

## GUIDELINES AND PROCEDURES FOR PRELIMINARY EXAMINATIONS

To be provided to PhD students and their supervisors *after successful completion of the ATC examination*

### A. Introduction

The purpose of the preliminary exam is to:

- evaluate whether the PhD student is making sufficient progress on the PhD to soon advance to the Defense.
- Identify any potential weaknesses that can be addressed prior to the Defense.

It can be considered a book-end to the ATC exam, which evaluated whether students were prepared to execute their PhD plans, this exam is meant to evaluate whether students are on track to wrap up their degrees within a year or so.

The Preliminary Examination has three components:

- 1) An **essay** reviewing the literature in the area of biology of the thesis.
- 2) A research **progress report**.
- 3) An **oral examination** in defense of both the essay (1) and the research in progress (2).

### B. Essay Requirements and Guidelines

*General Purpose:* Students in a Ph.D. program are expected to develop some breadth of knowledge in addition to the depth and focus they acquire through research into a specific biological problem, and the writing of a thesis. In the essay, they should address the area of their research from a broad perspective and in a critical manner.

The essay should provide the student with an opportunity to select the appropriate body of literature and to evaluate it in writing. It should help to develop the skills needed later in writing the thesis, and where the task proves difficult, to indicate the need for assistance or practice in written presentation of information.

*Length:* It can be misleading to prescribe a fixed number of pages since quality, not quantity is what will be judged. However, a total text length of 20 pages, typed double-spaced on letter-size paper plus references would be a reasonable maximum. Tables and figures may be added. More than 40 pages total is excessive and may be considered justification for rejection by examiners. In terms of effort, the essay should take six weeks to three months to complete.

*Format:* The review should be critical (i.e., including evaluation of conflicting evidence) and organized and written in the style appropriate to the thesis.

*Content:* A mere survey or summary of the literature is not enough. The essay must not only provide significant information about the topic but must assess it as well. The writer's views and conclusions are an important part of an essay. These should lead to a new synthesis of previously scattered ideas and disconnected facts as an appropriate beginning to the development of the thesis.

*Plagiarism:* Never transcribe information in its original written form. Put it into your own words and acknowledge its source. The Academic Integrity website provides information on plagiarism and other forms of academic dishonesty ([http://www.dal.ca/dept/university\\_secretariat/academic-integrity.html](http://www.dal.ca/dept/university_secretariat/academic-integrity.html)).

*Getting Assistance:* Supervisors are expected to help students improve their writing ability by carefully criticizing drafts of the essay. Other members of the Supervisory Committee may also be willing to help, but on a voluntary basis. The Writing Center provides academic support for improving writing skills ([http://www.dal.ca/campus\\_life/student\\_services/academic-support/writing-and-study-skills.html](http://www.dal.ca/campus_life/student_services/academic-support/writing-and-study-skills.html)).

### **C. Research Progress Report**

The document should provide an up-to-date report of research progress and a plan for completing the thesis project. This report should be concise, but sufficient for the examiners to make critical judgement of progress. Papers published, or in preparation for submission to journals, are useful appendices.

### **D. Format of Oral Examination**

The oral examination will include a twenty-minute oral presentation of the essay as an introduction, but focusing on the research results, followed by questions from the examiners including supervisor(s). The student will be examined for mastery of all aspects of the thesis research including its background. The examiners should be satisfied that the student has a thorough understanding of concepts and methods needed to complete the project, as well as the intellectual ability and independence expected of a PhD candidate.

The Examining Committee consists of at least the following individuals:

- A Chairperson
- An External Examiner
- Supervisory Committee Members (Supervisor or two Co-supervisors and at least two individuals)

The examination will be chaired by a Stream Chair or designate of the Graduate Coordinator. The External Examiner, usually from outside the department, is selected based upon suggestion from the Supervisory Committee. The External Examiner should be knowledgeable and experienced in the area of research covered by the thesis and must not have been involved in the thesis work, or other research, of the student or supervisor(s). All members of the Examining Committee must be present for the examination and only one examiner may take part remotely via telephone or video conferencing.

### **E. Scheduling, Submission of Essay and Report**

Preliminary examinations are normally to be held more than 30 months after commencing the graduate program. We encourage students to aim at taking their preliminary exam ideally as close as possible to **month 37 and no later than month 54 after start of their program**. However, we understand there can be circumstances that may require students to take longer than 54 months.

With the purpose of the exam in mind, the supervisor and PhD student should decide on the timing of the exam, given the guidelines above and the availability of the Supervisory Committee members. **At least four weeks in advance**, the supervisor should contact the Graduate Secretary and provide the names and contact information of members of the Supervisory Committee and suggested External Examiner. The Graduate Secretary along with the Graduate Coordinator will schedule the examination and arrange for a Chair. The Graduate Secretary will notify the student and Examining Committee of final arrangements, including the date, time and room of the examination.

When scheduling the preliminary exam, students should keep in mind that there will likely be a minimum of 6 months (often longer) elapsed between the date of the preliminary exam and the date of the PhD defense. Finding an external examiner who is suitable (i.e., no COI, PhD supervision experience, etc.), willing, and available for a PhD defense within a given date range often takes considerable time.

**At least two weeks** before the scheduled date of the examination, the student must submit to each examiner (including the Chair) a copy of the essay. Prior to submission, the student should consult his/her supervisor for suggestions for improvement.

**At least one week** before the scheduled date of the examination, the student will submit to each examiner (including the Chair), an up-to-date report of research progress report.

The essay and progress report should be submitted electronically to all members of the examining committee; however, students must submit hard copies of either document to any examiner that requests one.

#### **F. Evaluation and Outcomes**

Each examiner (except the Chair) will independently complete an evaluation form (*Prelim. Exam. Form Part 1*). After the defence, these are collected by the Chairperson who enters the results on a consensus form (*Prelim. Exam. Form Part 2*). The examiners discuss the evaluation amongst themselves; the chairperson enters the decision, all useful comments, and an overall evaluation on the consensus form, which is then signed by all present, to indicate their concurrence. The forms are returned to the Graduate Coordinator.

**The examination can have only two outcomes - pass or fail.** The Chairperson will accept the view of **the majority of examiners** but may cast a deciding vote if necessary. Students who fail the defense may apply within 2 weeks to the Graduate Coordinator for re-examination. Faculty of Graduate Studies regulations allow a second attempt within one year of the first examination. The Chairperson will inform the Graduate Coordinator and student as to the reasons for failure. Scheduling of a second defense and the composition of the examining committee will be at the discretion of the Graduate Coordinator after consultation with the original examining committee and the supervisor(s). If the student fails upon re-examination, or if no request for re-examination is received, the Graduate Coordinator will so inform the Department Chair and the Dean of Graduate Studies and recommend that the student be dismissed from graduate studies.

## GUIDELINES FOR CHAIRS OF PRELIMINARY EXAMINATIONS

1. Take the following to the examination:

- a) The Essay and Research Proposal
- b) Three, or more, copies of *Preliminary Examination Form Part 1: Examiner Report* (1 for each examiner)
- c) A copy of *Preliminary Examination Form Part 2: Committee Consensus Report*
- d) *FGS Graduate Student Program Update Form*

2. Introduce yourself, the Candidate and the Examining Committee.

3. Explain the purpose of the examination.

It may be helpful to quote the following departmental guideline:

*“The student will be examined for mastery of all aspects of the thesis research including its background. The examiners will assess the student’s knowledge in the area of the thesis research, understanding of concepts and methods needed to complete the project, as well as the intellectual ability and independence expected of a PhD candidate.”*

4. Review the examination process.

- a. Candidate gives an uninterrupted **20-minute presentation**.
- b. The examiners have **two rounds of questioning** with each person allotted approximately 15 minutes each round. Subsequent rounds of questioning may be undertaken at the discretion of the Chair. The External Examiner usually begins each round of questioning. The Supervisor(s) participates in the questioning. The audience, if present, may not participate in questioning.
- c. When the rounds of questioning are completed, the candidate and audience are asked to leave the room for the ***in-camera* session**.

5. Proceed with the examination.

6. Once questioning is completed, thank the audience for attending and ask the candidate and audience to withdraw. Remind the candidate that she/he will need to return once the *in camera* session is completed.

7. Begin the *In Camera* session:

- a. Review Committee options for outcomes: Pass or Fail (See section F of ‘Guidelines and Procedures’)
- b. Ask the Supervisor(s) to comment on the examination (especially questions the student had difficulty with) and the student’s ability.
- c. Ask the examiners to complete *Preliminary Examination Form Part 1: Examiner Report*.

- d. Discuss the evaluation with the examiners. The Supervisor(s) participates in this discussion and in the final decision. The result is obtained by the majority vote and the Chair may cast a deciding vote if necessary.
  - e. Collect the *Preliminary Examination Form Part 1: Examiner Report* and complete *Preliminary Examination Form Part 2: Examiner Report Committee Consensus Report*. Briefly summarizing the student's performance on the table provided.
  - f. Record the final recommendation (pass or fail) and any comments on the *Preliminary Examination Form Part 2: Examiner Report Committee Consensus Report*.
8. Ask the candidate to return to the room and inform her/him of the decision.
  9. Complete the *FGS Graduate Student Program Update Form*. Program changes including the preliminary examination result and any changes in Supervisory Committee should be recorded.
  10. Ensure that all signatures are collected on the *Preliminary Examination Forms* and *FGS Graduate Student Program Update Form*. Return all completed and signed forms to the Graduate Coordinator.