

## **Expectations for the PhD Qualifying Exam in the Environment & Resources Program**

The qualifying exam is intended to establish that a) the candidate is well-grounded in the facts and concepts fundamental to interdisciplinarity, and b) that they have a sufficient understanding of the facts and concepts relevant to the specific area of the candidate's dissertation research. The focus of the qualifying exam however, is on general foundational knowledge, not on the specific details that apply to the proposed dissertation project. It is the objective of the next exam, the preliminary exam (that is, preliminary to undertaking a research project) to address issues specific to the candidate's research.

The Nelson Institute is committed to interdisciplinarity. Because of this, students address a wide variety of topics and use a variety of research approaches. The appropriate scope and nature of a qualifying exam must therefore be flexible to accommodate this variation. Accordingly, except for the expectation of a suitable level of rigor, the points made below are guidelines, not strict rules. As in other aspects of graduate education in the Nelson Institute, it is the student's advisor and committee who are charged with ensuring that an appropriate, and appropriately rigorous, examination process is devised for each student. Graduate students must therefore work with their advisor and committee to establish what specifically is expected of them for the qualifying exam.

### **General guidelines**

1. The exam should be designed to evaluate a student's general command of knowledge relevant to their objectives. In keeping with the interdisciplinary mission of the Nelson Institute, in all cases, the exam should explore the candidate's grasp of what interdisciplinarity is, its strengths and weaknesses, and why it is an approach that many advocate as essential to dealing with environmental issues. The exam should also test the general knowledge of the candidate in areas that are foundational to the candidate's declared area of research. So, for example, a candidate who will be pursuing research focused on environmental justice will not be expected to have a working knowledge of how the distribution of species along environmental gradients might inform biodiversity conservation policies.
2. The examining committee will normally consist of all members of the candidate's dissertation committee but may, in unusual circumstances and with the approval of the E&R program chair, consist of as few as three persons. In all cases, the committee conducting the qualifying exam should be interdisciplinary. At least one committee member should represent natural science, and at least one committee member should represent human dimensions.
3. The candidate's committee must provide clear instructions to the candidate as to the range and type of information they will be evaluated on as well as the exam format and their collective reading list(s). A folder containing previous PhD students' qualifying exam questions exists in Jim Miller's office (70 Science Hall) for those who might want to see examples of past exams.

4. The candidate shall see that each member of their committee receives, well in advance of the examination, at least a one-page prospectus outlining the intended nature of their research project. The candidate is also strongly advised to arrange a one-on-one meeting with each of their committee members, especially their advisor.
5. Qualifying exams usually consist of both a written and an oral component. If the exam is entirely written, it is recommended that the candidate meet face-to-face with their committee to discuss the outcome of the exam.
6. There must be an appropriate degree of rigor. Students must be informed about the standard of performance expected. It is recommended that advisors or committee members provide sample questions to give the candidates an idea of what to expect.
7. The details of the evaluation will depend on the form of the exam.
8. Formal outcomes: We suggest the following levels of summary evaluation:
  - a) Pass without qualifications
  - b) Pass, but with recommendations for further study of areas where the committee felt the candidate's performance was weak. (This is probably the most common outcome.) No further examination to be conducted.
  - c) No decision, further examination required. In this case deficiencies serious enough to merit a second round of examination shall have been identified and time allowed for the candidate to address the deficiencies.
  - d) Fail, but repeat of examination after a period of time either encouraged or allowed.
  - e) Fail. No encouragement to repeat. This would normally indicate that the student will drop out of the program. It should be a rare outcome and vanishingly rare for students who have been diligent in meeting with their advisor and committee.

Adopted: April 30, 2019