

BIOL 802 Comprehensive Review of a Selected Topic in Biology

Overview: The student will write and present an in-depth literature review in an area of biology selected in consultation with the Graduate Coordinator, Faculty Supervisor, and PhD committee. It is recommended that the topic be presented to the student in the form of a question to be addressed. The review will demonstrate knowledge, synthesis, and writing ability suitable for a PhD candidate. At an oral examination, a departmental committee will examine the candidate's knowledge related to the review. The topic of the paper must be distinct from the dissertation; i.e., portions of the review paper should not form part of the dissertation's Literature Review. Conversely, the topic of the paper *should* be in the same general field as the dissertation and is expected to augment the student's knowledge in their area of study. **Required of all PhD students; must be completed in the first 20 months of the program. For students who transfer from the MSc to the PhD program, BIOL 801 and 802 must be completed within the first three semesters of the transfer.**

BIOL 802 has several purposes:

- 1) It is part of a candidacy examination process (along with BIOL 801).
- 2) It forces students to immerse themselves in scientific literature relevant to their dissertation work.
- 3) It provides valuable scientific writing experience with formal feedback from a committee.

Required of the Student: The student will write a formal review paper that is 20-25 pages of double-spaced text (not including title page, reference list, etc.), in 12 point font with appropriate margins. Students are to review a substantial body of literature that enables them to sufficiently address their review topic, while demonstrating their writing and synthesis skills. There is no formal guideline on the number or date range for the references cited; however, the student (and examining committee) should be convinced that the body of literature cited is adequate and reflects sufficient effort and quality for performance at the PhD level. Figures and tables are allowed, and must be properly attributed if not original. The BIOL 802 paper is supposed to be written at a high level to reflect PhD candidate calibre, but it is also just one of the things that a student should be accomplishing during that semester (i.e. research and other activities should not grind to a halt).

The review paper should be submitted to the examining committee at least two weeks prior to the examination date.

Required of the Faculty Supervisor: The supervisor may consult with the candidate to provide guidance regarding general tactics for writing the review. This may include some high-level discussion of the topic and thoughts about general organization of the review. However, in contrast to BIOL 801, **the supervisor should not provide any direct feedback on the written document.** The BIOL 802 review is meant to be the sole work of the student and should be evaluated as such. The supervisor should aid the student in setting up the oral exam date, time, and location.

The Examining Committee: The committee is the same as the student's PhD supervisory committee. According to FGSR regulations, the supervisory committee of a PhD student must

consist of, at minimum, a supervisor (or co-supervisors), two regular committee members (from the principal academic unit and related academic units selected because of their knowledge of the proposed research field), an internal-external member (from a unit other than the student's home unit), and a chair of the committee. In the Biology Dept. the chair of the PhD supervisory committee is the Graduate Coordinator; the chair does not normally ask questions during the oral exam. The student should work with their faculty supervisor to schedule the exam date, time, and location. It can be difficult to coordinate all of the people involved, so plan early!

The BIOL 802 Oral Exam: The examination will begin with the student giving a 15-minute presentation that summarizes their review topic. This will be followed by questions from the committee; the student should be prepared to answer questions about all aspects of the subject matter. The oral examination is typically 2-2.5 hours in duration. BIOL 802 is graded as a percentage, and the committee will consider: the written document, the presentation, and oral exam in their evaluation. As with all courses taken by graduate students, the passing grade is 70%.

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