

## Oral qualifier FAQ

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- (1) Does the committee know how many people are planning on taking the exam? I can think of at least 8, but what happens when 12 sign up?

*Yes. We have this under control and are planning accordingly.*

- (2) How are we evaluated? (Grades, written proposal, publications, conferences, ability to answer questions during the defense period, etc)?

*This is an oral exam based on a research proposal each student will submit. The students are judged on the quality of the written proposal and on their ability to present and defend that proposal to the standing committee. The most important component, however, is the ability to respond to questions posed by the committee.*

- (3) What happens with people whose advisor or committee members are on the standing committee?

*Advisors are not allowed to participate in the oral examination of their students, although they may be present (and silent) if they so choose. To date, I do not believe that any advisors have been present for the examination of their own students.*

- (4) Can we have committee meetings between now and then, especially for 4<sup>th</sup> year students who need a meeting soon?

*Yes. Students should continue with regularly scheduled committee meetings, although they should not be presenting the research proposal to their committee before the oral qualifier.*

- (5) Is there a target pass/fail rate?

*Yes. Our target is that all students pass the exam. Unfortunately, this does not always happen.*

- (6) If someone does not pass, what are the implications/next steps?

*This is handled on an individual basis in consultation with the student's advisor and the graduate committee. Potential implications could include, but are not limited to the following: a request to take additional courses, a retake of the exam, or being asked to leave the program.*

(7) What is the tolerable level of advisor involvement?

*Advisors may not write or substantially edit any portion of the proposal. They are encouraged to provide students with exemplary sample proposals and to discuss research objectives. Advisors also may review the first draft of the proposal to provide comments on appropriate structure and format, but may not rewrite any portions of the text.*

*I also strongly encourage students to practice their oral presentation to fellow graduate students before the oral exam. At this practice, the audience should be encouraged to ask detailed questions broadly relevant to the proposal to simulate the format of the examination by the standing committee. The goal would be to help the student identify any areas of weakness that should be strengthened prior to the exam. At least some students outside of the research lab should be included in the audience.*

(8) Do people need to be prepared to answer questions that have nothing to do with their project? For instance, tissue engineering for someone doing systems-level neuro.

*No. All questions will be relevant to the proposed research. However, this includes a broad understanding of the basic science, relevant principles and methodologies. For example, students should be prepared to describe the physical principles and limitations of any measurement technique essential for their proposed research. Students also should be prepared for relevant topics that may not directly impact the research outcomes but are closely related to the proposed studies. For example, if someone is using diffusion-weighted imaging, basic questions about the diffusion process would be appropriate.*

*In summary, a successful student will not only be able to describe the research plan and its significance but also will be able to defend this plan by being able to provide a rationale for the proposed methods, to contrast them with reasonable alternatives and to display a mastery of the related scientific and engineering principles.*

(9) What is the intended 'audience' for our written proposal and presentation?

*The examining committee. This will be comprised of faculty with a broad range of interests and expertise. Hence, the presentation should not be targeted solely to experts in the student's area of study, but to a more general audience with a strong technical and medical background.*

(10) The fact that advisors do not know how much they can be involved, in addition to the fact that quota rumors have been allowed to persist, gives the perception that the faculty are divided over the qualifier.

*We discussed and clarified the purpose of this exam at our faculty retreat in December and there was no dissent. Any advisors who continue to have questions or suggestions are free to contact me at any time, as are students.*

(11)What is a reasonable amount of time to spend preparing the document and presentation?

*It is not really possible to provide a general answer to this question, but I can provide some insight based on my own students who have completed the exam. Overall, students should begin preparing for the exam approximately 2-3 months before the scheduled date. However, it is important to note that I anticipate only ~2 weeks of this time is in addition to what would be expected if this exam did not exist. The majority of the 2-3 month preparation time will be associated with formulating an appropriate research question, reading the relevant literature, designing the appropriate experiments, collecting data and summarizing these efforts in the form of a written proposal. These are the requirements for receiving the PhD whether or not there is an oral qualifying exam. Part of the purpose of having a deadline for the oral qualifier is to help students focus on these critical steps as early as possible in their graduate career.*

*The job of the examination committee is to assess if the student is qualified to conduct PhD-quality research. If the above tasks are completed appropriately, little additional preparation for the exam will be required. The additional tasks that will require an extra ~2 weeks include preparing an oral presentation that might be slightly broader than that ultimately presented to the student's thesis committee, and further reviewing background material relevant to the proposed work so that it can be described clearly and concisely to the examination committee. This last task is what will require the most effort, though it really should be an integral part of the planning for any new research project.*