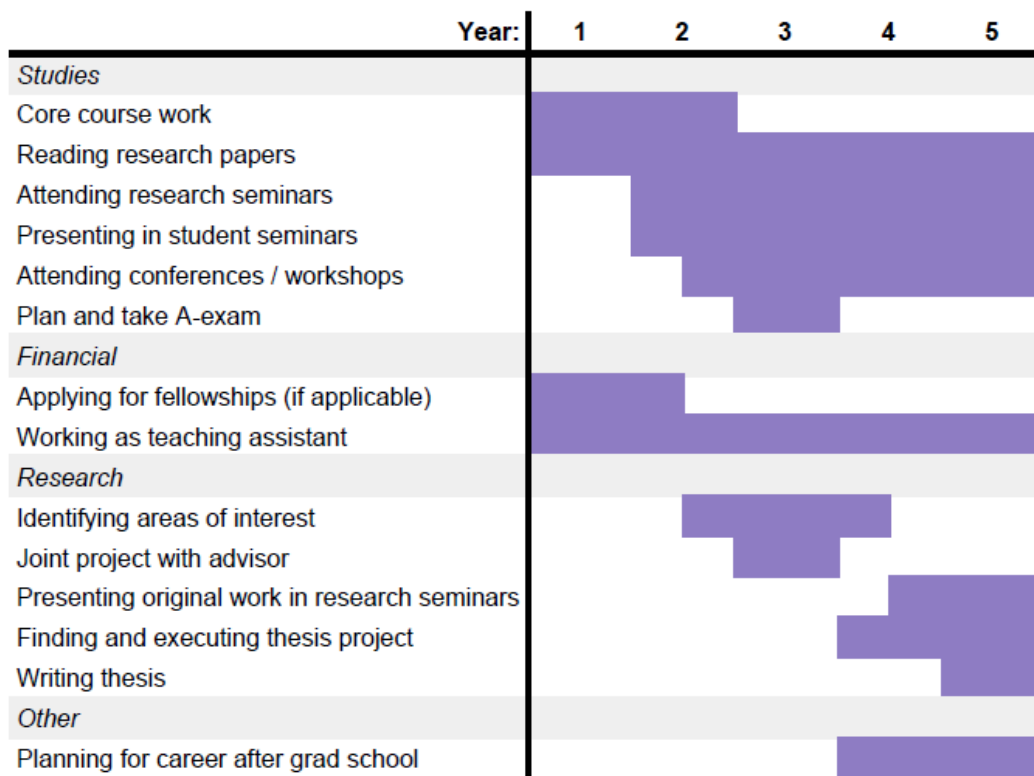


Advising philosophy:

Graduate school is a fun time, and a challenging time. You have nearly absolute freedom to study and pursue your interests, which is mostly great, but comes with some hazards. Almost everyone I know who did a PhD (across many disciplines) experienced a slump somewhere between years 2-4. You might find yourself asking “what the heck am I doing here?” or “this can’t possibly be right, am I doing well or poorly?” or “why isn’t my adviser helping me to find my way?!”

The angst is partially due to advising philosophy, poor communication, and personality match between advisor and advisee (remember, when you choose an adviser, you’re choosing a boss for 5 years!). Some of the big questions, like what are you doing here, you have to answer for yourself, and that can be challenging, but I hope to minimize stress by clearly setting expectations.

What a PhD looks like (approximately).



Advising versus instructing.

In the beginning, I might explicitly explain some mathematical concepts. But you will likely find yourself (very quickly!) in subjects that I know well enough to advise on but not well enough to provide thorough instruction. For that reason, you will end up teaching yourself, and teaching each other, most of the math you learn here.

I will not provide a thesis problem for you! I believe that after actively collaborating with me on a small 3rd year project, it is imperative for you to find your own path as a researcher.

My Responsibilities:

1. To support you to help you become an excellent researcher. I will provide advice on choosing a research project, identifying interesting papers to read, and writing.
2. To administer your A-exam.
3. To plan and attempt to co-author a small paper in your third year. There's a chance the project does not work out, but either way it will hopefully be a good learning experience.
4. To provide constructive feedback on your work, such as publishable manuscripts and professional presentations.
5. To provide a supportive, safe, and fun research group environment.
6. To set ambitious but achievable goals with you, and with the group.
7. To be receptive to your feedback on how we can better work together and improve the research group.
8. To support your professional development. I will suggest and help to fund, when possible, your travel to conferences and workshops, offer advice on career plans after grad school, and try to help you realize your goals, *be they in academia or industry*.

Mutual expectations:

1. To treat all members of the group with respect. To help make all group members feel welcome regardless of their race, gender, sexual orientation, ethnicity, or religious background.
2. Be creative (e.g. how could we solve this problem in a new or better way?).
3. Be dependable (e.g., produce deliverables on time, follow through on commitments you make).
4. Be diligent (e.g., work through challenges) and take initiative (e.g. own your research, identify what the next steps could be, and take it there!).
5. To participate in group activities, such as learning seminars or providing feedback on drafts of manuscripts.
6. To commit to working a specified set of hours and generally be engaged in projects related to the goals we've set. If you'll be away from the math department, please let me know.
7. To not divulge non-public information about ongoing research projects without getting the permission of your collaborators.
8. To behave honestly and, in particular, to not plagiarize or engage in any type of academic dishonesty.

My Expectations of You:

1. Hold yourself to a high standard of research and practice, i.e., work hard.
2. Provide bi-weekly progress updates covering the following 4 questions:
 - a. What did you work on/accomplish?
 - b. What went well / what challenges arose?
 - c. What questions do you have?
3. Give talks in the learning seminar and/or write blog posts about interesting math topics (once the blog is up and running)
4. Be an active collaborator on the 3rd year project, helping to figure out the problem and, if it results in original results, taking the lead on writing the paper.
5. Keep track of our work plan and upcoming deadlines.
6. Take initiative in studying your topics of interest and identifying potential thesis problems.