**PHD COMPREHENSIVE EXAMINATION (July 17, 2023)**

**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 [(CGPS link)](https://cgps.usask.ca/policy-and-procedure/Academics/examinations.php#63QUALIFYINGANDCOMPREHENSIVEEXAMINATIONS).

All PhD students will be examined using the process outlined below. Students should have acquired all required introductory knowledge and basic skills in their research area prior to beginning the comprehensive exam process. Supervisors and advisory committees will determine the extent to which outputs from the PhD comprehensive examination can be used in the final thesis.  The products of the comprehensive exam may not be used to meet other PhD program requirements such as assignments for graduate courses. 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 their program.

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 consists of three components: i) a written review paper; ii) a presentation outlining a novel research study; and iii) an oral defence of both the review paper and presentation. Students will undertake the comprehensive exam in THREE steps beginning approximately 8 to 12 WEEKS before the expected date of the oral examination.

***Step 1*** *– Notification of advisory committee (topic of written paper)*

* 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 emails this proposal to all advisory committee members and the Graduate Affairs Office at least ONE WEEK prior to the preliminary meeting, along with a completed Program Update Form.
* In addition to providing the one page summary, students are also encouraged to provide a PhD progress update to their advisory committee during this meeting. If a progress update is provided, this meeting can count towards the student’s annual advisory committee meeting requirement. The Graduate Affairs Office must be notified of this intention prior to the meeting and that a dual-purpose meeting was held must be made clear in the minutes.

***Step 2*** *– Preliminary meeting (approximately 1.5 hours)*

* The preliminary meeting will be attended by all advisory committee members. 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):
	+ The student provides an update on their overall progress in the PhD program.
	+ 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.
	+ The committee establishes a deadline for the completed written paper and the date of the comprehensive exam. It is recommended the comprehensive exam occur approximately TWO to THREE 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.
	+ NOTE: on the day of the comprehensive oral examination, students are required to provide a 20-minute presentation describing a novel research study from the same general area covered in in the written review paper. Students are not required to obtain permission for the research proposal topic; however, it is recommended that students discuss preliminary ideas with the advisory committee to help identify the focus of their presentation.
* Minutes will be circulated by the Graduate Affairs Office within two weeks of the preliminary meeting, along with a formalized timeline for the exam.

***Step 3*** *– The research proposal presentation and comprehensive oral exam (approximately 2 to 3 hours)*

* The final step in the PhD comprehensive examination process involves a research proposal presentation followed by an oral defence. All committee members must attend (in-person or virtual). This meeting cannot count towards the annual progress meeting required of all PhD students.
* 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 Affairs Office.
* 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. Following the general question period, the advisory committee chair will request all audience members to leave except for the advisory committee and will facilitate the oral examination.
* During the oral exam, 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 if advisory committee members require more information to assess the adequacy of the student’s performance. 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.
* 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 student’s knowledge of their research area will be assessed, in part, through an evaluation of their focused review article prepared for a specific peer-reviewed journal. The paper can provide an in-depth analysis of existing topics within the student’s PhD thesis or it can cover a different area of interest to the student.

The paper will be prepared in a format consistent with a specific peer-reviewed journal in the area and should have strong potential for publication recognizing that revision will likely be necessary following the comprehensive exam. In general, the paper will be 1,500 to 3,000 words in length; however, longer articles may be appropriate depending on the specific journal requirement. **Plagiarism will result in an automatic failure of the comprehensive exam**.

Supervisors are authorized to provide feedback to the PhD student during development of the written review paper. While it is understood that preparation and mentorship are critical components to student growth, the final products of the comprehensive exam must represent the student’s own work. Ultimately, the student must take responsibility for all sections of the written review paper and adequately defend its content during the oral defence question period.

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

1. Pass (Exceptional or Proficient): The paper is acceptable as presented
2. 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.
3. Inadequate Achievement: The paper is inadequate. The committee feels that the student is not prepared for PhD candidacy.

*Expectations of the Research Proposal 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 address an existing PhD objective 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 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:

1. 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.
2. 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).
3. 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 an in-camera discussion among advisory committee members after excusing the student from the room. Consensus scores will be determined for the written review paper, the research proposal presentation, and the oral 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 SIX months to re-take the part of the exam that was deemed inadequate.

Students are allowed 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 3-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 prepared. 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 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 University of Saskatchewan Governance website (https://governance.usask.ca/student-conduct-appeals/academic-misconduct.php#About). Each student must perform their 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 their 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>