## University of Massachusetts Boston Department of Chemistry Chemistry Doctoral Program Green Chemistry Track

## **Oral Qualifying Exam**

The oral qualifying exam consists of a public, oral defense of an original research proposal submitted by the candidate to their dissertation committee. Generally, within one month following the written exam, the student should submit a brief summary of their proposal to their dissertation committee and the GPD for approval. The proposal should be 10-15 pages and should include a brief background description, hypotheses to be tested, appropriate methodology, anticipated results, potential pitfalls and literature citations. The final proposal should be submitted to the dissertation committee within one year of passing the written exam. Before the examination, the student should confer with the members of their committee regarding the soundness of their proposal.

## Written Research Proposal

- The proposed work should be in the students chosen discipline (physical, organic, inorganic, biochemical, education, materials, etc), but must not overlap with the students dissertation research
- There should be a green focus to the proposed research
- The proposal must follow federal guidelines, either NSF or NIH
- 10-15 pages long
- Based on a literature review of the field
- If the proposed research were successfully completed it should result in a series of publications
- Must be approved by, and hopefully written in consultation with, the student's advisor
- Completed proposal must be presented to the dissertation committee two weeks prior to the defense date

## **Oral Presentation and Defense**

- 45 minute seminar
  - o Dissertation committee
  - o General public
- Questions and discussion from the general public
- Private examination based on proposal and presentation
  - o Probe the students understanding of the proposed experiments
  - o Examine in depth the students understanding of their chosen research field
  - Test the student's ability to think on their feet and competently defend their work and ideas
- Dissertation Committee Judgment
  - o Passed Unconditionally
    - Candidacy into the doctoral program granted
  - Passed Conditionally
    - Student must satisfy conditions spelled out explicitly by the dissertation committee before being granted candidacy into the doctoral program.
  - o Failed
    - Candidacy denied