

## **Bioengineering Qualifying Examination: Advisor Guidelines**

You are receiving this document because one or more PhD students in your laboratory will take the Bioengineering qualifying examination this year.

The objective of the qualifying exam is to assess whether the student is prepared to succeed in the PhD program. It is *not* an evaluation of the student's progress on a thesis project, and as such no preliminary data are required or expected for the qualifying exam. The general topic of the qualifier will be submitted by the advisor to the Graduate Examinations Committee (GEC) and **it should not exactly be the student's intended thesis project**. The purpose of this exam is to evaluate the student's ability to generate their own engineering scientific questions, to generate an approach to address this question, and an ability to contextualize the results. As such, the student is not allowed to consult anyone in the preparation of the written report or the oral presentation.

1. Please consult the provided set of student instructions to familiarize yourself with the process and the evaluation sheet for the evaluation criteria: emphasis will be placed on biosciences/engineering expertise, formulation of hypothesis, and design of experiments to validate hypothesis.
2. To facilitate committee scheduling, **<90-minute oral exams will take place on a limited set of dates from June-September. The advisor and student should list availabilities from the list for scheduling the oral exam, completed online by May 17, 2018. An online scheduling form will be emailed to you shortly.**

The combined exam will begin three weeks prior to the presentation. The student will not be allowed more than two weeks to work on the written document, but should be allowed to devote his/her time during these first two weeks to prepare this document. The student will then be allowed to devote his/her time during the final week to prepare the oral presentation.

3. **In addition to scheduling (see above), the advisor will be required to submit a topic for the exam, rank three concentration areas relevant to the proposed topic, and provide committee recommendations through an online form through the scheduling form.** Note that the topic is confidential and will only be revealed to the student on the specified starting date, once the logistics for the written and oral presentations are in place. The topic should be broadly defined within the general area of the student's PhD thesis and should be amenable to engineering or quantitative analysis; however, it should *not* be a specific hypothesis, as this is one of the charges for the student.

While preparing the qualifier (both written and oral components), the student is not to consult the advisor, peers, or anyone else. No scientific help is allowed. Kate Venit, the GEC chair, and the Bioengineering Graduate Group chair will provide administrative guidance, if necessary.

***A combined oral/written evaluation form will be filled out by the committee at the time of the proposal.***

If you have any questions about the process, please do not hesitate to contact us. Thank you for your time and effort.

Sincerely,

David Issadore, *Co-Chair, Graduate Examinations Committee*  
Brian Chow, *Co-Chair, Graduate Examinations Committee*

Dr. Ravi Radhakrishnan  
*Chair, Bioengineering Graduate Group*