

Last Updated: August 2021

General Thoughts

1. **Be careful not to quickly dismiss the coursework as irrelevant for your future research.** This is for two reasons. First, specific topics from the coursework do end up being heavily related to parts of your research agenda. Second, even if the relevance is minimal, interdisciplinary learning often comes from bridging two distant fields.

Coursework

1. **Find a supportive study group.** Ideally, six is the magic number since most assignments allow submissions in groups of two or three. The benefits of a study group are both academic and emotional. A substantial portion of your learning occurs through peer discussion and struggles. Furthermore, most study sessions end up being augmented with friendly banters on politics or latest pop culture as well as group dinners and gatherings. A great study group can be a substantial force shaping your first year in graduate school.
2. **Create custom lecture notes.** Even when the instructor adheres almost entirely to the textbook, it is worth rewriting the proofs and explanations with your own hands. Furthermore, good notes reduce study time for exams. If the notes are equation-heavy, Lyx or Latex are strongly recommended.
3. **Ask questions during class.** The usual case for asking questions is that others will likely have similar questions and therefore you're doing them a favor. In addition, the ability to direct clear, well-formulated inquiries will prove useful in seminars and discussions. In general, honing your capacity to articulate your thoughts is always helpful.
4. **Talk to upperclassmen.** Having gone through the first few years of graduate school, they can provide with a student perspective on how to best deal with the first year. Even if they do not know the answers, they may know where to look.

The Core Exam

1. **Get a clear sense of what the exam tests as soon as possible.** Take a look at some of the past exams and understand the types of questions, especially in conjunction with the exams and assignments from the classes.
2. **Set up a clear roadmap towards the day of the exam.** Usually there are three to four weeks to prepare for the exam. Roughly divide your weeks into (1) reviewing course notes, (2) revisiting midterms, finals, and problem sets from the classes, and (3) solving past core problems. If time allows, it is also good practice to check out other school's core exam questions.
3. **Maintain a healthy mindset.** Because the stakes are high, it is easy to get stressed. Remind yourself that given the hard work you've put in classes, the core exam can be passed with a few more weeks of hard work and preparation.