ESE Qualifying Oral Examination

The purpose of the qualifying oral examination is to determine a student’s depth and breadth of scholarship in a chosen area of specialization as well as the student’s originality, capacity for synthesis and critical examination, intensity of intellectual curiosity, and clarity of communication.

Format and Guidelines for the Qualifying Oral Examination:

I) Examining Committee Selection and Scheduling:

- It is the responsibility of the student to submit a final PhD Program Plan to the CHD (Committee on Higher Degrees). The program plan consists of the set of courses for the degree and lists 3 out of 4 committee members. The CHD reviews the courses and adds the fourth member of the committee, the "Dean's nominee". The expectation is that the Dean’s nominee may not be closely associated to the candidate’s field of study, thus representing breadth. The oral examination is to be taken by end of May in the 4th term of the program (or the end of Reading Period if 4th term is in fall), or a request to delay form (linked below) has to be submitted;
- Examinng committee consists of (i), the principal advisor; (ii), one student nominee, (iii), one principal advisor nominee, and (iv), Dean’s nominee (by CHD). The principal advisor (or the SEAS co-advisor, if any) will act as convener (i.e., chair) and will report the outcome of the examination to the Office of Academic Programs. Students with two advisors must name the second advisor as nominee (ii) or (iii).

The deadline for submission of a petition to postpone is the study card due date in the student’s fourth term in the program. (Note that the SEAS-wide deadline for submission of the final PhD Program Plan is during the previous term.) Request for permission to postpone is by written petition, via the Request to Delay Qualifying Exam form, to the CHD and should include statements by both the student and their principal advisor outlining the reasons for postponement.

II) Research Proposal:

- Proposal on research topic to be selected in consultation with principal advisor for in-depth discussion during oral exam.
- The target for the proposal is 5-pages, including figures, written in 12 pt. font with 1.0” margins.
- Submitted to qualifying exam committee and Office of Academic Programs 2 weeks prior to exam date. Failure to do so may result in rescheduling of exam.

The proposal should include an introduction explaining the rationale for the study, provide background context in the field of study, how the research project fills a gap in knowledge, the methods to be employed, and the implications or possible impacts on neighboring branches of environmental sciences and engineering. Specific hypotheses/objectives should be formulated and approaches proposed how to test these.
III) Oral examination

The presentation should include an introduction explaining the rationale for the study, the methodology employed, and provide context in the field of study into which the research project fits, and its implications or possible implications for neighboring branches of the environmental sciences and engineering. The examination will be closed and consist of the student and the examining committee.

- First part consists of an approximately 25 minute presentation by the student that may be paused for questions. Visual aids are encouraged; it is the student’s responsibility to ensure that the necessary equipment is set up.
- Second part consists of in-depth questions and discussion of proposal.
- Focus is on ability of student to carry out dissertation research, but questions may be broad in nature to test general knowledge of environmental and earth sciences.

The duration of the examination will be variable but typically will last two hours. The room reservation (which can be made by sending an email to classes@seas.harvard.edu) should be made for three hours. If the room is reserved via other methods, the student must still email classes@seas.harvard.edu with the reservation information so the qualifying exam administrative materials can be prepared accordingly.

IV) Remarks:

Students who do not pass the qualifying oral examination on the first attempt can either receive a failing or inconclusive grade. For the latter, students are normally given another chance with specific guidelines for improvement on their weakness(es). The examination committee may also stipulate further requirements, such as further coursework, as described in the Policies of the CHD document. Any second attempt must be conclusive, either pass or fail.