Prelim: Advice from Graduate Students

Make sure you have clearly defined your project and where you expect it to go. It doesn’t matter if in the end it becomes something else, you need to present a clear plan at your preliminary exam. Be sure you can explain why your project is important and why someone should pay you to do the work. This means having real world applications as a goal of the research. Don’t obsess over preliminary results; they are nice but not necessary. As long as you have a good background and a solid plan for finishing your work, you will pass, even without great preliminary results. Finally, practice your presentation with your group for feedback and have them ask you as many tough questions as they can think of, so that you won’t be surprised by your committee. - Erin Phelps

If you are doing well on your research, it's not hard to pass the prelim. - Qian Zhou

A growing trend among highly ranked schools is the incorporation of an oral preliminary exam. Upon completion of 4 semesters of classes/research, each student must present their work to a 4-faculty committee. The student must submit a 15 page document of their current progress, discoveries and future work. Upon submitting this document, the student must defend their work in front of the committee and an audience of their peers. One highly useful technique in preparing for the preliminary exam is to organize your data in a format that can be directly imported into a document such as the prelim report. Many advisors (including mine) require biweekly/monthly reports, which are very useful when the time to begin writing your report approaches. Even if your advisor doesn't require weekly/monthly reports it is a great idea to create them for your own benefit. Many times throughout my own research I've found results when typing my reports that were particularly interesting. Had I not created the report, the interesting results would have most likely gone overlooked. The best way to ready yourself for prelim is to begin preparing your results for reporting as soon as they are taken. Then, its just as simple as cut and paste! - Joshua Allen

During the first semester of their third year, a preliminary defense is required. A preliminary defense is simply a compilation of data and literature reviews organized into a nice and neat presentation/paper, which supports the graduate student's original proposition. Passing one's preliminary defense is the first official step towards a Ph.D. However, the preliminary defense is not a rite of passage. Instead, this should be viewed as an interim report that establishes necessary additives for establishing the various conclusions for one's thesis. After the preliminary defense, most of the remainder of the Ph.D. work will be self-evident, and hopefully well underway towards providing the field of interest with encouraging insights. - Joshua McClure

Start early. From the time you pass Proposition onward, all of your work can or will contribute to your Prelim. Summarize your experiments and results once every month or two for yourself to see your progress and keep a thorough lab notebook. Use these updates to put together your outline for the Preliminary Exam. The updates also make great outlines for meetings with your advisor(s). By the time you get to your prelim, you are halfway through your time at NC State, but probably about one quarter to one third of the way through your research. Use this as a gauge so that you don't propose to do too many things in the remaining time of your PhD. It is also important to include not just data but also your analysis of the data and its scientific
significance to prove to your committee that you are a true PhD students, not a laboratory technician. Finally, be involved in the selection of your committee members. They can add significantly to your PhD project, add very little if not involved, or stress you during exam time depending on who you choose. - Sara Arvidson

Start your literature research early (no later than the summer following your second year) because compiling and reading the relevant literature will take the longest to finish. When you start writing the document, designate one or more days a week as “Writing Days” and stay home to write. If you come to work, you will get distracted and not be productive. Give your presentation to anyone who will listen to gain more practice speaking and answering questions confidently. Give your presentation to students outside of your laboratory group – they will ask different types of questions than your group members. Brainstorm questions pertaining to your weak areas and learn the answers to these questions before your defense. Know your committee members’ research areas because they will ask you questions in these fields.
- Jessica Jenkins