

**Passed at SES Meeting March 29, 2023**

**PhD Comprehensive Exam Policy**

**Purpose and Objectives**

- The overall purpose and objectives of the ENSC PhD Comprehensive examination are to ensure that PhD candidates have:
  - adequate and sufficient knowledge in their chosen area of research and an ability to contextualize this within the broader interdisciplinary field of environmental studies;
  - the ability to express themselves clearly and concisely in both written and oral formats;
  - the ability to seek out primary and secondary sources of information to support an argument;
  - the ability to think critically, understanding the history and meaning of the concept, and skills associated with critical thinking to defend, logically and clearly, his/her reasoning;
  - an understanding of the principles of academic enquiry, including the ability to efficiently and effectively gather relevant information;
  - a sound background in the broad aspects of environmental sustainability
- Additionally, the examination is also intended to identify areas of weakness that should be remedied by the student.

**Process and Timing**

- Normally the PhD comprehensive examination will take place after all coursework is completed, no later than the end of the fifth term (typically winter term of second year). Approval for comprehensive exams occurring after the sixth term of study must be sought from the Graduate Committee in advance.
- The examination will incorporate: (i) submission of a PhD research proposal; (ii) a written response, the format of which is determined by the committee; and (iii) an oral examination.
- The Comprehensive Examination Committee shall consist of a Chair (normally the Graduate Coordinator), the student's supervisor(s), and two examiners. One of the examiners must be core faculty if the supervisor(s) is not, and one of the examiners may be cross-appointed or external to the School. If the supervisor is a core member, then the other two examiners can be cross-appointed or external to the School. The student's Supervisory Committee could, in part, make up the Comprehensive Examination Committee.
- The student will initiate a request to proceed with the ENSC PhD Comprehensive Examination by submitting a copy of their research proposal to the Graduate Coordinator who will distribute it to the committee (see Proposal, below). The Comprehensive Examination Committee will then be assembled and shall meet to: (i) prepare the written essay question for the candidate (see Written Essay, below), and (ii) set the date and location of the oral examination (see Oral Exam, below).
- Once the candidate has been given the essay question from the Chair, he/she will have 10 working days to submit their answer. The oral examination will be held between 5 to 10 working days after the candidate has returned the essay to the Chair. This allows for distribution of the essay to the committee for their reading and assessment.

- At least two working days prior to the scheduled oral examination, the Chair will confirm with all members of the examination committee that the written performance on the proposal and essay is satisfactory such that the oral component of the comprehensive should proceed.

### **Research Proposal**

- The PhD research proposal will identify the student's topic of research for their dissertation and plan for progression and completion of the degree.
- In all cases the proposal will identify the goal and objectives of the research and provide substantive rationale for the research. The proposal will also typically include: (i) a review of relevant and current literature in the candidate's research area, (ii) identification of specific research questions and/or hypotheses where appropriate, (iii) description of and rationale for the methods to be used, (iv) significance and limitations of the expected results, and (v) a work plan with timelines, budget and data management plan. It is recognized that each proposal will be developed for a unique situation and that deviations from these guidelines are inevitable, particularly in circumstances where the proposed research plan does not fit a conventional disciplinary academic approach. In these instances, students should receive specific guidance from their supervisory committee on the structure of the proposal.
- It is expected that the supervisory committee will have met with the candidate to discuss the proposal before the comprehensive examination.
- The proposal should be 5000-6000 words, double-spaced with 12-point font and 1-inch margins (excluding figures and bibliography).

### **Written Response**

- The intent of the written response is to have the student demonstrate their academic skills and capabilities within the field of environmental studies and/or science. This could be achieved through consideration of other disciplinary approaches or fields, other sub-fields within the student's core area in an essay, or the design of course syllabi, experiments or research proposals in fields beyond the student's core research. This will challenge the student to contextualize their specific topic of research within the broader interdisciplinary area of environmental studies and/or science. There is potential for this written response to lead to subsequent publications, course design or further research.
- The length and format of the written response will be decided by the committee but will not exceed 5000 words (excluding figures and bibliography).

### **Oral Exam**

- The oral exam is intended to evaluate the student's ability to orally articulate and respond to questions pertaining to their proposal and essay, and the fields of environmental studies and/or science in general.

- The oral exam will be approximately two hours in duration and should not exceed three hours. The procedure for the exam is similar to a thesis defense. The candidate is initially asked to withdraw from the room, the Chair reviews the student's performance on the proposal and essay, and each examiner is asked to comment briefly. The student then returns to the room for the examination. He/she has the opportunity to provide a 15-minute presentation on the research proposal prior to the start of questioning.
- Questioning will typically occur in two rounds with potential follow-up, both with equal weighting and time allotment such that both the proposal and essay are equally weighted (e.g. the first round devoted to the proposal and the second round devoted to the essay). Questions in each round are permitted to extend beyond the specifics of the proposal or the essay, but within the broader topic of each, where relevant.
- Following the questions the candidate will be asked to leave the room and the examining committee will discuss his/her performance and arrive at a decision (see "Outcomes" below). A consensus-building approach should be used, with the Chair acting to guide discussion. If no consensus can be attained, then a vote should be held (the Chair does not vote). After deliberation the candidate is invited back into the room and informed of the committee's decision.

### **Outcomes**

- The committee shall judge the candidate's performance on the exam as either "Pass" or "Repeat". In the case of "Pass" the Chair of the committee, in consultation with the committee, should submit written notification to the student within 5 working days of the exam. The committee may determine that the student requires some additional work in a particular area, but that this is not substantial enough to warrant a "Repeat". In these cases, the written notification should identify areas where the committee feels improvement is needed and suggest possible actions for this. This could range from a suggestion for additional coursework, to a set of prescribed readings, to serving as teaching assistant for a specific course, to remedial assistance in writing or oral communication.
- A decision of "Repeat" means that the student is not yet sufficiently prepared and should have another opportunity within 4 months to demonstrate his or her ability. The committee may exercise discretion in determining the timing and nature of a repeat examination; it may require the student to repeat the entire examination, including revisions to the proposal or the essay, or both. The committee may also decide to repeat only the oral component. In the event that a repeat examination is necessary, the Chair must provide the candidate, in writing and within 5 working days, detailed information from the examiners about perceived deficiencies and recommendations for improvement. The repeat oral examination should address these deficiencies.
- On the repeat examination, the decision shall be "Pass" or "Fail"; in the latter case, examiners must provide to the supervisor and Chair in writing, within 3 working days, the reasons for judging the candidate unfit to continue in the PhD program. Thereafter, the procedure for withdrawal on academic grounds will be followed according to the General Regulations of the SGSPA.