Honors Thesis

Important Dates

- May 20: Preliminary Proposal is Due (form will be posted on the wiki page)
- August 22: Final Proposal is due (examples posted on the Honors and Prizes page)

Finding a Topic

- Inspiration can be from any source. However, the best sources are your economics classes and your RA positions (if any).
- The topic that you propose should not be something completely divorced from the courses that you have taken at Columbia. Presumably the courses that you select and your thesis topic arise from common interests that you have. The obvious first step for you to explore a topic is to take a course.
- Look over the topics/reading list from courses that you particularly liked. See if any of them inspire you to ask more questions. If you are a sophomore or freshman, then keep track of these topics while taking classes.
- Younger students take a seminar in junior year. Two options for juniors. Junior Seminars – specifically for juniors that we target as possible thesis writers. Only students who have completed micro, macro and metrics with B+ grades will be admitted. Next year we will offer 1 or 2 junior seminars – both in the spring semester. Senior seminars – senior seminars with available seats beginning in the second week of classes will be open to non- seniors. You must have completed micro, macro and metrics. Seminars not only provide you with topic ideas but also with experience writing a research paper.
- RA experience- working with a faculty member on a research topic is a great way to get to know a faculty member, get experience with real economics research (as opposed to problem sets) and perhaps to generate your own topic based on the faculty members research. RA positions in the academic year can sometime be extended into the summer months. There is limited funding for these positions (see the info on the Summer Research Prizes posted on the Wiki and distributed before the break).
- Types of research paper: 1) empirical, 2) theoretical; 3) literature review. We do not accept #3 as a senior thesis. Most theses are empirical. Very few undergraduates have the modeling experience to write a theory paper and theory papers are necessarily

riskier than an empirical paper. About every 3 years there is a theory paper. If you would like to write such a paper then you should have had experience writing proofs and or solving complex models in economics. For the latter, depending on the topic, you may need matlab or other specialty software skills.

- Keep the availability of data in mind. You will most likely be writing an empirical thesis (using data to answer a set of questions). You must be able to identify the data sets that you plan to use and make sure that it is available to you. Speaking with a Research Librarian can help you to identify the data sets that you might need as well as alert you to any potential data issues that may scuttle your thesis. If you cannot speak with a librarian the you should at least check out the Data Resource guide on the Computing and Data Resources page on the website.
- Do a preliminary literature search. Bentley MacLeod recommends using Web of Science (ask a librarian if you cannot log in) this site will let you search both published papers as well as working papers.
- Another good place to start a literature search is JEP (Journal of Economic Perspectives) which is available from the libraries as well as on the AEA website. The JEP features survey articles which give a broad overview of the (somewhat) current state of research in all areas of economics. You can browse by issue or do keyword searches.

Finding an Adviser

- Each student in the honors seminar will be assigned a faculty adviser.
- Hopefully during your first three years at Columbia, you will have established a relationship with one or more faculty members. Mostly these will be faculty that you have taken classes with. Other possibilities are faculty you have done research with.
- How do you establish a relationship with a faculty member? You should be going to faculty office hours. Office hours are not simply for those students who cannot solve a particular homework question. You should be going to faculty office hours to discuss the material – ask questions of the material, ask suggestions for more reading, and even criticize the material! Getting an A or even an A+ in a class is not enough. The instructor needs to speak with you on a semi regular basis (after class or in office hours). The most common complaint of Columbia faculty is that the good students do not come to office hours.

- You can ask your TAs for advice (again assuming that you are taking classes that are related to your thesis topic, the TAs are generally knowledgeable about which faculty do research in that area).
- Work as an RA.
- Look through the faculty directory online.
- You can work with faculty members from outside the department so long as they are economics PhDs. However, unless you have a prior relationship, you should not plan on doing this.
- Do not contact someone that you do not know asking if he she will advise you. One reason that I have collected the preliminary proposals from you is so that I can match you with some prospective advisers (assuming you do not know one).

Timeline

- Before leaving for the summer, hopefully you will have submitted your preliminary proposal and gotten some feedback (which might be (but hopefully not) that your proposal is non-viable).
- Meet (online) with a Librarian (if possible) to discuss your topic, data needs and literature search.
- Talk to your faculty! Hopefully you already know faculty who would be interested in your topic or maybe someone you are taking a class with now go and talk to them (not necessarily about your topic but show them that you are interested in economics). You can even visit former faculty. Just send an email asking if you can (virtually) stop by and talk about a particular topic (that came up in the class). Remind them who you are and when you took the class.

- Over the summer, you should be reading. You should be reading economics papers and even outside economics (but on the general topic). Either you have gotten a reading list from a faculty member or you can do your own research. You can also look at the bibliographies of the papers of the faculty you are interested in working with. You can speak with a Research Librarian. Check out Web of Science. Reading will familiarize you with the look of an academic paper.
- Another good thing to do over the summer is to improve your programming skills be it STATA, R or whatever program is most relevant to your topic (SAS for finance, maybe python etc). If you aspire to an RA position at Columbia or a full time position after Columbia (prior to grad school) then they will expect that you have very good programming skills – it is not too early to practice).

Final Proposal

- The formal proposal will be due August 22.
- The proposal should include both a question and a tentative answer (it may turn out to be wrong). Your answer should be plausible and you should include at least one reason why it is plausible. The proposal is like the abstract of a paper except you do not know that you will be able to show the answer is true.
- Most theses are empirical. Thus the proposal should indicate the data sets that you will be using and should state how you plan to access the data. It should also have a brief bibliography (2-3 papers is sufficient).
- You will also be asked to provide the names of potential advisers (again don't contact them) and to provide a little background on yourself.

Honors Seminar

• Criteria for admission. The minimum is a 3.7 in econ. Generally we are also looking for students with 2 or more electives completed and at least one relevant one. We are looking for good grades in the core econ classes. One B+ in metrics will not sink you but you better have lots of other good grades to compensate.

- Joint majors. The thesis in economics allows you to graduate with honors in economics not in a joint major. Thus you must satisfy all of the requirements as an economics student. You can write theses in both departments but they MUST be separate theses. They can be broadly on the same topic but they cannot be the same.
- You must be able to attend the honors seminar (schedule will be posted before April registration). You will not be registering for it at this time. Students are not registered until the fall semester. If you are admitted and have a class conflict with the seminar then you will be asked to choose. You cannot do both.
- In the seminar you will be expected to present your work (several times per semester) and to discuss others work.
- Throughout the fall, you will be submitting progress reports to the honors seminar instructor. These will get progressively longer and more detailed as the semester goes on. By the end of the semester your report will include your literature review and descriptive statistics for your data set (so you have already acquired the data set).
- You will also be meeting with your individual adviser and presenting to him/her progress reports throughout the semester.
- Failure to meet with advisers on a regular basis or to turn in progress reports on time is a reason to dismiss you from the honors seminar.
- If you only complete one semester of the honors seminar then you will receive an R in the seminar. You will have to complete the seminar requirement by taking a senior seminar.
- The <u>Honors and Prizes</u> page has more information on the topics above, examples of senior theses, and advice from previous thesis writers.