

## PHD COMPREHENSIVE EXAMINATION

### Purpose

The purpose of the Comprehensive Exam is to assess whether the student has a mature and substantive grasp of the field as a whole.

The College of Graduate and Postdoctoral Studies policies surrounding comprehensive exams can be accessed here: <https://cgps.usask.ca/policy-and-procedure/Academics/examinations.php#63QUALIFYINGANDCOMPREHENSIVEEXAMINATIONS>

### Principles

All PhD students will be examined using the process outlined below. Students should have developed all required introductory knowledge and basic skills in their research area prior to beginning the comprehensive exam process. The products of the comprehensive exam may not be used to meet other PhD program requirements, including assignments for graduate courses or sections of the thesis. PhD students who successfully pass the Comprehensive Exam will achieve PhD candidacy.

The advisory committee will assess whether the student has met each learning outcome (listed below) using standardized assessment rubrics. All outcomes must be successfully demonstrated for the student to earn PhD candidacy.

### Learning Outcomes

To pass the Comprehensive Exam the student must have demonstrated the following learning outcomes to the satisfaction of the majority of the advisory committee:

- Both a breadth and depth of knowledge in their area of research.
- The ability to analyze, interpret, and communicate existing evidence.
- Exhibit potential to conceptualize and defend a novel research study

### Timing

The comprehensive exam must be completed within the first **18 months** of a PhD student starting their studies. The comprehensive exam process should therefore be initiated within 10 to 12 months of the student starting his or her program. In cases where a Master's student transfers to PhD program, the comprehensive exam must be held within **12 months** of the transfer.

If extenuating circumstances delay the comprehensive exam this must be discussed by the advisory committee and approved by the Associate Dean, Research and Graduate Affairs as early as possible before the deadline for completion.

### Process

The comprehensive exam will assess a student's successful meeting of learning outcomes using three components: a written review paper, a presentation outlining a novel research study, and an oral defence of both the review paper and presentation. The comprehensive exam process consists of THREE stages that formally begin approximately six months before the anticipated oral exam date.

#### Stage one – Identification of topics

- The student and supervisor prepare a ONE PAGE summary of the topic and major objectives of the written review paper. During the development of this initial summary document, the student may consult the supervisor and advisory committee members for assistance and feedback.

- The student sends this summary directly to all advisory committee members as an email attachment at least ONE WEEK prior to the preliminary meeting. In the body of the email, students must briefly outline their achievements to date in the PhD program (i.e., coursework completed, seminars presented, etc).

*Stage two – Preliminary meeting (approximately 1.5 hours)*

- The preliminary meeting will be attended by all advisory committee members. This meeting cannot count towards the annual progress meeting required of all PhD students.
- If a single member is missing, the student and supervisor must meet with that member following the meeting, review the main discussion points, and obtain approval for the written paper. The preliminary meeting cannot proceed if two advisory committee members are absent.
- During this meeting, the following tasks must be accomplished (led by the chair):
  - Discussion and approval of the review paper topic. Subsequent amendments to the proposed review paper can occur after the meeting through an email vote of all advisory committee members.
  - Review of Written Paper Scoring Rubric and Presentation Scoring Rubric to familiarize the student and committee members.
  - Approval of a deadline for the completed written paper and the date of the comprehensive exam. It is recommended the comprehensive exam occur approximately SIX MONTHS following the preliminary meeting. The written review paper must be submitted to all advisory committee members at least TWO WEEKS before the exam date.
- Minutes will be circulated by the graduate administrative assistant within two weeks of the preliminary meeting, along with a formalized timeline for the exam.

*Stage three – The comprehensive exam (approximately 2 to 3 hours)*

- The comprehensive exam will be a formal assessment of the oral research proposal AND written paper. All committee members must be in attendance (in-person or virtual).
- At least 14 days prior to the oral examination the student will submit the title and a 100-word summary of their presentation to all advisory committee members and the graduate programs assistant.
- The meeting begins with a 20-minute oral presentation of the research study. This presentation is open to all members of the campus community and public. An initial question period of 10 – 15 minutes will be open to all audience members followed by a closed defence with the advisory committee.
- Each advisory committee member will be given the opportunity to ask questions twice (i.e., 2 rounds of questions) pertaining to the research proposal. A third round of questions will focus on the written review paper. Additional rounds of questions may be allowed by the chair if advisory committee members require more information to assess the adequacy of the student's performance.
- If an advisory committee member is not able to participate either in person or remotely, an alternate faculty member with sufficient expertise in the area must be invited to ensure that the minimum number of members required for a PhD advisory committee will be present at the examination. If the cognate member cannot attend, the alternate member must not be a member of the College of Pharmacy and Nutrition. This additional committee member must be approved by all committee members prior to the exam and is granted full voting privileges.

## **Products and Evaluation**

The student will be assessed on their written review paper, oral presentation, and oral defence using standardized rubrics. The student's performance must be of sufficient quality for a 'pass' or 'conditional pass' in all three components to successfully achieve PhD candidacy.

### **Expectations of the Written Review Paper**

The written paper should demonstrate the student's breadth and depth of knowledge in their research area. Although the topic of the paper (and research proposal) can fall within the PhD research area, it cannot be used in any part of the PhD proposal, PhD thesis (verbatim), or any graduate course assignment. Thus, the written review paper can provide a different perspective or an extension of the research that will not be part of the final PhD thesis.

The paper will be prepared in a format consistent with a peer-reviewed journal in the area and should have strong potential for publication recognizing that revision will likely be necessary following the comprehensive exam. The paper will typically include 3,000 to 5,000 words and will represent the most up to date literature. **Plagiarism will result in an automatic failure of the comprehensive exam.**

Students may request feedback from the supervisor and advisory committee members during "stage 1" (i.e., development of the one-page proposal). However, following approval of the topic at the preliminary meeting, the student must work independently on each element of the comprehensive exam.

Committee members will evaluate the written paper according to the Written Paper Scoring Rubric and assign one of the following outcomes:

- i. **Pass (Exceptional or Proficient)**: The paper is acceptable as presented
- ii. **Conditional Pass (Growing)**: The paper is lacking in one or more area. The student will need to address the committee's concerns and submit a revised draft for re-assessment over email following the comprehensive exam.
- iii. **Inadequate Achievement**: The paper is inadequate. The committee feels that the student is not prepared for PhD candidacy.

### **Expectations of the Research Presentation**

The oral presentation should describe a novel research study arising from the same general area covered in the written review paper. The research presentation cannot be part of the existing PhD proposal or PhD thesis but students may identify related research questions or propose alternative research methods for their PhD research questions. The student's performance will be evaluated according to the Comprehensive Exam Presentation Scoring Rubric.

At least 14 days prior to the oral examination the student will submit the title and a 100-word summary of their presentation to all advisory committee members and the graduate programs assistant. The exam will begin with a 20-minute presentation open to all College members and/or public followed by a question period from audience members (10-15 minutes). Next, the chair will request all audience members to leave except for the advisory committee and will facilitate two rounds of questions focused on the oral presentation. In the first round of questions, each committee member will be allowed up to 15 minutes for questioning. In the second round, committee members will have an additional 10 minutes to examine the student's research proposal if necessary. Committee members who are satisfied may pass in the second round. A third round of questions will focus on the written review paper. The student may request a 15-minute break at any time during the examination.

At the conclusion of the oral component of the comprehensive exam, committee members will use the presentation scoring rubric to assign one of the following scores:

- i. Pass (Exceptional or Proficient): The student's research presentation and oral defence demonstrate independent research ability and oral communication skills necessary for success in the PhD program.
- ii. Conditional Pass (Growing): The research presentation and/or oral defence are lacking in some regard. The committee will deem the student to have passed the oral defence on condition of providing additional evidence as determined by the advisory committee (e.g., assignment, subsequent interview, reading, or revisions).
- iii. Inadequate Achievement: The student's performance in the research presentation and/or oral defence is inadequate based on a majority vote of the advisory committee.

### **Overall Evaluation**

At the conclusion of the oral examination, the chair will facilitate discussion among advisory committee members to determine consensus scores for the written review paper and the oral presentation/defence. If consensus cannot be reached, a majority vote will determine the score for each rating. Students must receive a "pass" or "conditional pass" on both the written and oral components of the comprehensive exam to be considered a PhD candidate.

If 'Inadequate Achievement' is concluded by a majority vote on EITHER the written review or oral presentation, the advisory committee will provide written documentation of this decision to the student. Subsequently, the student will have 12 months to re-take the part of the exam that was deemed inadequate.

The College of Graduate and Postdoctoral Studies allows two attempts to pass the comprehensive exam. Should a student receive an assessment of 'Inadequate Achievement' at their second attempt at either the written review paper or research presentation/defence portion of the comprehensive exam they will be required to withdraw from the PhD program.

### **Re-take of the written review paper**

If the original written review paper is deemed inadequate, a second exam will be allowed. The student will develop a new 1-page summary for approval by the advisory committee before a new 6-month writing period can begin. The student can request to develop the same topic for the review paper; however, an entirely new paper must be completed. The student must submit the new review paper to the advisory committee within six months of receiving approval of the 1-page summary. Following submission, the student will undergo another oral examination focused only on the written review paper.

### **Re-take of the research presentation**

If the original research presentation and/or oral defence of the research proposal was deemed inadequate, a second exam will be allowed. The oral research presentation will be conducted using the same procedure as the original examination, EXCEPT the presentation and defence will be closed to advisory committee members only.

### **Roles and Responsibilities**

Roles and responsibilities of parties involved in a comprehensive exam are as follows:

A) PhD Student

- Familiarize themselves with the comprehensive exam process and procedures as outlined in the Pharmacy and Nutrition Graduate Handbook
- Complete the components of the comprehensive exam within the time limits, using only permitted resources
- Adhere to academic integrity principles and protocols and take full responsibility to ensure that the products submitted for evaluation adhere to academic integrity standards

#### B) Supervisor

- Be knowledgeable of the comprehensive exam process as outlined in the Pharmacy and Nutrition Graduate Handbook
- Ensure that the PhD student is cognizant of the timelines of the comprehensive exam process
- Review the comprehensive exam learning outcomes with the PhD student
- Identify the PhD student's strengths and areas for improvements
- Discuss relevant readings and one or two possible paper topics with the PhD student for presentation to the committee.
- Determine a proposed time frame for the comprehensive exam for the committee
- Respond to questions of clarification from the PhD student, including advising on permitted feedback and adherence to academic integrity standards
- Fairly evaluate the written paper and oral examination to assess if learning outcomes have been met

#### C) Advisory Committee Chair

- Understands the comprehensive exam and ensures consistent process
- Ensures the appropriate scheduling of meetings
- Follows the standard agenda for meetings
- Communicates to the student the evaluation and the reasons for the decision reached by the committee in sufficient detail to enable the student to identify their strengths and weaknesses. Support for this task will be provided by the supervisor and advisory committee members
- Ensure that due process is followed if differences of opinion arise during evaluation

#### D) Advisory Committee Members

- Review the proposed paper topic(s), timelines, and written review article for the comprehensive exam.
- Fairly evaluate the written paper and oral examination to assess if learning outcomes have been met
- Carefully review the written paper and presentation abstract prior to the comprehensive exam
- Respond to questions about the 1-page proposal for the written paper during stage 1 (i.e., prior to the preliminary meeting)

#### E) Graduate Affairs Office

- Distribute the College of Pharmacy and Nutrition's comprehensive exam process and procedures to committee members
- Initiate scheduling of the preliminary meeting and distribute timelines and minutes within two weeks of the preliminary meeting
- Distribute materials following advisory committee meetings

### **Academic Conduct**

Students are expected to review and understand the University of Saskatchewan's Regulations on Student Academic Misconduct and Academic Integrity Flowchart available through the Office of the University Secretary website (<http://www.usask.ca/secretariat/>). Each student must perform his or her own work, and honesty and integrity is expected of all students.

PhD students undertaking the comprehensive exam may seek guidance from the advisory committee during "stage 1" where they are developing the 1 page proposal for the written review paper. However, consulting, discussing, or asking for feedback or revisions on the content of the written paper or oral presentation, including from other students, staff, or faculty, is expressly forbidden during the comprehensive exam period. A copy of the final written paper will be kept in the student's file.

Students may seek help for English writing from non-content experts at the University of Saskatchewan Writing Centre. The student is requested to inform the Graduate Office about use of these services for information purposes only; this use will not be disclosed to the advisory committee.

Any PhD student who encounters extenuating circumstances during the comprehensive exam period such as for health or compassionate reasons should discuss this with the advisory committee chair if these circumstances will impact his or her ability to complete the exam within the approved timeframe.

### **Appeals**

Students are referred to the College of Graduate and Postdoctoral Studies procedures for Student Appeals in Academic Matters <https://cgps.usask.ca/policy-and-procedure/conduct-discipline/appeals.php>