

BPH new QE Guidelines for sections 8c and 8d. No changes to sections 8a and 8b which are repeated here for completeness. A separate document “Graduate Student Handbook” will include the details for the format of the oral portion **8c** of the qualifying exam as provided below – see yellow highlight section page 2.

8) Qualifying Examination and Dissertation requirements:

a) Examination Requirements

The Academic Advisor will verify the candidate's eligibility to take the QE. The examination must be scheduled only after the student has completed all courses and other program degree requirements, including the TA requirement. However, the QE may be scheduled during a quarter in which the student is taking the final 1 or 2 courses in his or her program of study. If that is the case, the Academic Advisor must not sign the Advancement to Candidacy form until they can verify that the student has passed the courses and thereby satisfied all program requirements.

b) Written component of Qualifying Examination

Dissertation Prospectus: The written component consists of a research proposal similar to an NIH grant proposal that describes the dissertation work to be undertaken (typically 5-7 single-spaced pages with 1-inch margins, not including references). This prospectus should be submitted to the QE Committee no later than two weeks prior to the examination date.

c) Oral component of the Qualifying Examination

The oral portion of the qualifying exam is intended to demonstrate the student's critical thinking ability, synthesis, and broad knowledge of the field of study. It consists of a three-hour oral exam with the five committee members present. The student typically begins the exam with a brief summary of the research proposal (prospectus) and the committee then questions him/her on the details. Then the questioning is opened up to three previously agreed upon areas of specialization within biophysics that have been approved by the Committee on Educational Policy.

The committee will evaluate the student's general qualifications for a respected position as an educator or leader in the field as well as the student's preparation in a special area of study based upon relevant portions of the student's previous academic record, performance on specific parts of the examination, and the student's potential for scholarly research as indicated during the examination.

Additional guidance for how to prepare and structure your oral presentation is provided in the Biophysics Graduate Student Handbook.

If required, the QE committee can act as the comprehensive examination committee for the Master's degree Plan II.

d) Qualifying Examination Evaluations/Outcomes

There are three possible outcomes of the first examination - Pass, Not Pass, and Fail. Pass enables a student to advance to candidacy for the Ph.D. Fail means that the student will be recommended to the Dean of Graduate Studies for disqualification.

Not Pass means that the student is required to retake all or part of the examination OR to satisfy another requirement of the Committee, as specified in the Chair's examination report. If requested,

the second examination is to be scheduled at the earliest possible date (timeline to be specified in the Chair's report) and will be administered by the same committee.

There are only two possible outcomes of the second examination – Pass or Fail. A student must receive a Pass on the second examination (or completion of the new requirement) in order to Advance to Candidacy. Receiving a Fail on the second examination will result in a recommendation for disqualification.

Upon receiving a Pass, the student must officially advance to candidacy within 1 quarter by paying a fee to the Cashiers Office and submitting the fully endorsed Advanced to Candidacy Petition to Graduate Studies.

Maintained separately in the Graduate Student Handbook

c) Oral Component of the QE Exam (Presentation and Structure)

Part 1. Research Presentation - the student makes a 15–20-minute presentation using a maximum of 10 slides where they

1. present sufficient background to motivate their project
2. present the hypotheses/aims of their project
3. present their approach to testing/meeting the hypotheses/aims
4. present potential limitations and challenges as well as potential alternatives

The QE committee asks questions throughout the presentation on the material presented, usually starting after the first 1-2 slides. The time for part 1 is usually about 1.5 hours to get through the presentation and questions. Questions will be asked throughout the presentation. Students are encouraged to use the board to answer questions.

After Part 1, there is typically a break where the student is asked to leave the room and the QE committee discusses how things are going and the subject areas to probe in Part 2.

Note to students: the QE is typically a challenging time BUT, we strongly encourage you to seize this as an opportunity to think thoroughly about your research project and discuss it with your mentor, collaborator(s), and lab members. Selection of the QE committee should be based on who can help your research and professional progression the most. You have 5 faculty members devote hours of their time to help you on your research. You will get critical feedback and assessment of your proposed research and may have new ideas that result from this process of brainstorming with your QE committee. Make sure you take notes. Many times, brilliant ideas, approaches, and techniques to take advantage of come up during the QE. The QE committee members can be a wonderful source of mentorship and research collaboration. Just as there can be brilliant ideas, sometimes concerns are raised about a potential weakness or issue with the proposed research and approach. Instead of viewing this negatively, please consider this as a

good outcome. Being aware of potential showstoppers in your research plan or an area that you need more depth in to be successful are super helpful if caught early.

Part 2: Subject Area question period

1. The three subject areas designated by the student, after consultation with the Major Professor, are approved by the Academic Advisor, and are probed through questions by the QE committee.
2. The QE committee asks any additional general questions in Biophysics to ensure sufficient breadth of foundational knowledge.

Note to students: The idea here is not that you are experts across the subject areas and all of biophysics, but that you demonstrate sufficient competency that the QE committee assess that you will have obtained the expected breadth and depth at the completion of your PhD. The committee will consider how the questions in the subject area are broadly related to the proposed research.

Outcomes:

There are three possible outcomes of the first examination - Pass, Not Pass, and Fail. If the QE committee awards a Not Pass, the QE committee Chair in consultation with the committee will document any requirements to ameliorate the not pass and time to do so by. Requirements may focus on Part 1 and(or) Part 2 and may include, for example, additional course work, literature review with a written report, a second oral presentation on a subject, retaking all or part of the QE, etc.

There are only two possible outcomes of the second examination – Pass or Fail. A student must receive a Pass on the second examination (or completion of the new requirement) in order to Advance to Candidacy. Receiving a Fail on the second examination will result in a recommendation for disqualification.

Upon receiving a Pass, the student must officially advance to candidacy within 1 quarter by paying a fee to the Cashiers Office and submitting the fully endorsed Advanced to Candidacy Petition to Graduate Studies.