

## **Suggested Guidelines for The Comprehensive Examination, IGDP in Ecology Prepared by the Ecology Graduate Student Organization, Fall 2018**

In response to student and faculty concerns about the absence of guidelines for the administration of doctoral comprehensive examination, the Ecology Graduate Student Organization (EGSO) has developed a series of recommendations for the administration and completion of the examination; we advise incorporating these recommendations into a program-wide policy. In doing so, we attempt to set reasonable, uniform standards for comprehensive exams across the IGDP, and to provide students and committee members with expected goals and objectives of the examination process. This is not an attempt to regulate the content of comprehensive exams. Each student's doctoral degree is unique, and a fixed exam would detract from a committee's ability to provide each student with an assessment that is of appropriate rigor and value for that student.

### **I. Current Information Provided by the Ecology Program:**

Presently, one of the only sources of information regarding the comprehensive exams is found on the Huck website. It states:

*“The Comprehensive Examination for the PhD is a rigorous examination administered as early as possible in the student's tenure by the student's committee. An oral examination is required. The committee may also choose to require a written examination. The exam should cover aspects of advanced ecology and related disciplines necessary to the student's field of specialization. The student's advisory committee will have responsibility for determining the content of the comprehensive examination.”*

While information on the website also covers recommended timelines and procedural information for scheduling the exam, there is little guidance provided on the structure of the exam. In students' experiences, this has led to confusion among committee members, especially those outside of the Ecology Program, as well as drastically different comprehensive exams among students. Additionally, there are no clearly stated expectations a student must meet in order to pass the exam.

### **II. Recommendations Proposed by the EGSO:**

To address concerns, the EGSO recommends that the Program adapt a more explicit policy to clarify four main areas of uncertainty:

- a) Suggested Preparation and Expectations
- b) Options for Exam Format
- c) Standards of Performance and Evaluation
- d) Recommendations in the Event of a Failed Exam

#### *a) Suggested Preparation and Expectations*

During preparation for the comprehensive examination, students should review their understanding of advanced ecology as well as related and sub-disciplinary fields relevant to their dissertation. This will generally involve some development of dissertation research prior to the

exam, which itself may include preparation of a formal dissertation proposal. Students are encouraged to develop an examination preparation plan with their advisor and the other members of their dissertation committee. The examiners (the dissertation committee) are expected to help in this preparation phase by meeting with the student to guide them toward appropriate literature and inform them of the potential scope of questioning during the examination. They may choose to provide a reading list or some guiding questions at this time. It is the student's responsibility to initiate these meetings with committee members.

*b) Options for Exam Format*

An oral exam is required to be administered by the student's doctoral committee, and at least three members of the doctoral committee (including the primary advisor) must be physically present for the exam. The chair of the committee, usually the student's advisor, should be responsible for monitoring the length of the exam (generally between two and three hours), ensuring that committee members have equal opportunity to test the student, and providing a debriefing on the student's performance and score following the examination.

The committee may choose to require a written examination prior to the oral examination, particularly if written communication was identified as a weakness during the qualifying exam. A written component will allow the student to demonstrate skills that cannot be tested orally, and will serve to generate content to be discussed during the oral exam. A written exam may include a several hour test from each committee member (a general guideline could be a four-hour exam from each committee member), the preparation of an extensive dissertation proposal or literature review, or the completion and report of some data analysis. Written exams should be administered at least two weeks before the oral exam and should be distributed to all committee members for review.

*c) Standards of Performance and Evaluation*

During the comprehensive examination, students will have been rigorously tested on their knowledge of their topic of study. Committee members should aim to assess the student's knowledge of the proposed project themes and relevant topics to the robust implementation of their research. The committee should be able to evaluate the student's current knowledge and be able to suggest additional areas in which the student should expand.

Evaluation should be based on verbal (and optionally written) proficiency in thoroughly answering committee questions, demonstrating ecological theory in logical deductive reasoning, and deeper knowledge of topics pertaining to the student's area of study. The student should be able to explain their rationale in exam answers, proposed research, or oral responses in a well-worded and factually-supported manner. Students should be able to debate the merit of their proposed approaches and research in order to convince committee members of their ability to conduct the proposed projects in their dissertation.

*d) Recommendations in the Event of a Failed Exam*

A two-thirds favorable vote of the student's committee is required to pass the comprehensive exam, and no more than six years may pass between successful completion of the exam and completion of a student's degree. If a student needs to retake the exam, the primary advisor should work with the student to identify major weaknesses, suggest additional coursework, and assist the student in preparation. The student must retake the oral portion of the exam, but it is up to the discretion of the advisor whether written sections, if administered, must also be retaken.