

11. Appendix D: Guidelines for the PhD qualifying examination

11.1 Introduction

The Qualifying Examination, administered by the School's Graduate Program Committee, is a component of the doctoral program at the University of Guelph. Students must successfully complete this examination as part of their graduation requirements. The objective of these guidelines is to provide School-specific information for both students and faculty regarding the Qualifying Examination, with the goal of administering the Qualifying Examination as simply as possible. Need for a Qualifying Examination

The Qualifying Examination provides an opportunity to ensure that students have acquired an in-depth understanding of their area of research and in the broader aspects of scientific research and knowledge. For faculty, the Qualifying Examination provides an opportunity to assess the student's breadth and depth of understanding of the subject area and related fields, technical competence, analytical skills, capacity for critical thinking and to identify a student's weaknesses that can be addressed within our graduate program. As the name implies, upon successful completion of the Qualifying Examination, a student qualifies for the status of PhD Candidate. Thus, the Qualifying Examination allows the School to determine if a student is ready to progress to the dissertation stage of the doctoral degree.

Preparation for the Qualifying Examination involves a period of study and preparation (typically 2-3 months). There are numerous strategies that students can use to cope with the challenge of taking the Qualifying Examination; some of these are outlined in the accompanying Qualifying Primer document prepared by students who have previously completed the examination ([PhD Qualifying Primer](#)).

11.2 Timing of the Qualifying Examination

According to University regulations, PhD students should complete the Qualifying Examination before the end of the 5th semester of study. The guideline of the School requires that this examination be completed even earlier, preferably at the beginning of the 5th semester, so that, in the event a second examination is needed, it can be completed before the end of the 5th semester. For students who are switching from MSc to the PhD program without completing the MSc, the University stipulates that the Qualifying Examination must be completed before the end of the 7th semester, while the School suggests that this examination be completed by the end of the 6th semester.

11.3 Additional information about the Qualifying Examination

There are a number of people, and sources of information, that students may consult in preparation for their Qualifying Examination. The first contact should be the student's Advisor(s) and Advisory Committee. Together, the Advisor, Advisory Committee, and the student will decide on the appropriate time for this examination considering the time lines imposed by the University and the School. Students should also consult the general rules governing this examination which can be found in the University Graduate Calendar (General rules). The student should study these rules before proceeding to the Qualifying Examination with the help of his/her Advisory Committee and Graduate Program Committee. Students may also contact the Associate Director (Graduate Studies) regarding any administrative or technical questions pertaining to the Qualifying Examination. The Graduate Program Committee is responsible for coordinating and selecting a Chair for the examination.

11.4 Setting up the Qualifying Examination

The Qualifying Examination consists of two parts: written and oral.

The normal sequence of events for students to arrange their examination is:

- 1) The student meets with his/her Advisory Committee. The Committee considers the student's research ability and potential, as well as the background knowledge in the general and peripheral areas related to the student's doctoral research. The latter assessment may be done by performance in undergraduate and graduate courses taken by the student. If the Advisory Committee is satisfied with the student's potential as a PhD candidate based on his/her background knowledge and research ability, the Committee then recommends that the student proceed to the Qualifying Examination.
- 2) The Advisory Committee suggests the four subject areas to be examined and the examiners responsible for each of the topics in the Qualifying Examination. There are five members of the Qualifying Examination Committee. According to University regulations, two of these examiners must be University of Guelph graduate faculty who are not serving on the student's Advisory Committee, while the other two can be from the student's Advisory Committee. The 5th member chairs the examination. The Examination Chair may elect to assign an area of questioning ahead of the written exam and to ask general questions during the oral exam.
- 3) The Advisor approaches the Graduate Program Assistant, about setting up a Qualifying Examination with the following information:
 - a) Names and contact information of four potential examiners (maximum of two from the Advisory Committee and two other members). The examiners must be faculty members, associate faculty, or special faculty at the University of Guelph.
 - b) Two or 3 tentative dates for the oral examination.

c) Names of potential Chairs. The Associate Director, (Graduate Studies) will chose the Chair of the Examination and may nominate people other than those suggested to chair the examination.

d) The four subject areas for the examination.

This information will be forwarded to the Associate Director (Graduate Studies). This information is submitted on the Examination Information Form.

- 4) A Chair for the Examination is appointed by the Associate Director (Graduate Studies). The student will be notified once a chair has been chosen. The student should contact the Chair of the Qualifying Examination to get approval on the suggested Examination Committee before proceeding to the next step.
- 5) The student contacts each of the examiners to obtain guidance regarding the subject areas. After consultation with all members of the Examination Committee, a date/time is confirmed for the oral examination and a room is booked by the student or Graduate Program Assistant. The date/time information should be provided to the Graduate Program Assistant who will post the announcement at a suitable time before the examination.
- 6) At least two weeks before the scheduled written examination date, the Chair of the Examination Committee contacts and solicits questions from each of the examiners for the written examination. The written examination is usually completed about 1 to 2 weeks before the scheduled oral examination. The written examination may be completed over the course of one to four days and is administered by the Chair of the Examination Committee or a designate. The responses to the written questions may or may not serve as the basis for questioning in the oral examination.
- 7) The written examination will have the following general format:
 - a) The Chair of the Qualifying Examination will solicit two question(s) (possibly having several sub-questions) in writing from each of the four other examiners ≥ 2 weeks before the scheduled oral examination.
 - b) The Chair will select one question from each examiner to be presented to the student for written answers. Normally, the student will be given a 2-hour in-class time period to answer the question(s) from each examiner (i.e., a total of 8 h for all questions). The form of the written examination will be determined by the individual examiners. The Chair will examine the questions to minimize any overlap and consult with the examiners if necessary to ensure that the questions can be answered within this time frame. Each examiner will inform the Chair if his/her portion of the examination should be open or closed book and this should be noted on the question. For open book exams, the Chair, in consultation with the examiner, will communicate to the student what books or references can be used in the examination and if access to the internet is allowed. In closed-book exams, no texts, notes, or internet access is allowed. In both

closed and open book exams, additional aids or tools (such as calculators, specific references, and laptop computers) may also be granted. Prior to the examination, the student may discuss with individual examiners the format to be followed and the tools allowed, and the results of the discussion shall be conveyed by the examiner and the student to the Chair. The Chair and the examiner will have the final say on the ground rules for that examiner's question on the written examination. Once established, the student shall follow the rules set forth by the Chair. The examination is held over 1 - 4 days at the choice of the student. For example, one question is provided in the morning and one in the afternoon each day over two days. Except for the format and duration of the examination, other aspects of the examination are at the discretion of the Chair to accommodate special examination arrangements at the request of the student and/or individual examiner(s).

- c) After the examination, each examiner will receive the student's answers to all the questions and will then mark and/or evaluate his or her question(s). At least five working days prior to convening the oral examination, each examiner will inform the Chair if the student's answers to his/her questions are satisfactory. At this time, the Chair shall pass the decision of the examiners on to the student and the student may seek feedback from the examiners.
 - d) If the answers to written questions from two or more examiners receive an unsatisfactory assessment (a student receiving one unsatisfactory decision can still elect to proceed with the oral examination), the student will be advised but not required to repeat the written assignment for these examiners. In this case, the oral examination will be postponed and the student's graduate committee will decide on the appropriate course of action.
- 8) The oral examination will be held ≥ 2 weeks after the written examination is completed. Prior to the oral examination, the Advisor(s) will provide the Chair with a letter attesting to the student's research ability and potential. This letter should include the views of the student's Advisory Committee. This letter forms part of the assessment by the Examination Committee at the end of the oral examination. The oral examination will have the following general format:
- a) The Chair first invites the student to give a brief overview (5-10 min.) of his/her background, education and/or relevant experiences.
 - b) The Chair asks each member of the Examination Committee to pose questions to the student. The sequence of questioning by the examiners will be decided by the Chair.
 - c) There are normally two rounds (ca. 20 and 10 min, respectively, from each examiner) of questioning by the Examination Committee. Additional questions may be posed after these two rounds at the discretion of the Chair. When the questioning is completed, the student is asked to withdraw from the room to allow for private deliberations by the Examination Committee. The student is deemed to have passed the Qualifying

Examination if not more than one of the 5 examiners votes negatively. An abstention is regarded as a negative vote.

- d) After the deliberations, the Chair invites the student back to the room and conveys the findings of the Examination Committee to the student.

In the event of a disagreement between the student and the examiners as to how well a student has done in the Qualifying Examination, the matter will be referred to Office of Graduate Studies. Resolution of such disagreement may involve consultation with experts outside of the School at the discretion of the Office of Graduate Studies.

12. Appendix E: PhD defense examination checklist

Week	Date Completed	Task	Responsibility
-10+		Check to make sure there is enough time to complete the process before the deadline for submission of the thesis without financial penalty. If so, candidate or Advisor submits the <u>School of Environmental Sciences Graduate Exam Information Form</u> to the Graduate Program Assistant.	Candidate and Advisor
-8		Discuss Examination Information Form with Candidate. Ensure that the thesis is close enough to finishing that proposed examination dates are reasonable. If so, then discuss with the Candidate appropriate people to serve on the Examination Committee, including potential External Examiners. Contact suggested Examination Committee members to determine their availability and select three potential dates for examination. Contact External Examiner(s) to determine willingness and availability; note that this is not an invitation, which must come from the Chair pending determination of suitability (see next box). Explain steps in the process to Candidate, identifying sources of information, and where to obtain necessary forms (e.g., (Graduate Studies and SES website). Submit completed Examination Information Form to the Associate Director (Graduate Studies).	Advisor
-7		Confirm availability of Chair of Examination and confirm	Associate Director