Harvard University Department of Economics Ec 990a: Senior Thesis Research Seminar Spring 2024

(as of 10/25/2023; subject to change)

Course: Ec 990a

Instructor: Thomas Baranga

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Meeting Time: by appointment

Canvas page: https://canvas.harvard.edu/courses/128406

Objective

The Ec 990 seminar provides a forum for students to pursue their independent thesis research on the "off" cycle (starting spring, ending fall). The Ec 990 seminar and instructor is integral in guiding students from the beginning stages of research to the final product of a high-quality thesis.

The Role of the Ec 990 Instructor

While each thesis student has a faculty advisor, the Ec 990 instructor's role is also fundamental to a student's progress on their thesis and the quality of work they produce. The Ec 990 instructor's goal is to help thesis writers in the transition from student to scholar, leading them to conduct sound research and produce high-quality work.

Meetings

Ec 990 meets in the spring and fall terms, either weekly or bi-weekly. These meetings take the form of (1) seminar meetings with all Ec 990 thesis writers (provided there are several off-cycle thesis writers) or joint presentation meetings with an Ec 985 section, and (2) individual meetings with the Ec 990 instructor. Individual meetings are 30 minutes and involve substantial discussions between the Ec 990 instructor and student.

The format and scheduling of these meetings will be determined once enrolment in Ec 990 is known.

Assignments

Throughout the semester, there are several deadlines to ensure thesis writers are progressing on their research and to provide them with feedback on their ideas. **Unless otherwise noted, assignments are due by 11:59pm on the date listed, via Canvas.** Page counts assume 12 pt font, double spaced.

Thesis Content

Acceptable theses are those that make a worthwhile contribution to the economics literature. Sometimes this contribution comes from an interesting empirical or theoretical result, but contributions can also arise from showing how an apparently promising avenue of research may not prove fruitful. Though there is no minimum or maximum length for theses, each thesis should have a reasonable idea, developed well enough for submission to an economic journal.

Collaboration

Discussing ideas and work-in-progress with others is an important part of the research process, for thesis writers and researchers more generally. But in the end, a student's thesis must be his or her own effort, written by the student, and ultimately based on his or her own thinking. All written assignments must use appropriate citation practices to acknowledge sources the student has consulted. For any questions about Harvard's stance on academic honesty, please consult the <u>Academic Integrity</u> subsection in the Harvard College Handbook for Students, pp.35-36.

Deadlines

We all have a natural propensity toward procrastination. The effects of procrastination can be even worse for young researchers, who may not understand how long particular parts of their projects will take (especially those involving data). Ec 990 provides a series of deadlines and deliverables to help thesis writers make steady progress on their research and produce high-quality theses.

Grading

Students receive a letter grade for the spring semester of Ec 990, which is overwritten by the thesis grade if the student completes the thesis in the fall. If the student does not take Ec 990 in the fall semester, the spring grade will be the final course grade. The spring grade is based on the 25-page final paper (80%) and overall course participation (20%).

Resources

- **Ec Senior Thesis** page, with information on research funding, IRB, advisors, past thesis titles, formatting guidelines, etc. https://economics.harvard.edu/senior-thesis
- Harvard-MIT Data Center: hmdc.hahmdc.harvard.edurvard.edu
- Harvard Library Guide to Getting Started in Economics Research: http://guides.library.harvard.edu/economics
- Economics Reference Librarian, Diane Sredl: sredl@fas.harvard.edu
- **Econlit**: database of economics literature, useful for exploring papers in an area. Access through Harvard Library: <u>library.harvard.edu</u>
- **Web of Science**: useful for finding specific papers in economics and other disciplines. http://guides.library.harvard.edu/webofscience
- **Citation tools** (RefWorks, EndNote): http://guides.library.harvard.edu/cite
- A ranking of economics publications, to gain familiarity with different publications: research.stlouisfed.org/publications/review/09/05/Engemann.pdf
- The economic department's guide on Writing Economics: http://economics.harvard.edu/files/economics/files/writingec_f2014_0.pdf
- John Cochrane's **writing tips** for Ph.D. students. A bit advanced for undergraduates, but contains useful tips on writing economics papers. https://www.johnhcochrane.com/research-all/writing-tips-for-phd-studentsnbsp
- Some recommended books on writing and research: <u>The Chicago Manual of Style</u>,
 University of Chicago Press; <u>Elements of Style</u> by William Strunk, Jr. and E. B. White; <u>On Writing Well</u> by William Zinsser; <u>The Craft of Research</u> by Wayne C. Booth, Gregory G. Colomb, and Joseph M. Williams.

2024 Spring Schedule for Ec 990a Thesis Writers

Spring 2024 Semester

Week of 1/22

First Ec 990 individual meeting. Introduction to the thesis-writing process, including an overview of Ec 990, thesis-writing and research logistics, and plans for the semester. Will also include a brief discussion of student's research ideas and interest.

Week of 1/29

- Deliverable: One-page prospectus [DUE Mon 1/29]
 - This week, students must submit a one-page prospectus. The prospectus should be based on a specific question. (For example, a project describing the theory of tax incidence is not as good as specifically asking whether consumption taxes are preferable to income taxes.)
- Meet individually with Ec 990 instructor. Goal: make sure student has an advisor and topic or is on track to doing so.

Week of 2/5

- <u>Deliverable:</u> Three-page prospectus [DUE Mon 2/5]
 - Students must submit a three-page prospectus. This version will expand on the previous draft, including a discussion of the related literature, and where the student's question fits into that literature.
- Ec 990 seminar (if enough enrolment). Introductions, present and discuss thesis prospectus

Week of 2/12

 Meet individually with Ec 990 instructor: touch base on progress, comments from presentations etc.

Week of 2/19

- Tuesday 2/20: Deadline to submit Thesis Registration Form to Justine Johnson (econundergrad@fas.harvard.edu). If you do not turn this in by 4pm, you must drop the thesis.
- 990 seminar meeting (if enough enrolment). Ec 990 students will give a presentation of their thesis question, discussing why the topic is interesting and important.

Week of 2/26

Meet individually with Ec 990 instructor. Goal: make sure students have a clear thesis question and know where their work fits in existing literature. With the instructor's help, students should outline the necessary steps for completing (1) the draft due in May and (2) the final thesis due in November. For example, if the work is empirical, think about what data are needed and potential econometric approaches. If students have found data, discuss whether it's sufficient. If the work is theoretical, think about the modeling to be done and how to get started.

Week of 3/4

- <u>Deliverable:</u> Thesis Justification [DUE Mon 3/4]

The thesis justification explains why the thesis topic is interesting and important. This document should be a critical review focused on why the student's question needs to be answered and how it relates to existing research. The idea is to show that there is an interesting, important, and unanswered question that the student's project can help address. The literature summarized can relate to the background of the issue, the actual issue, the methodology used to address it, etc. The justification can be integrated into the final thesis as the introductory/motivation section.

990 seminar meeting (if enough enrolment). You will present your thesis justifications.

Week of 3/11

- **Spring Break**. No meetings this week.

Week of 3/18

Deliverable: Data/Methodology Paper [DUE Mon 3/18]

Students doing empirical papers should have their data by this point. Students should submit a paper discussing data sources, econometric tests that they plan to run, and preliminary summary statistics. (They should also discuss shortcomings of the data.) Students doing theoretical papers need to submit a paper discussing their model and any particular techniques they will use. This can be integrated into the final thesis as data/methodology/modeling section(s).

990 seminar meeting (if enough enrolment). Students will present their question, motivation, relationship to related literature, and data/models they will use. For empirical papers, explain the causal effect you hope to estimate. If you're writing a correlative paper, explain the correlation you're measuring and why you can't claim causality. For theory papers, explain the key assumptions of your model (eg, constant returns to scale, risk neutrality, parameter values, ...).

Week of 3/25

- Meet individually with Ec 990 instructor. Discuss data/methodology paper, data issues, etc.

Week of 4/1

- Economics Department Honors Exam (TBD). No thesis meetings this week.

Week of 4/8

Meet individually with Ec 990 instructor.

Week of 4/15

- Deliverable: 12-page draft [DUE Mon 4/15]

Students must submit a minimum 12-page draft of their paper. All drafts must include a discussion of relevant literature and motivation for the current project. For empirical theses, this draft must also include a detailed empirical section that includes a discussion of the data, summary statistics, and preliminary regressions. For theory papers, the draft must include a preliminary set-up of the model.

Meet individually with Ec 990 instructor. Last individual meeting before the final 25-page paper is due. Discuss any remaining questions, the 12-page draft, and clearly outline what work remains.

Week of 4/22

- 990 seminar meeting (if enough enrolment). Present preliminary findings.

Week of 4/29

• Deliverable: 25-page draft [DUE Mon 4/29, 5pm]

The 25-page paper will form the major portion of the first semester grade for Ec 990a. If the paper is empirical, the student should have included at least one empirical result (e.g., a regression). If the paper is theoretical, the paper should include a workable version of the model. This paper will be revised and expanded into the final thesis during the fall semester.

Week of 5/6

Optional: meet individually with Ec 990 instructor. Students are welcome to meet with the Ec
990 instructor to discuss comments on their 25-page paper, and to map out their future research steps for the summer.