Department of Biological Sciences PhD Candidacy Exam
Guidelines for Examining Committee: Current as of July 2023

See also: Faculty of Graduate Studies Regulations and Department of Biological Sciences Supplemental Regulations (5.8 Candidacy Examination)

Prior to embarking on the process outlined below, students should contact the Departmental Graduate Studies Committee (GSC) Chair or Graduate Secretary, so that a Candidacy Examining Committee Chair and the GSC examiner can be appointed prior to the initial meeting.

Timeline
- The Department of Biological Sciences Candidacy Exam typically occurs in the later part of a student’s Ph.D. program, after the Thesis Proposal has been approved and no later than 1 year prior to graduation.
- The Candidacy Exam consists of a written proposal and an oral examination; both parts together will be completed over an 8-week time period. This timeline is meant to limit the time that students spend away from research and ensure equitable conditions for all students.
- The 8-week time period can be summarized as follows:

  ![Timeline Diagram]

  - Identifying possible times when the Advisory Committee is available for the initial meeting and oral exam (8 weeks apart) and possible revision meeting (week 10) is usually the responsibility of the student or student’s advisor, with support from the graduate secretary in the department.
  - The Chair of the Graduate Studies Committee will arrange for the Candidacy Examining Committee Chair and the GSC member who will serve as the external examiner.

Written Proposal
- The topic of the proposal will be chosen by the Candidacy Examining Committee in a discussion with the student during a meeting (the “initial meeting” above) that takes place 4 weeks before the proposal is first submitted to the committee (8 weeks before the oral exam).
- Although the student and their advisor are encouraged to discuss a minimum of 3 possible topics in advance of the meeting, the focus of the proposal should not be determined until this meeting with the full Candidacy Examining Committee. At the beginning of the first meeting, the student is encouraged to present a PowerPoint of 1-2 slides summarizing their PhD topic and 1-2 slides per possible topic for the candidacy proposal.
- After the general topic has been determined and the student has had an opportunity to further explore and consider the topic, they should more clearly describe the specific avenue of research within the bounds of this topic and briefly summarize (300 words maximum) this
avenue of research to the Chair of the Examining Committee (by e-mail) within 48 hours of
the initial meeting. This paragraph should not have details of the hypotheses, but should
summarize the topic of the proposal, in a similar way to the Summary of a Discovery Grant
(i.e., in that it should be in simple terms, and briefly describe the nature of the topic). The
Chair will send the paragraph to the committee and all responses by committee members will
be sent to the Chair, who will communicate them to the student.

- The written proposal is modelled on the most recent NSERC Discovery Grant format. See:
  http://www.nserc-crsng.gc.ca/ResearchPortal-PortailDeRecherche/Instructions-
  Instructions/DG-SD_eng.asp.

- The maximum page limit for the proposal will be 5 pages, plus additional pages for
  references (not limited to 2 per NSERC guidelines). Students should not include budget
  information.

- Students are encouraged to use Discovery Grant proposals from their advisor (or other
  individuals willing to share their proposals) as guides on how to prepare their own proposals,
  but need to ensure they do not: 1) take ideas or wording from these proposals, or 2) pass
  these proposals on to other individuals without the express permission of the proposal author.

- During the 8-week period of the examination, the student may seek clarification and advice
  from members of the examining committee but must not ask any members of the committee
  (or other individuals) to read and give specific feedback on drafts of the proposal. Although
  extensive feedback from peers would be encouraged under other circumstances, the
  Candidacy Examination is an academic exercise for evaluation. The proposal submitted at
  the end of the 4-week period must be entirely the student’s own work (see Plagiarism,
  below).

- The student should submit the proposal by e-mail (in MS Word to facilitate editing and
  insertion of comments) to each member of the Examining Committee, including the Chair,
  by the “Week 4” date determined at the outset. Examiners will provide constructive written
  feedback on the proposal to the Chair within one week of submission; the Chair will
  promptly give the examiners’ comments to the student.

- The student will then have 2 weeks to revise and resubmit the written proposal, based on the
  written feedback. Additional feedback from the Examining Committee will not be provided
  to the student before the oral exam.

- The student will submit a letter with the final proposal (maximum 3 pages) outlining how the
  committee’s major comments were addressed. Students may be questioned on their responses
  at the oral exam.

- The student will be evaluated on both the quality of the first version of the proposal and on
  how well they used or rebutted the Examining Committee’s feedback on the original
  proposal.

- Plagiarism will not be tolerated. Ignorance regarding what constitutes plagiarism is not a
  valid excuse for infringement of the policy on academic integrity. Students will be required
to sign an Honesty Declaration and return it to the Examining Committee chair at the initial
meeting.

- The Candidacy Examination proposal, both conceptually and as a document, will remain, and
  be recognized as, the intellectual property of the student.

**Oral Examination**

- The oral exam will start with a 20-minute presentation by the student on the written proposal.
• The presentation will be followed by two rounds of questioning from the examiners. Questions will assess the student’s breadth and depth of knowledge in areas related to the rationale and themes of the research topics in the proposal, related areas outside the proposal background, and current topics in the field. Questions may also explore how feedback provided by the Examining Committee on the first version of the written proposal was incorporated or rebutted (see Evaluation).

• The total time allocated to the oral examination (including the presentation) will be a maximum of 2 hours.

**Evaluation**

• The student will be evaluated (Pass or Fail) separately on the written proposal and on their performance during the oral exam.

• To receive a Pass on the written proposal, the Examining Committee should not expect that the grant would be funded by NSERC. Students will be evaluated on how well they have achieved the goals of the examination, as outlined in the Supplemental Regulations. The goals related to the written proposal include being able to: 1) use pertinent information in the literature to formulate a research program related to, but not the same as, the student’s PhD project; and 2) use the scientific method and formulate testable hypotheses.

• The other goals of the Candidacy Exam are to examine: 3) the student's depth of knowledge in the particular research specialty; and 4) the breadth of knowledge required to research and write the background material for the proposal. The Examining Committee should further evaluate the depth and breadth of the student’s knowledge during the oral exam.

• To receive a Pass on either component, the decision of the examiners must be unanimous. If the student fails either the written or oral exam (but not both), they will have an additional 2 weeks to make further revisions to the proposal or to repeat the oral exam (as required). These revisions will be based on the feedback provided to the student (within one day of the examination) by the Examining Committee and Chair. Successful completion of the repeated component will be deemed a Pass.

• A student that fails both components at the 8-week point, or fails to successfully revise the proposal or the repeat oral exam at Week 10, will be considered to have failed the first attempt at the Candidacy Examination. The combined written and oral exam may be taken a second (and final) time, within 1h year of the failed attempt. The 8-week process outlined above would be repeated, with a new topic being chosen. The same membership of the Candidacy Examining Committee should be retained, if possible, although a new Chair may be assigned for the examination by the Chair of the Graduate Studies Committee.