Master's Thesis Requirement (Rehab 899)

Students who must complete this requirement will register for a Directed Research Project course number (REHAB 899,*3). The project will be supervised by the student's doctoral program supervisor and may be related to the student's future doctoral thesis research. REHAB 899 can be used to fulfill one of the required elective courses.

Steps to complete an in-lieu-of-thesis include:

- 1. Idea stage Conceive of an appropriate research project to complete. Options include experimental research (quantitative/qualitative) or a review (narrative, systematic) related to your thesis interests. Secondary analysis is acceptable. Idea discussions should happen with your supervisor. Note: the project should be of sufficient scope to result in a publishable outcome.
- 2. In-lieu-of-thesis proposal Decide on your project and write up a research proposal including background and rationale, research question(s) and proposed methods. The proposal should be 20 pages or less (exclusive of references or appendices).
- 3. Committee formation. You and your supervisor should form an in-lieu-of-thesis committee consisting of an additional 1-2 faculty members (usually from within the Faculty of Rehabilitation Medicine). The in-lieu-of-thesis committee does not have to be the same as the PhD committee.
- 4. Meeting with your in-lieu-of-thesis committee. At the meeting you will present your proposal orally (10-20 minutes), followed by a discussion about the proposal with the goal to refine it prior to starting.
- 5. Conduct the research.

- 6. Write up the research project. The project's implementation, results and analysis must be described in a formal paper and should demonstrate the ability to complete research at the level of a Master's student (e.g., basic knowledge of research methods, understanding of context of research but depth of knowledge may be limited).
- 7. Present the findings of the research project orally (10-20 minute presentation). A question and answer session will then take place with the in-lieu-of-thesis committee.

The in-lieu-of-thesis will receive a mark of "credit," "incomplete" or "fail". If a student receives an "incomplete" or "fail" for the project at the end of the year in which it is undertaken, that student must clear the incomplete or repair the project satisfactorily for a "credit" no later than the end of the subsequent academic year. It is strongly recommended that students who need to complete an in-lieu-of-thesis project enroll in Rehab 500 in their first term (where course content focuses on research methods and proposal writing) and register in Rehab 899 in the second term.

The in-lieu-of-thesis project must be completed prior to the PhD Candidacy Examination.

8. Intellectual Property

The university has developed guidelines for supervisors and graduate students regarding ownership of intellectual property. These can be found on the university website at <u>link</u>.

Also find intellectual property information at: Research and Innovation Site

9. MILESTONES AND RECOMMENDED TIMELINES

Milestone	Recommended Timeline for Completion - PhD Students	Recommended Timeline for Completion - MSc Students
Ethics and Academic Citizenship (see <u>link</u>)	must complete by the end of Year 1 (recommended completion is in the first semester of study). Students are automatically registered at the time of enrollment (starting Fall 2022)	must complete by the end of Year 1 (recommended completion is in the first semester of study). Students are automatically registered at the time of enrollment (starting Fall 2022)
Professional Development	IDP and 8 hours of professional development activities. Recommended in 1st year, must be completed before program completion.	IDP and 8 hours of professional development activities. Recommended in 1st year, must be completed before program completion.

Supervisory Committee Formation	By the end of Year 1 (minimum 3 people, which includes supervisor)	By the end of Year 1 (minimum 2 people, which includes supervisor)
Course Work	By the end of Year 1	By the end of Year 1
Candidacy	mid to late year 2 (FGSR policy states must be complete by the end of Year 3)	Not applicable
Prospectus	Within three months of candidacy completion	End of Year 1, early Year 2
Committee Formation for Defense	Add one arm's length, one External Examiner (EE). EE must be approved 2 months prior to defense	Add one arm's length examiner
Defense	Four years	Two years