Advice from Recent Thesis Writers

- I think the two most important factors in determining how well the thesis goes for you is personal motivation and topic choice. Without a deep interest in your thesis, you are not going to put in a consistent amount of effort into research (which is completely necessary to produce good work). Beginning with a broader research topic means that it will take you longer to reach a research question that could serve as the starting point for a paper, essentially limiting the time you have to write it.

- While not essential, I think it's a good idea to brainstorm questions that are related or tangential to your proposed research question at the beginning of the process so that if something does not work out as expected (e.g., problems with data sets), you are quickly able to pivot to another question.

- Allocate time every day or at least every other day to work on your thesis. Since this is a long-term project with few deadlines, it's important to be disciplined and incorporate it into your daily schedule. With research projects, it often takes time to truly digest the information and come up with new ideas. Each progress report should be started as soon as the last progress report is turned in. Don't wait until the last minute to do anything! Start early, do a tiny piece each day, and it won't seem so daunting.

- Engage with your advisor often. I set up biweekly meetings with my advisor and prepared for them as if they were my homework. I showed up with a list of questions and agenda so that we could make the most out of the 1-2 hours we had…Communicate often, prepare for meetings, and print drafts for them to edit. Be proactive about using them as a resource!

- If you are writing in an area you're not familiar with and feel in need of a "crash course" consider reaching out to a member of the Columbia community, including current PhD candidates, who do research in that field.

- In the first few months of research, you should be honest about whether you have the requisite (mathematical or technical) skills to carry out the project you have in mind. While it may be personally rewarding to explore more advanced econometric methods, it is not always the best use of your time, especially if your approach is not supported by publicly-accessible code. It is better to worry about these things at the onset rather than at the end.

- If you are not a LaTeX user, start doing assignments in LaTeX when possible for the practice. This way you'll be comfortable using the software once you start working on your thesis (also - http://www.tablesgenerator.com/).

- Some data sets are only available to graduate students. Before planning your research around a specific dataset, confirm with the Columbia librarians that it is available to undergrads.

- Get started on your data early. Oftentimes, you can spend a lot of time thinking about theory, methodology, and implications, but your data could (and very likely will) show you something different from what you were expecting or something that doesn't make sense. Chances are you will have to revise your method based on what your data shows. You may lose a lot of time thinking about how your data *could* look when your actual data looks completely different, and you have to discard a lot of the work you've done before. Have a broad idea and methodology, but start (1) obtaining and (2) running tests to get outputs from your data as soon as possible.

- Any step during your data-cleaning process should be well-justified and saved in code script. If you are really concerned with empirical truth-finding (as you should be), commit to a pre-specified methodology BEFORE you start pumping out regressions so you can better address problems associated with multiple hypothesis testing.

- While it is nice to outline the implications of your results, be honest about the limitations of your findings. For example, if you haven't done the appropriate power calculations for your statistical test, be cautious in how you interpret a significant coefficient in your regression.

- Try to craft your thesis presentations in a way that someone without any knowledge in your field would be able to follow. It will help lead to a more productive conversation about your work during the seminar and also inform your research plan so that you don't miss the forest for the trees.