

Appendix B: Written Qualifying Examination Procedures for the PhD Degree in Evolution, Ecology, and Organismal Biology

The purpose of the written qualifying examination is to determine if students have enough background knowledge and understanding of their area of research to prepare a meaningful and feasible dissertation. To that end, students are required to prepare a synthetic review on the intended topic of the dissertation. This review will contain the conceptual framework for the dissertation research and place it in an appropriate and broad background of their area of research as a whole. The intended audience is scientists in all fields of evolution, ecology, and organismal biology, as will be the case for many grant proposals, so it is particularly important to make clear the significance of the questions being asked. The synthetic review is not merely a summary of papers, but a focused synthesis and critical review of the accomplishments in the area that emphasizes the unanswered questions and thus defines the area of dissertation research.

The synthetic review has a maximum length of 15 pages double-spaced (approximately 4500 words), excluding tables, figures, and citations. It shall be prepared in Times Roman 12 point font (or the equivalent in size and clarity), left-justified, with 1” margins all around. Give citations in the text by name and date (not by number).

The writing of the synthetic review should be in the hands of the student alone, without benefit of editing by faculty or others. However, it is understood that the development of students’ ideas **up to the point of writing the review** involves consultation and discussion with faculty and other students, which is encouraged.

It is expected that the major papers and books in an area will be used to write the review. Emphasizing the historical development of the ideas, the review should focus on the conceptual framework of the topic, and conclude with a discussion of the research questions that will comprise the dissertation. The paper should explicitly answer the following:

- 1. What are the big questions in the area of interest?**
- 2. How have they been approached previously?**
- 3. What is needed now to advance our understanding in this area?**
- 4. How will the proposed work address this need?**

The review should not dwell on methodology; this is not a proposal to a granting agency which is already familiar with the issues. Similarly, there is no need to discuss the structure of the dissertation. If the student has done preliminary research, this is all to the good, but the focus of the paper is not on the details of how the research will be performed but on why the questions to be asked are important and interesting, and their intellectual and conceptual context.

Submitted reviews will be circulated to the faculty Review Committee, with individual faculty members leading discussion of each paper and writing a summary of the committee's evaluation for the students. If a review shows that a student is ready to proceed to develop a more specific research plan, then the student will be encouraged to prepare for the Oral examination. Alternatively, if there are serious flaws in the review, the Review Committee may decide either to allow one resubmission, or not to allow resubmission. In a certain limited number of circumstances, a student may appeal the outcome of a written qualifying exam (see Appendix D for details).

Reviews can be submitted no later than the end of Week 8 of any academic quarter and no later than the end of the eighth week of the spring quarter of the second year in the Ph.D. program. Students must inform chair of the Review Committee of their intention to submit their synthetic review at the beginning of the quarter in which they plan to submit. Resubmissions will be required no later than Week 8 of the Fall Quarter of the third year.