SENIOR THESIS HANDBOOK

Fall 2019

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I. Introduction

First things first: you have never written a paper like this one. You may have written many college papers before, perhaps even some longer like this one. But all those papers were written primarily for the purpose of demonstrating knowledge of material you had learned that semester. This semester you are called on to go a step farther. In the process of demonstrating your knowledge of the field of economics – knowledge you have acquired over the course of several semesters – you will also take part in the dialogue through which that knowledge is constituted, refined, synthesized, and disseminated. It may sound daunting, but you are ready to do it.

The senior thesis assignment is predicated on the fact that you actually learn by writing. Because of this, the secret to success is to start writing today and keep writing every day until you are done. Write to explore what interests you. Write to test out arguments and see how far you can take them. Write to make note of what others have written. Write to question, agree with, or expand on what other writers have written. Write to say what you are going to do. Write to do it. Write to make it better.

Throughout this process you will be coached and guided by a two-person team consisting of myself and a thesis advisor of your choosing. My role is to guide you through the process of identifying a research question, exploring it, contextualizing it, and considering the evidence that will answer it. Our seminars are designed to help you work through your ideas with me and with your peers, and I will provide basic writing advice and feedback at all stages of the process. Your thesis advisor will help you refine your topic, identify and understand relevant secondary sources, apply models, and design your research method.

It helps to understand why you are doing this. Think of yourself as an apprentice who is making the passage to master level. To do this you must demonstrate your knowledge of economics and your ability to use its tools to interpret the world around you. As a product, that is what your senior thesis is and what it should do. But the learning happens in the process. As you look at the world around you to find a topic, as you begin to apply your knowledge and skills to that topic, as you become engaged in the academic conversation surrounding that topic, as you formulate your own analysis in the context of that conversation – as you do all these things you will find that you are capable of more than you thought you were, and you will grow intellectually. That is the experience we want you to have.

II. Timetable

This is a rough timeline. Specific deadline dates are found in the syllabus and on the eLC calendar.

Weeks 1-2:	Explore topics; develop hypotheses on two or three
Week 2:	Begin discussions with potential faculty advisors
Week 3:	Complete research proposal (topic, hypothesis, claim, reading list)
Week 4:	Begin research; identify thesis advisor
Week 5:	Continue research; sign contract with faculty advisor
Week 6:	Complete a literature review

Week 7: Revise thesis statement; begin to organize thesis
Week 8: Complete a working introduction (also called a thesis proposal)
Weeks 9-10: Complete first draft
Weeks 11-12: Re-think thesis claim; evaluate thesis structure; fill in research gaps
Weeks 13-14: Revise and polish
Week 15: Receive feedback from faculty advisor; complete further revisions as needed

III. Structuring Your Research

Experts say that there are five goals you should keep in mind as you begin the process of writing a research thesis:

1. Ask a question worth answering.
2. Find an answer that you can support with good reasons.
3. Find reliable evidence to support your reasons.
4. Draft a report that makes a good case for your answer.
5. Revise that draft until readers will think you met the first four goals.[1]

Achieving these goals involves many steps, of course, but, as with any big project, it helps to break it down into smaller tasks. The first task is to find a topic that will give rise to questions worth answering.

A. The Topic

Almost everyone will tell you that choosing a topic is one of the hardest parts. You want something that is meaty enough to keep you interested but narrow enough to be fully developed in fifteen pages. Most students will start broad – "I want to write about the economic effects of illegal immigration" – and will gradually whittle down to something more manageable in scope – "I will do a cost-benefit analysis of illegal immigration in three local economies in Georgia." Your topic needs to motivate a question – "Do the benefits of cheap labor outweigh the costs of undocumented workers and their families to local communities?" – in response to which you will pose a hypothetical answer. This question and hypothesis will frame your research, and that research, that exploration of your question, will ultimately lead to a claim about the topic (also called a thesis statement) that will be the basis of your discussion.

The process begins by finding and exploring topics. A topic is a broad area of inquiry, for example, "immigration," or "competitive balance" or "monetary policy" or "energy markets." Your first step is to write down a list of phrases that express topics you are interested in pursuing. These activities might help you generate that list:

[1] Booth, Wayne, et al. 2007. *The Turabian Guide for Writers of Research Papers*. Chicago: U of Chicago P.

- Read through old class notes. Make a list of ideas that sparked your interest.
- Make a list of topics that you know something about but would like to explore further on your own.
- Think about what you would like to be doing 1-3 years from now. What topics might you learn about that would help you get there?
- Ask a favorite professor what they are working on. Is there a piece of that topic that you could take on as your senior thesis project?

As a rule, you should start with more than one topic. Very often your first idea does not turn out to be a fruitful one (for any number of reasons that I won't go into here). You may not even find this out until you have started to dig into the literature surrounding the topic. So, having a Plan B is important to keep you from falling behind.

B. The Advisor

You should begin discussing your topic ideas with potential thesis advisors very early in the semester. Use the Economics Department faculty directory to find out who's who in the Department. Keep in mind that you may find your best match with a professor you haven't taken a call with. Faculty members will ask questions and make suggestions that will help you narrow and focus your ideas. They may be able to suggest articles to read, or they may be able to head you off from ideas that won't work for this project.

Approach a faculty member with respect and courtesy, of course, but keep in mind that everyone on the faculty is committed to helping you succeed in this project.

C. Exploring Your Topic Ideas

Exploration takes many forms. Aim for variety. The one component they all share is writing. Keep in mind, though, that at this stage you are not writing a thesis. That comes later when you are ready to construct your first draft. The purpose of this writing is not so much to be read as it is to get the conversation going in your own head. Use writing as a strategy for identifying questions, defining issues, trying out ideas, mapping out arguments, etc.

Google is a great place to start. Look for good quality journalism about your areas of interest. Follow up on leads to economics research in those areas. Browse sources like *21st Century Economics* or *The New Palgrave Dictionary of Economics* to get an idea of the economics questions associated with your topic. Encyclopedias, handbooks, dictionaries, newspapers and magazines – these so-called "tertiary sources" – are invaluable repositories of information. They can provide context and background. The *Journal of Economic Perspectives* and the *Journal of Economic Literature* (both published by the American Economic Association) can help you dig deeper into the current economics knowledge about your topic.

After reading an article or two about a topic, you can begin taking notes that will start you down the path of understanding that topic. What defines it? What are the key terms associated with it? What questions does it raise? What are the unanswered questions related to it? Where is there disagreement among those who have studied it?

Explore by discussing topic ideas with faculty members. They can help you understand where topics might fit into the wide field of inquiry known as economics. They can suggest ways to approach the topic with economical tools and concepts. They can make suggestions about how to go about researching that topic. Take detailed notes during your meetings. After each meeting, take some time to summarize in writing what you got out of the conversation.

Explore by discussing your topic ideas with peers. In one-on-one conversations or in small groups you can throw out questions associated with a topic and hear a variety of responses. It is always useful to learn how different people approach the same question. Doing so will help you clarify your own ideas while also broadening your perspective. Take detailed notes of your peers' responses and use them to help shape your arguments as they develop.

As your knowledge of a topic develops, explore it further by searching the library databases of scholarly literature for articles on your topic. (EconLit, for example, is a good place to start.) These scholarly articles are known as "secondary sources," and they will introduce you to the most current research on your topic. At this stage you don't need to read entire articles, but do read their abstracts and introductions, and perhaps skim their reference lists. Take note of key words associated with the topic, as these will help you broaden and deepen your search later on. Save the full citation information for any article you think you might want to go back to later and read in its entirety.

D. Writing the Research Proposal

Sooner than you might prefer you will need to settle on one topic to take out of the preliminary exploration stage and into the serious research stage. Since you will invest considerable resources in your research, be sure you've done your due diligence by engaging in several of the activities described above. This is not to suggest that you are locked into a particular topic once you write a research proposal on it. You may still change course after you dig into the secondary literature. But the more you understand your topic before you begin the serious research the more efficiently you will work.

As you explored topic ideas, you focused on questions raised by those topics. The question that you find most compelling – the one that you think you can live with for several weeks – will become your research question. The research question then becomes your map through the field of literature you will encounter on your topic. As a rule, it is best to formulate a research question that can be answered with a "yes" or a "no."

For example, recently a student wrote a very successful thesis about software patents. She began by asking, "How do software patents affect the software industry?" This is fine for the initial exploration stage, but it's too open-ended to provide direction as you move forward. As she explored the topic she became interested in the idea that the American patent system may be

designed in such a way that deters innovation. By the time she wrote her research proposal, she had formulated this question: "Does the U.S. patent system burden innovators more than it benefits them?"

The purpose of the research proposal is to show your thesis advisor that you have thought a good bit about your topic and done some preliminary research. The elements of the research proposal include some brief background (what motivates your research?), a research question, a hypothesis in response to that question, and a list of secondary sources you intend to read in detail.

A note about secondary sources: secondary sources are books and articles written by economists. They are called "secondary" because they offer interpretations of data, which in economics are the primary sources. Secondary sources are pitched to a more academic audience than are the tertiary sources you may have already consulted – encyclopedia entries, news reports, trade-press articles, none of which engage directly with the data but instead report on what economists are saying about the data. While you may spend a good deal of time with tertiary sources during the early exploration phase of your project, the bulk of your citations in your senior thesis should be to secondary sources, which is the scholarly literature on your topic.

E. Reviewing the Relevant Literature

Doing academic research is time-consuming, often tedious, occasionally heart-breaking, yet, in the end, extremely rewarding. It is important to be organized and methodical throughout this process. Doing so will save you hours of time down the road, and it will help you avoid inadvertent plagiarism.

As you work through this process, keep in mind that the goal is not simply for you to learn about your topic, although that will happen. The point is for you to become engaged in the conversation surrounding your topic. You will become familiar with the key terms of that discussion, what ideas or conclusions are generally accepted by scholars in the field, and what is in dispute. It is true that you will be reading articles by people with a great deal more experience than you have, so you have to accept your apprentice-level role in the conversation. Nevertheless, you are qualified to take part, and that is what you must do.

Here are a few ground rules:

- Always make note of the full citation information for every source you read, even if you don't think you will use it. This is simple to do, often accomplished by a mouse-click; nevertheless, many students skip this step and come to regret it later.
- Evaluate each source for its relevance to your topic before you invest the time it takes to read it all the way through. In addition to reading abstracts and noting key words, read the introductions and conclusions.
- For the articles you deem worth your time, always read twice, once sympathetically (to understand to writer's argument) and once critically (to question the writer's argument). Take notes as you read, but also take notes after you read. Summarize the main argument

and add some notes about how this article relates to others you have read or how you might use it in your own work. Or perhaps you might question the assumptions that underlie the argument. Throughout your notes, make it clear when you are paraphrasing and when you are quoting directly. Again, keeping track of these details now will save you enormous time and trauma later.

As you read, you will encounter things you do not understand. When that happens, make an appointment with your thesis advisor to discuss the article in question. Also as you read, you may become unsure of your direction, even question whether your topic is viable at all. Do not let these thoughts and feelings scare you into a corner. Instead, discuss them with your thesis advisor, with your ECON 5900 instructor, and with peers. These seeming dead-ends or bottomless swamps or vast wastelands (choose your metaphor) are sometimes just that, while sometimes they are opportunities to take your understanding of your topic to a new level. In any case, you will need a little guidance to navigate this space. Do not fail to seek it.

F. Data and Analytics

As you get control of the secondary literature surrounding your topic, you must also think about the evidence you will need to support your hypothesis (or thesis statement). In economics, evidence is usually data. It's important that you work with your advisor to identify data sources. While it's not their job to find data for you, it is their job to advise you on where to look and to help you determine the best method or methods to analyze the data. As you locate data sources, take notes that describe them and explain how you will analyze them. At first these notes may be very general, but keep returning to them as you learn more and make them more detailed.

G. Writing a Working Introduction with Preliminary Findings

Just as your research proposal charted a course for your research, your working introduction will chart a course for writing a first draft. Obviously, this document will be revised extensively after you've completed your first draft. At this stage, you are basically creating a roadmap for that draft.

A working introduction starts with the background information that shows your reader what motivates your research question. It includes a brief summary of the main issues at stake as you have gleaned them from the literature, which allows you to position your analysis within the context of the ongoing discussion surrounding your topic. Your working hypothesis (or thesis statement) should flow from these other two elements. The working introduction also includes a paragraph or two summarizing your preliminary findings, based on the data you intend to analyze. It concludes with a description of how your thesis will be organized.

Similar to the research proposal, the working introduction has a dual purpose. In addition to setting out a road map for the next stage, it is an opportunity for you to tell your thesis advisor

what you plan to do in your thesis and to discuss your progress. Schedule a meeting with your advisor as soon as possible after completing this document to receive feedback on your argument, how it is structured, and what resources you may still need in order to make this argument successfully.

H. Drafting Your Thesis

Using your working introduction as a guide, begin writing your thesis. Keep in mind that a research paper typically has the following components: an introduction, a body which will be made up of multiple sections such as background facts, literature review, presentation of data, analysis, policy recommendations, etc., and a conclusion. As you write, think constantly about how you are structuring your argument. What does your reader need to know in order to understand your point? In what order should those various pieces be arranged for the greatest clarity?

As you write, think of yourself as part of a scholarly conversation about your topic. Assume you are writing for an audience that shares your background in economics, so there's some common language, but who has not thought about your topic in this particular way before. Keep in mind that as a discipline, economics values clarity and simplicity, so strive for the clearest, simplest terms to express your ideas.

Work on your draft every day until it is complete. Don't count on long blocks of time on the weekends to accomplish this task. Sometimes it is possible sit down, clear your head, and write for hours on end. But other times your muse doesn't show up, and a long stretch of time turns out to be completely unproductive. Establishing the habit of daily writing will ensure that when your muse arrives, you are ready.

Before you give your draft to anyone else to read and evaluate, read through it carefully and evaluate its structure. (It's often helpful to jot down an outline of the draft as it stands at this stage.) Where is the thesis statement placed in the text? Does the draft actually fulfill the promise of that statement? If not, does the statement need to be revised? Look at each paragraph; does it have a clear topic sentence (usually the first sentence)? Be aware that you will often "write your way into" the point that you want to make, so pay attention to the last sentence of a paragraph. Should that actually be your topic sentence? Also, you may find that clear expression of your thesis in the conclusion. If so, move it to the introduction.

Never give a draft to anyone else to read without first proofreading for errors. If you do not feel confident in your proofreading skills, get some help from a friend.

I. Revising Your Thesis

You will submit your first draft to me for feedback, which will take a couple of weeks. Your advisor may or may not want to read the first draft, but in any case, use that time to discuss your

work-in-progress with your advisor, assess the quality of your research, and fill in any gaps you have found in that research. Get a couple of peers to read through your draft and note places where the argument isn't clear. Continue considering the structure of your argument. Rewrite your introduction based on what you learned in the process of writing the first draft.

When your draft is returned, read all the comments and jot down questions. You may want to schedule an appointment with me to discuss and to get more feedback. Then get to work on your revisions.

First, address any problems with focus and organization. Next, examine each point in the argument. Where you do need to expand your discussion? Where do you need to eliminate unnecessary explanations? Have provided evidence to back up claims?

Once you feel reasonably sure that you have all the pieces and that they are in the best possible order, address sentences and words. This is one of the most satisfying parts of the entire process, yet it is one that many inexperienced writers omit. Remember that as you wrote your first draft, you were focused on getting ideas into words, not so much on finding the best words to use. Naturally, many of the words you chose in your eagerness to get your thoughts on paper must be understood as placeholders. They simply keep the idea in place until you have time to come back and consider the best words in which to express it.

You'll find some very good guidelines for revising sentences and words in the *Turabian Manual for Writers*, Chapter 11. The basic principle is this: your sentences are what lead your reader through your points as they develop. You need to coax that reader's attention along by putting important information near the beginning of the sentence. So pay special attention to the first seven or eight words. Most of the time, those words should include both the subject and the verb of the sentence. (A few of your sentences may start with a long introductory phrase, but most of them should not.) The subject should be a clear, concrete noun, and the verb should be an active verb and not too far removed from the subject. Making these adjustments will dramatically improve the flow and coherence of your writing.

Finally, don't turn anything in that hasn't been proofread by at least one pair of eyes in addition to your own. Address every red or green underscore that Grammar Check offers, even if you only click "Ignore."

J. Submitting Your Thesis

Although you have been talking with your thesis advisor throughout this process and have given that person sections to read along the way, this is the first time you are presenting your thesis for a grade. Make the best impression by closely following the format guidelines. Be sure to review the Thesis Evaluation Form (appended below), a detailed rubric that contains a plethora of information about what your advisor will expect from the final product.

When you submit your thesis, ask your advisor when you can expect to receive his or her feedback. Be prepared to schedule time at that point to do further revisions on your thesis if they are required. After that, pat yourself on the back and go back to the rest of your life.

IV. Source Citation

Your citation style is the Turabian (also called Chicago) author-date style. The author-date style cites sources parenthetically in the body of the paper, using the author's last name and year of publication. Each in-text citation corresponds to an entry on the reference list at the end of the paper, where you provide full bibliographical information. This style is most widely used in the sciences and some social sciences (like economics) because it foregrounds the date of the citation, which is important information in fields where knowledge develops quickly. The *Turabian Manual* for Writers is a recommended text for this course. You'll find a free online quick guide to the style here. Also, many of the online databases you'll be using to conduct your literature review have citation generators associated with them.

V. Tables and Figures

First, know the difference. Tables are rows and columns of data. Figures are pictures, either graphical representations of data or other visual images. As a rule, all tables and figures should be your own. Don't cut and paste from other papers, even with proper attribution.

Check with your advisor about placement of tables and figures. Some prefer them in the text (unless they are more than a page long). Others prefer them at the end in an appendix. Either way, they count toward your total page count.

Introduce tables and figures in the paragraph before inserting or appending them.

- "Table 1 is a list of OEDC countries by GINI coefficient of income inequality."

Assign each table or figure a number and a name, centered, with the following format:

- "Figure 3: Healthcare Spending as a Percent of GDP"

Number tables separately from figures, e.g.: Table 1, Figure 1, Figure 2, etc.

Add a source line, left-aligned, below the table or figure with the following format:

- "Source: Bureau of Labor Statistics, www.bls.gov"

VI. Thesis Format

A. Title Page

This is a working paper, so your title page should be simple and include basic information. Here's a sample:

Title

Prepared for

[advisor's name]

Economics 5900

Fall 2019

Prepared by

[your name]

UGA email address

Date

B. Abstract Page

The abstract is one paragraph no more than 150 words long, and it occupies the second page by itself. It describes the research question, hypothesis, and findings. The label "Abstract" should be centered above the paragraph. It is not a substitute for the introduction.

C. Text

This section should be double-spaced and approximately fifteen pages long, including tables and figures. (If you are writing an Honors thesis, you may have different page requirements). It should be divided into sections which are labeled with descriptive headings.

On the first page of the main text, put the full title at the top and leave some extra space between the title and the first line of text. Use 12-point Times New Roman font, and one-inch margins on all four sides. Create a right-hand header made up of a shortened version of your title and the page number. Do not leave single lines of paragraphs at page ends or beginnings. Do not leave sections headings alone at the bottom of a page.

D. References

This page should include only references that you cite in your paper. Begin your reference list on a new page, headed "References," centered on the page. Arrange the citations alphabetically by author's last name, or by the first name of the title if there is no author cited. Format the list according to the Turabian author-date style.

E. Appendix

Use an appendix for tables and figures that are more than a page long, or for presenting data that is relevant to your discussion, but not needed as part of the text for readers to understand your argument.

VII. Appendix 1: Thesis Evaluation Form

Thesis Evaluation Form

Student: **Advisor:**
Date:

Assessment scoring

Score	*Interpretation*
1	below departmental standards
2	meets departmental standards
3	above departmental standards
4	substantially above departmental standards
N/A	Not applicable to this assessment

Competency	**Mastery**	**Comments**
Use economic concepts to organize an argument. **Score:**	The research question is tractable and sufficiently motivated.	
	The thesis statement is clear and is supported by the rest of the paper.	
	The writer accurately describes relevant economic principles and correctly applies them to support the thesis.	

Competency	**Mastery**	**Comments**
Address relevant scholarly literature on the topic.	The writer discusses relevant economics research to provide a context for the analysis.	
	The writer refers to the secondary literature to support positive statements and/or to address issues that fall outside the scope of the writer's analysis.	
	The writer accurately describes policies, history, and/or institutions that are relevant to answering the research question.	
Score:	The writer addresses alternative arguments or results found in the literature.	

Competency	Mastery	Comments
Use and interpret economic data. **Score:**	The writer uses economic data as evidence to back up claims.	
	The writer describes the data and articulates how the analysis addresses the research question.	
	The writer discusses any limitations of the data and how those limitations affect any conclusions.	

Competency	Mastery	Comments
Understand and apply economic models. **Score:**	The writer correctly applies economic models to draw conclusions.	
	The premises of the model are described accurately, and the writer's conclusions follow logically from those premises.	

Competency	Mastery	Comments
Express ideas in clear, correct, discipline-specific prose. **Score:** .	The tone is clear and straightforward. The prose is free of major editing errors, and typos are rare.	
	The paper develops a thesis-driven argument. It is divided into sections that are labeled and that form a logical structure.	
	The writer uses correct and consistent citation practices. Tables and figures are correctly formatted, labeled, and sourced. The "References" page is correctly formatted and accurately reflects the literature cited in the paper.	

Grade:

First revision	
Second revision (if relevant)	
Final letter grade	