

The BIOL850 exam is a **qualifying exam** that must be completed before the end of the fourth semester. Students are encouraged to have at least one committee meeting prior to beginning the BIOL850 process. For students who fast-tracked the BIOL850 exam should be done by the end of the second semester. The purpose of the exam is to evaluate the applicant on several criteria including:

1. Their ability to ask original questions in their field of study
2. Their ability to formulate a series of cohesive projects to address those questions
3. Their ability to put into writing in a clear and concise manner a long-term work plan
4. Their ability to answer questions and defend their work plan

As such, students will be required to write a short proposal for their PhD work. Some students may have preliminary data that can be incorporated into the proposal (see below).

FORMULATION OF THE COMMITTEE

The evaluating committee is composed of the student's supervisor, two committee members, two additional members, and the chair of the examining committee (normally the graduate program director or a designated substitute). The chair is a non-voting member of the examination committee. The chair could be a committee member in which case the chair would be a voting member.

The exam will take place in two phases as detailed below.

PHASE 1: The written document.

After consulting with the supervisor, students will write their proposal and submit to the graduate program assistant who will then disseminate the document to the examining committee. Within two weeks of receiving the document, the committee will assign a grade of SATISFACTORY or UNSATISFACTORY. The grade is assigned by a majority vote. If the grade is SATISFACTORY, the student will then arrange an oral exam based on the approved written document. The oral exam should be held within two weeks of the assignment of the grade on the written document. The oral exam can be scheduled at the time of submission. If a grade of UNSATISFACTORY is assigned, the committee must provide detailed feedback to the student on how to improve the document. In this case, the student will normally have two to three months to resubmit the document. If a second UNSATISFACTORY grade is assigned, or if the document is not submitted within this time frame, the student will be prohibited from continuing in the PhD program.

How to structure the written document

The purpose of the written document is to demonstrate to the committee that the student can think beyond the "next experiments" and fill knowledge-gaps in their field. The document should contain the following as essential elements:

1. The main question to be addressed.
2. Literature pertinent to the field relevant to the proposal.

3. Objectives, rationale, methodologies. Note that details of methodologies are not required but enough detail should be provided to convince the committee of feasibility and backup plans. The rationale could include data the student has already generated and will build off of. Therefore, there is no need to show any data in the document.

The committee will evaluate the document based on the following criteria: innovation, originality, feasibility, long-term and short-term objectives, anticipated impact and broader relevance. How each of these essential components is formatted within the document is at the discretion of the student. The document should be formatted single-spaced, Times New Roman font 12 point with 2 cm margins all around. It should not exceed 5 pages, not including references. An additional page with a proposed timeline and outcomes (e.g. anticipated publications, conference presentations, pedagogical training) should also be included. Students are encouraged to look at an NSERC Discovery grant proposal for samples.

PHASE 2: The oral exam

The oral exam will begin with a 20 minute presentation from the student that covers aspects of the written document. This includes background, the main questions, the objectives, predicted outcomes, impact, and methodologies. Presentation of some progress to support feasibility and rationale is strongly encouraged. Following the presentation, the committee will ask questions in rounds of questioning to probe the knowledge of the student relevant to their proposal, their field of study and their ability to defend their proposal.

The committee will then vote to PASS, CONDITIONAL PASS or FAIL the student by simple majority. If a FAIL grade is assigned to the oral presentation, the student will not be permitted to continue in the PhD program. If a CONDITIONAL PASS is assigned, the committee will decide what is required for the student to PASS. If the student is required to redo the oral exam it must be done within 2 months. Students may also be required to do more coursework, workshops or assignments. Once successfully completed in a time frame determined by the committee, but usually as soon as possible, the grade will be changed to PASS. Only one CONDITIONAL PASS can be assigned.