

Interfaculty Studies Doctoral Program in Quantitative Life Sciences Thesis Proposal and Comprehensive Exam Meeting

Guidelines for Chairing the examination

Prior to the exam:

The student does not need to leave the room at the start. The Chair should thank examiners for taking the time to read the proposal, and participating in the examination.

- Briefly comment on the comprehensive exams in QLS:
 - Ask them if they all received some information on what is expected of them prior to the exam. Distribute **Guidelines for examiners of Comprehensive exams** if not.
 - Highlight to the examiners that QLS is an interdisciplinary program where every thesis spans at least one quantitative element and one life sciences element. Nevertheless, PhD students cannot sacrifice depth of knowledge for breadth, and ensuring good depth is very important for continued success of the QLS Program.
 - Remind the examiners that this is a combined Comprehensive exam and thesis proposal defense. Therefore, their questions should address both general background knowledge (built on the reading list that should have been provided to them by the student) and specific knowledge around the thesis proposal itself.
 - Remind examiners that students take their comprehensive exam at the end of year 2 or the beginning of year 3 in the Program; however, they will have spent their first year in rotations. Their background knowledge can be expected to differ from students in the examiner home departments.
- Remind the student that they will do their presentation first, with a maximum of 20 minutes, and then there will be two rounds of questioning of 10 minutes for each examiner.
- Establish order of questioning. Note that the supervisor(s) do not participate in the oral examination (questions). Normally the external examiners would go before the committee members.
- Request that the examiners use the first round of questioning to assess general background knowledge questions. (The two-hour window for the exam is short, and there may be no time left in the second round for such lines of questioning.)

During the exam:

1. Ensure that the questions are asked in a respectful manner, and that supervisors keep more or less to their allotted time within each round of questions.
2. Keep track of major comments/criticisms for discussion at the end.
3. During the exam, questions should be asked by four examiners (two external examiners who are not members of the thesis advisory committee and two members of the thesis advisory committee). In cases where the thesis advisory committee has only one member other than the supervisor attending the exam (many QLS committees include two co-supervisors), either the thesis supervisor or co-supervisor may ask questions.
4. Keep an eye on time overall in case some examiners have to leave promptly after two hours.

After the exam:

1. Ask the student to leave the room.
2. Ask the supervisor(s) if they would like to make some comments on the student's background and/or growth trajectory during the preceding year, or any specific comments that the committee should know.
3. Chair the discussion, and then fill out the report, and possibly the annual progress tracking form with the examiners. (See details below).
4. Obtain signatures must be obtained.
5. Thank the examiners.
6. Inform student of the committee's decision. If this is "Unsatisfactory", explain that they should meet with the GPD and their supervisor(s) for details on the next steps. Some additional information is provided below (Pass and Fail criteria for comprehensive exams).

Pass and Fail criteria for comprehensive exams

If all elements are "Pass" then the comprehensive exam element of the QLS PhD is complete. In this situation, the examination can be also considered to count as a thesis advisory committee (TAC) meeting, if desired. If the examination is to be considered as the annual TAC meeting, the annual progress form should also be filled out and signed, and the next TAC meeting should be held within one year.

A Fail may result from Failing any element.

- If a student passes the comprehensive knowledge part of the exam, submits a clearly written proposal and does a good oral presentation, but the examination committee feels the proposal is unlikely to result in new research appropriate for a doctoral degree at McGill, the student may have to develop a new proposal. This requires an assessment of the new proposal (including a written proposal and also oral questioning of the proposal), but does not require a new oral examination of background knowledge. The student will have one year to develop and present a new proposal.
- If a student passes the comprehensive knowledge part of the exam, but presents an unclear proposal such that the examination committee has difficulty assessing the potential, the examination committee may ask for a clarified and improved written proposal, within three months.
- If the student demonstrates poor knowledge of background knowledge and poor understanding of the research required for the thesis proposal, the comprehensive examination will need to be completely retaken within 6 months.

For any of the above fail situations, failing a second time implies that the student must withdraw from McGill.