

## Department of Community Health Sciences Graduate Program Doctoral Candidacy Requirements

### OVERVIEW

The University of Calgary (UC) Doctoral [Candidacy Regulations](#) (“the Regulations”) govern the conduct of Admission to Candidacy at the UC. This document establishes program-specific requirements associated with the conduct of admission to graduate candidacy under *the Regulations* for doctoral students in Community Health Sciences (MDCH) under the Cumming School of Medicine (CSM).

### STATEMENT OF PURPOSE

The candidacy requirements in MDCH are designed to provide students with the background necessary to develop competencies as professionals in their field or discipline in community health sciences, and to assess their ability to conduct independent research leading to the successful completion of a thesis. Specifically, the candidacy requirements test the suitability of candidates and their preparedness to begin their doctoral research by assessing the following attributes: (i) breadth and depth of knowledge in the research area, (ii) understanding of the necessary technical and tactical skills to design and conduct a research project, (iii) ability to communicate effectively, (iv) critical thinking (ability to judge their own work and the work of others), and (v) adaptive thinking (ability to integrate new ideas).

### CANDIDACY COMPONENTS

As per the [Candidacy](#) section in the Graduate Calendar and subject to any extension allowances, doctoral students must complete all candidacy requirements *within 28 months* of first registration in the doctoral program. Those students who have transferred from a master’s program must complete all candidacy requirements within 36 months of the first registration in that master’s program.

All doctoral students in MDCH must successfully complete the following components prior to being admitted to candidacy:

- 1) All course requirements;
- 2) Research Ethics requirements;
- 3) Research Integrity Day;
- 4) Written Thesis Proposal;
- 5) Concept Map and Reading List;
- 6) Written Field of Study (FoS) Examination; and
- 7) Oral Field of Study (FoS) Examination.

#### 1) All Course Requirements

Graduate courses in MDCH promote the acquisition of both broad knowledge in the field and a deep understanding in a specific research area. Doctoral students must complete all course requirements outlined in the Graduate Calendar, those required by the MDCH specialization (valid at the time of their start in program), and any additional courses recommended by their supervisory committee and approved by the Graduate Program Director. All course work must be satisfactorily completed and the thesis proposal approved by the supervisory committee, normally *within 24 months* of initial registration and before the Written and Oral Field of Study (FoS) Examinations can occur.

#### 2) Research Ethics Requirements

The CSM requires that students working with chemicals, biohazards, radioactivity, and/or animals complete the necessary training requirements and relevant certification(s) prior to beginning their research project and/or working in the laboratory. For MDCH students working with human primary material or human subjects, students must complete the mandatory TCPS-II (or update) online training and receive approval from the Conjoint Health Research Ethics Board (CHREB) prior to initiating their research. Proof of ethics submission must be provided to the Graduate Program Administrator before admission to Candidacy will be permitted, however the specific research project cannot proceed before all approvals are granted even if all candidacy requirements have been completed.

### 3) Research Integrity Day

MDCH students are required to attend a Research Integrity Day, focused on Academic Integrity and Responsible Conduct of Research, provided by the Graduate Science Education (GSE) office. It is recommended that this CSM requirement be completed normally *within 12 months* of first registration in the doctoral program, but certainly prior to the FoS Written Examination.

### 4) Written Thesis Proposal

Faculty of Graduate Studies candidacy regulations require that in order to be admitted to candidacy, students must successfully complete a written thesis proposal that is approved by the Supervisory Committee (see *Academic Regulations – Admission to Candidacy*). FoS *Written and Oral* examinations can only be held AFTER the Supervisory Committee has approved the thesis proposal. Students are encouraged to develop, with their supervisor, a timeline to complete both their thesis proposal and FoS Written and Oral Examinations within these program guidelines. **Please Note: Normally, if the written thesis proposal is not successfully approved within 25 months of initial registration, the student will be required to withdraw from MDCH.**

Preliminary Thesis Proposal. Within *three months* of entry into the program, students shall establish a Supervisory Committee, as per the Graduate Calendar (Section J.5) and current GSE guidelines. All students are encouraged to prepare a preliminary research proposal (approximately 5 pages in length) for submission to their Supervisory Committee *within 12 months* of initial registration. This preliminary proposal will serve as a starting point to stimulate discussion with the Supervisory Committee and will form the basis of the full written thesis proposal that will be eventually submitted for approval (see below). The preliminary proposal is meant to outline the direction of the thesis research and to provide the student with an opportunity to receive valuable feedback from the Supervisory Committee. The Supervisory Committee members will provide research guidance (in-person and via email) in the conceptualization, design, and development of the preliminary thesis proposal, but ultimately the student must be actively involved in this process and prepare the full written thesis proposal.

Full Written Thesis Proposal. Thesis proposals are detailed documents that outline the research approach and methods that will be undertaken in the thesis research. MDCH students are expected to incorporate feedback from their supervisory committee on the preliminary proposal and prepare a more detailed thesis proposal, which should be between 10 and 15 single-spaced pages (excluding figures, tables, and references, 0.75 inch margins and 12-point font). A suggested (*but not mandatory*) format for the written thesis proposal is:

- Introduction and Literature Review (approximately 4 to 6 pages – should contain a review of relevant theoretical frameworks, definitions or key terms, critical review of the existing published research related to the project, and end with a problem statement or research question(s) and the significance of the proposed study)
- Research Methods/Experimental Plan (approximately 5 to 6 pages – should describe the setting and context, participants, sampling, participant recruitment, data collection, and data analysis plan)
- Ethical Considerations (approximately 1 page – should include a description of data handling procedures)
- Significance (1/2 page)
- Budget and Justification (1-2 pages)
- Dissemination and/or Knowledge Translation plan (approximately 1 page);
- Research Timeline (approximately 1 page)

Students should consult with their Supervisors before submitting their written thesis proposal to the Supervisory Committee for evaluation and approval. Normally, students will electronically distribute their full written thesis proposal to the Supervisory Committee for evaluation, members will have a *minimum of two weeks* and normally a *maximum of three weeks* to read the proposal, and the Supervisor will schedule a Supervisory Committee meeting to determine whether the thesis proposal will be approved.

Approval (*no later than 25 months* from initial registration) of the thesis proposal takes place via a Supervisory Committee meeting, and must be unanimous. The proposal meeting is chaired by the Supervisor and is intended to provide the student with an opportunity to present his/her thesis proposal. The student will deliver

a 15-minute synopsis of the proposal, answer rounds of questions about the proposal from the supervisory committee, and discuss improvements or amendments based on the Supervisory Committee's feedback. Members of the Supervisory Committee must be satisfied that all of their concerns and questions are addressed. Supervisory Committee members will decide whether the written thesis proposal can be approved, considering all of the following: (1) theoretical and methodological rigor, (2) feasibility, (3) contributions of the proposed research to the field/discipline, and (4) written quality of the proposal document. If no revisions or minor revisions are required, the thesis proposal can be judged acceptable at the conclusion of the meeting. A unanimous decision of whether the thesis proposal is acceptable or unacceptable is required.

If the Supervisory Committee members fail to arrive at a unanimous recommendation, the Supervisor will adjourn the discussion and inform the Associate Dean – GSE of “lack of unanimity.” The final decision will then be at the discretion of the Associate Dean – GSE, CSM.

If the Supervisory Committee unanimously determines that the thesis proposal is acceptable, the supervisor will gather approval signatures from the Supervisory Committee on the *Thesis proposal Approval* form and submit this form to the Graduate Program Administrator ([chsgrad@ucalgary.ca](mailto:chsgrad@ucalgary.ca)) for the Graduate Program Director's approval. This documentation, along with a copy of the approved proposal will then be added to the student's file.

If the Supervisory Committee determines that the thesis proposal is unacceptable, a second Supervisory Committee meeting (with the same committee members) to approve the thesis may be scheduled (*within six months* of the original proposal submission date or *no later than 32 months* of initial registration), wherein the student will present a revised version of the proposal. If the thesis proposal is not approved at this second Supervisory Committee meeting, then the student will be required to withdraw from MDCH. Each member of the Supervisory Committee will provide a detailed letter to the MDCH Graduate Program Director, outlining why the proposal did not satisfy the requirement. According to the Faculty of Graduate Studies regulations, a second failure on any candidacy component requires the student to withdraw from the program. The graduate program must send the *Recommendation of Required Withdrawal from Graduate Program for Failure to Maintain Academic Progress* to [gpoform@ucalgary.ca](mailto:gpoform@ucalgary.ca).

## **WRITTEN AND ORAL FIELD OF STUDY EXAMINATIONS**

All doctoral students in Community Health Sciences must complete both Written and Oral FoS Examinations, which **can be scheduled after approval of the Full Written Thesis Proposal**.

The Written and Oral FoS Examinations are formal and will be independently evaluated by the same FoS Examination Committee. The composition of the Written and Oral FoS Examinations Committee includes: (1) Supervisor and Co-Supervisor (if applicable; both non-voting), (2) a minimum of two Supervisory Committee members (voting), and (3) two independent examiners (voting). Of these independent examiners, normally one will be internal to the Department of CHS and one will be external to CHS but internal to the UC.

It is the Supervisor's responsibility to arrange a time and place for the FoS examination. The student is not involved in any aspects of exam arrangements. The Graduate Program Director will review and, if appropriate, approve the choice of examiners. Once it has been confirmed that requirements (i.e., components 1 to 5 as listed on page 1) have been met, the Graduate Program Administrator will prepare the Notice of Exam (NOE) and a Neutral Chair (non-voting) will be assigned to moderate the FoS Oral Examination.

The FoS examination process consists of 3 distinct steps: (1) The development of the concept map and reading list, (2) the FoS Written Examination, and (3) the FoS Oral Examination.

### **5) Concept Map and Reading List**

The student creates the concept map and reading list, in close consultation with the Supervisory Committee, which establishes the topics for the Written and Oral components of the FoS Examinations. The members of the Supervisory Committee complete the *Field of Study Preparation* form.

The **concept map** (refer to Appendix 1) should define the content boundaries of research knowledge that supports the student's thesis topic area, and more broadly, career development. The concept map content is expected to include the following three specific competencies:

- I. Underlying Theories and Conceptual Frameworks - What has emerged in these areas that help explain, predict, and connect ideas? How is study in these areas framed? Are there elements of different underlying disciplines?
- II. Methods/Methodology (study of methods) - What methods are most prevalent in these fields? Are there additional methodologies relevant to study in this area that the thesis does not focus on? Understanding these would provide the student with a broader base with which to move forward in his/her career. What are the strengths and weaknesses? Why have these methods developed (or been favored) and not others? How do the methods contribute to/hinder further understanding?
- III. Research Context - History and philosophy of the underlying science for this research area: How did researchers arrive at tools and methods that are currently in use? Historically, who has influenced study in these areas and moved them forward? Are there multiple leaders in development of these fields? Have their ideas been divisive, homogenous or synergistic? Are there specific historic events that changed the direction or focus of studies (e.g., new legislation, new technology developments, political or social factors driving/hindering this research)?

A **reading list** must be developed for each of the three competency areas (i, ii and iii above), typically with each list consisting of 20 to 25 academic sources (i.e., books, published peer-reviewed journal articles). While the list is not intended to include all possible knowledge in the three defined areas, it should include a broader perspective than the thesis proposal reference list. Once the Supervisory Committee deem the concept map and reading list acceptable, the supervisor forwards them electronically to the MDCH Graduate Program Director for approval. The Director evaluates all three lists together in relation to the concept map and ensures the readings appropriately represent seminal peer-reviewed publications and relevant sources in the discipline that will assist the student in responding to the questions posed by the examiners. Through an informal process, the Director may suggest additions to the reading list and/or revisions to the concept map via the Supervisor. Once approved, the student is notified and the student can consider the reading resources and concept map finalized resources for the FoS exam. The concept map and reading lists should be approved by the MDCH Graduate Program Director *no later than 25 months* after the initial registration.

## **6) Written Field of Study Examination**

The Written FoS Examination commences *four weeks prior* to the Oral FoS Examination.

No later than *four weeks* prior to the Written FoS Examination, the Supervisory Committee prepares the three questions for the Written FoS Examination; one specific to each of the three defined competency areas and relevant to the reading list. The Supervisor coordinates the question development and submits them for final approval to the Graduate Program Director.

Prior to 10:00 am on the first day of the Written FoS Examination period (see Conduct of the Written FoS Examination below), the Supervisor will email the Written FoS Examination questions to the student. The student must confirm receipt of the questions electronically to the Supervisor, who will keep this documentation for the student's file. Once the Written Examination begins, the student may no longer discuss anything specific to the exam questions with members of the examining committee, including the supervisor(s). Any questions on the part of the student should be directed to the Graduate Program Director.

### **Conduct of the Written Field of Study Examination**

The Written FoS Examination is a formal open-book, take-home examination. Students will have three weeks to prepare their responses to the Written FoS examination questions, not to exceed 15 double-spaced pages each in length per paper, exclusive of figures and references. The format and style of the examination responses should be in paper format that follows the presentation of a peer-reviewed journal article. All papers must demonstrate a critical analysis of each question or topic posed, as well as informed, insightful, and well-

reasoned responses that incorporate recent knowledge from the relevant literature.

Students must send their written responses electronically in Adobe Portable Document Format (pdf) to the Examination Committee by 10:00 a.m., *three weeks (or 21 days)* after receiving the questions. The Examination Committee will have one week to read and evaluate the student's Written FoS Examination responses to the three questions prior to the Oral FoS Examination.

Success on the Written FoS Examination is defined as the student: (1) demonstrating knowledge of and appropriate use of the literature from the approved reading list; (2) understanding the major debates, controversies and relationships identified in the relevant literature; (3) assessing and critically appraising the relevant literature with respect to specific issues and themes, as well as exercising critical judgment, including an understanding of strengths and weaknesses of various points of view; (4) producing answers that are coherent, internally consistent and supported by the relevant literature; and (5) articulating one's position as a developing scholar in relation to the evidence presented.

The evaluation of the Written FoS Examination will be a "Pass" or "Fail" result, based on the examiners' comprehensive review of all responses to the questions posed in the Written Examination. Examiners will submit their evaluations at the beginning of the Oral Examination (see below). Unanimous decisions are not required, however, it takes at least two negative votes to fail the Written Examination.

### **7) Oral Field of Study Examination**

The Oral FoS Examination will take place one week after the student submits the Written FoS Examination responses, which provides examiners sufficient time to prepare Oral Examination questions. The Oral Examination supplements the written examination and provides students with an opportunity to discuss and defend their written responses, as well as to be questioned orally about their research area. Oral Examinations in MDCH are not meant to be comprehensive to the entire discipline, but students are expected to have strong foundational knowledge and in-depth understanding of the topics related to their specialization, core field of research, and defined competencies. The Written Examination is understood to serve as the basis from which the Oral Examination shall proceed, however, written answers will **not** be directly re-evaluated in the Oral Examination. Although examiners are not limited to the written component in framing the questions asked, the concept map and reading lists will determine the scope of the material to be examined during the oral.

The Oral Examination will not exceed *two hours*, not including the deliberation time of the Committee or breaks approved by the Neutral Chair. The Chair will facilitate rounds of questions to the student and ensure that all relevant Faculty of Graduate Studies policies and protocols are followed. The concept map and written questions can be provided to the Neutral Chair prior to the start of the Oral Examination to help ensure the written responses will not be re-examined. Only voting members of the Examination Committee are permitted to question the student; **the supervisor and co-supervisor are non-voting members during the examination and therefore cannot pose any questions to the student.**

Success on the Oral Examination involves the student: (1) demonstrating knowledge of and appropriate use of the literature from the approved reading list; (2) understanding the major debates, controversies and relationships identified in the relevant literature; (3) assessing and critically appraising the relevant literature with respect to specific issues and themes, as well as exercising critical judgment, including an understanding of strengths and weaknesses of various points of view; (4) producing answers that are coherent, internally consistent and supported by the relevant literature; and (5) articulating one's position as a developing scholar in relation to the evidence presented.

At the end of the Oral Examination (or after the 2 hour maximum), the student and supervisor will be asked to withdraw from the examination room. The Neutral Chair will explain the procedure of evaluation to the voting Examination Committee Members. Each examiner will submit a straw vote by secret ballot, identifying his/her "Pass" or "Fail" recommendation for the Oral Examination, which will serve as the basis for further discussion about the student's performance. Although the goal of the discussion is to reach a consensus recommendation,

unanimous decisions are not required (it takes at least two negative votes to fail the Oral Examination). The Neutral Chair will conclude the deliberation phase by conducting a final secret ballot vote for the Oral Examination, where voting members of the examination committee must record a recommendation of “Pass” or “Fail.”

### Outcome of the Written and Oral FoS Examinations

Each of the FoS Examinations (Oral and Written) **will be evaluated as a “Pass” or “Fail”, independently**. A failure is indicated by two or more Examination Committee members that vote for a failed examination; otherwise, an examination will be considered a pass (i.e., a single vote for a fail results in a pass for an examination). The Neutral Chair will record the final outcome for each component on the *MDCH Field of Study Written and Oral Examinations* form to reflect the examiners’ final recommendations. The Neutral Chair or the Supervisor will then immediately inform the student about the outcome of the examination. The Neutral Chair will submit the final recommendation of “pass” or “fail” to the Graduate Program Administrator within one working day of the completion of the examination.

If a student fails the Written Examination, then one re-take of the Written Exam will be permitted, provided they can do so within FGS program deadlines. A failure of the Written Exam necessitates that both the Written and Oral Examinations must be completed again.

If a student fails the Oral Examination, then one re-take of the oral exam will be permitted, provided they can do so within FGS program deadlines. If a student fails the Oral Examination, but passes the Written Examination, only the Oral Examination will need to be re-taken. A re-take examination must occur between two and six months following the date of the first examination. If a student fails either examination component (written or oral) twice, they will be required to withdraw from the Program.

Potential outcomes for FoS Written and Oral Examinations include:

WRITTEN	ORAL	OUTCOME	RETAKE OUTCOME
PASS	PASS	PASS	
PASS	FAIL	Re-Take Oral only	
FAIL	PASS	Re-Take the Written only	
FAIL	FAIL	Re-Take both the Written and Oral	

Required Withdrawal if the same component is a **FAIL** twice.

### Committee Procedures for Failed Thesis proposal or Field of Study Examinations

If a student’s Thesis proposal is deemed unacceptable or a student does not pass a FoS Examination component (written or oral), each member of the respective committee will provide a detailed letter to the Associate Dean Graduate Science Education stating the rationale for his or her evaluation. For the FoS Examinations, the Neutral Chair will also provide a letter that details the examination procedures, including timings and any irregularities that may have been observed. Each letter must be delivered no later than five business days following the date of the failed Thesis proposal Evaluation or FoS Examination. Within five business days of receiving letters from the committee, the Associate Dean will respond to the student with a judgement about the final outcome. The Associate Dean may uphold the fail in the case of a clear fail or refer to FGS for decision in the case of an unclear fail.

### Appeals

If the outcome of any component of the Candidacy Requirements is a fail, the student has the right to appeal the decision. Students must appeal directly to the Faculty of Graduate Studies following the procedures described in the *Graduate Calendar* under [Academic Regulations – Appeals – Appeals Against Faculty of Graduate Studies Rulings](#)).



UNIVERSITY OF  
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CUMMING SCHOOL OF MEDICINE

Graduate Science Education  
3330 Hospital Drive NW  
Calgary, AB, CANADA  
T2N 4N1  
medicine.ucalgary.ca

Student Name: \_\_\_\_\_

**Candidacy Area 1 (Must address Competency One: Underlying Theories and Conceptual Frameworks):**

\_\_\_\_\_

Check if area also addresses:

- Competency Two: Methods/Methodology – Study of Methods  
 Competency Three: Research Context

**Candidacy Area 2 (Must address Competency Two: Methods/Methodology – Study of Methods):**

\_\_\_\_\_

Check if area also addresses:

- Competency One: Underlying Theories and Conceptual Frameworks  
 Competency Three: Research Context

**Candidacy Area 3 (Must address Competency Three: Research Context):**

\_\_\_\_\_

Check if area also addresses:

- Competency One: Underlying Theories and Conceptual Frameworks  
 Competency Two: Methods/Methodology – Study of Methods

Thesis Proposal Title: \_\_\_\_\_

\_\_\_\_\_