PrincetonEconomics

Senior Thesis Handbook Class of 2026

A resource for Economics majors containing guidelines, requirements and deadlines for Senior Independent Work

Copies of this handbook and more Senior Thesis information may be downloaded from the Economics Department website: https://economics.princeton.edu/undergraduate-program/independent-work/senior-thesis/

Table of Contents

Class of 2026 Senior Thesis Calendar	3
2025/26 Economics SENIOR THESIS At-a-Glance for STUDENTS	4
General Comments about Economics Research:	5
Choosing a Topic	7
The Economics Statistical Services (ESS)	8
Adviser/Advisee Assignments	8
Your Adviser and Your Schedule	
Extensions and Penalties	
Academic Infractions and Academic Fraud	10
Generative AI use	
Research Involving Human Subjects	12
Grading Standards and Practices for Senior Thesis Research in Economics (ECO 499)	13
1. How your thesis will be assessed	
2. Evaluation criteria and Learning outcomes	13
Grading Rubric (ECO 499)	15
Formal Submission Requirements	
Thesis Funding	16
Prizes	
Senior Thesis Generative AI Use Checklist	

Class of 2026 Senior Thesis Calendar

Friday, Sept. 5, 2025

11am – 12pm In-person Senior Thesis Mandatory Info Meeting, *Location TBD*

Monday, Sept. 15, 2025

Adviser Request Form/Thesis Proposal submitted online by 11:59pm.

Tuesday, Sept 25, 2025

Adviser assignments completed and posted on Canvas; announcement sent via Canvas.

Thursday, Nov 13, 2025

Thesis outline and bibliography due to Canvas by 11:59pm

Friday, Dec. 12, 2025

Deadline to request data not held at the University (Bobray)

Monday, Jan 26 – Friday, Jan 30, 2026 – Data Analysis Workshops for Independent Work

Thurs, Feb 12, 2026

Working TITLE, Question, Method, & Sources due to Canvas by 11:59pm

Tuesday, Mar 17, 2026

Analysis & Results due to Canvas by 11:59pm

Thurs, April 9, 2026

DIGITAL COPIES of THESIS due to CANVAS and Thesis Central and Senior Exit Surveys Completed BEFORE **4:00 PM** (Late penalties apply)

2025/26 Economics SENIOR THESIS At-a-Glance for STUDENTS

Assignment	Due Date	
LECTURE: Intro to Senior	F, 9/5	11am – 12pm; Mandatory Attendance; meeting w/ Prof Wilson,
Thesis		ESS, and Data Librarians
Adviser Request Form/Thesis	M, 9/15	All Adviser Assignments posted on Canvas by 9/23/25
Proposal		
Outline/Bibliography	Th, 11/13	Adviser gives feedback within 2 weeks
Deadline to request data not	F, 12/12	Make request with Bobray Bordelon at bordelon@princeton.edu
held at the University		
Question, Method, & Sources	Th, 2/12	Adviser gives feedback within 1 week
Analysis & Results	T, 3/17	Adviser gives feedback within 1 week
Final Thesis	Th, 4/9	Adviser and 2 nd reader grade internally; comments and final
		combined letter grade posted to Canvas.

ECO 498 - Senior Thesis Foundations, Fall '25: P/D/F Grade Guidelines

To achieve a "P" grade, the student must:

- Meet with Adviser regularly (approx. 3 times)
- Must submit Outline/Bibliography and meet deadlines

A "D" grade may be given if the student:

- Fails to meet with their Adviser in the fall term
- Submits an extremely poor Outline/Bibliography

An "F" grade may be given if the student:

- Fails to communicate with Adviser
- Fails to submit the Outline/Bibliography

Please note: A student cannot proceed to the spring semester (ECO 499) with an F in ECO 498. If this is their only F grade in the major, the student will have until the Friday before Wintersession to revise and resubmit to try to get a passing grade. Both grades will appear on the transcript.

ECO 499 – Senior Thesis II, Spring '26: Final Letter Grade Guidelines

<u>Participation:</u> 5% made up attending initial Intro to Senior Thesis lecture and meeting all 4 milestone deadlines. The remaining 95% of the grade will be made up of 1/3 faculty Adviser grade and 2/3 Second Reader grade.

One-on-one meetings with faculty Adviser We expect students to contact faculty Advisers and schedule times to meet and discuss their progress throughout the year, ideally 3x/semester. Students are expected to be proactive in connecting with their Adviser and self-disciplined at meeting all milestone deadlines.

<u>Canvas</u> All final comments will be posted to Canvas. Only a final, combined letter grade and comments will be posted to Canvas on the final thesis. Please note that second readers remain anonymous.

<u>Questions</u>: Andrea Wilson (<u>awilson@princeton.edu</u>); Gina Holland (<u>gholland@princeton.edu</u>); TA: Jack Zhou (<u>zz0714@princeton.edu</u>)

General Comments about Economics Research:

Economics research can be organized in several ways. The three main branches of economics research are: macroeconomics which provides the language and tools for analyzing aggregate economic outcomes; microeconomics which offers a framework for studying the interaction among individuals/organizations and the role incentives and information play in these interactions; and econometrics which develops tools for confronting macroeconomic and microeconomic theories with data.

The smaller areas within the branches listed above are called fields. Examples of fields are monetary economics, international finance, industrial organization, public finance, finance, labor economics, health economics, development economics, political economy, behavioral economics, experimental economics and international trade. Most fields fall under one of the main branches, typically macro or microeconomics. Some fields straddle multiple branches, (e.g. finance) others have their own unique features that make it difficult to classify them as macro or microeconomics. Roughly speaking, branches can be identified with the required courses for an Economics major and the titles of departmental courses correspond to (or identify) the fields.

Another and perhaps more useful way to organize economic research is by methods. Most research in academic economics and the vast majority of senior theses in economics are *empirical*. That is, the authors of these papers work to identify and quantify relationships among economic variables by applying econometric methods to data. Alternatively, economic research can be theoretical. Researchers in economic theory develop models that are abstractions of economic behavior (of, for example individuals, groups of individuals, or firms) and their interactions (in, for example, markets, political interactions, elections, bargaining). Some empirical work is closely tied to a particular theory. Many of the variables in the empirical models represent the ones that appear in the corresponding theory and the empirical relationships themselves mimic the relationships that the theory identifies. Most empirical papers however, measure relationships that are informed by one or more theories but are not specifically tied to a particular model. Some empirical papers, including some senior theses, measure the relationship among economic quantities without any guidance from theoretical work. Finally, some economics papers (and a small number of theses) are experimental. These papers analyze the behavior of subjects engaged in a structured economic activity. Experimental papers tend to involve simpler econometric techniques. The challenge in an experimental paper is in identifying an interesting question and designing and implementing the suitable experiment to address it.

If you look at titles of economics research papers, you will notice an impressive range of titles and subject matter. What makes up an economics paper? What is common to economic research? What distinguishes economics research from research in the other biological and social sciences and humanities? A precise and complete answer to these questions is impossible and fortunately not necessary. It is enough to know certain common features of economic research papers and certain attitudes or values that economists share. Without any pretense at being exhaustive or of a reflecting a consensus, here is a list of such criteria:

- (1) Economics is quantitative. Numbers matter, measurement is key. In this sense, a paper that is primarily descriptive, or one where data does not exist on the topic, would be considered characteristic of a *poor* paper.
- (2) Abstraction is permitted and valued. For example, GDP, sunk costs, utility, consumers' surplus, risk, and externality are neither the simplest concepts nor the most intuitive ones; yet they are central to economic analysis because they identify important economic categories or reflect useful compromises between what is of interest and what can be measured.
- (3) Agency matters. Economic outcomes emerge from choices that result from the interaction of individual preferences and individual and institutional constraints. Things happen because an individual or a group of individuals make them happen. In many cases, as you would expect, the individual is the agent of interest. In others, the firm is the agent of interest, either in its entirety or the various departments within the firm. The appropriate choice of agent depends on what questions you want to ask. If you are studying international trade, one agent could be an entire country. One key to economic research is identifying the right agent. One thing is clear, "we as a society," "humanity," "ideas," are not suitable agents for any economic analysis.
- (4) Arguments should be clear, logical and whenever possible formal. A beautiful paragraph of prose is nice but does not substitute for a logical flaw in an economics paper.
- (5) Economic research offers positive results not normative judgments. However, in the introduction or better yet, in the conclusion of a paper an author may consider some of the normative motivations and implications of their analysis. Often, the analysis indicates some advantages or disadvantages of a particular policy. However, an economic research paper typically isn't about identifying or defining what is good or what is fair. Introductory economics texts often state that economics can be divided into normative and positive economics. This is extremely misleading since what these books describe as normative economics is something you are unlikely to encounter in any top economics journal. One old textbook describes normative economics as follows: "Normative economics involves ethical precepts and value judgments ... These issues can be debated, but they can never be settled by science or appeal to facts. There are no right and wrong answers to these questions because they involve ethics and value judgements rather than facts." (Samuelson and Nordhaus (1990)). The last sentence offers the best description of what is not a good topic for an economics research paper.
- (6) The tone should be detached, unemotional and analytical. A research paper in economics is not a polemic or a call to action. No matter how strongly the author feels about the issue overall, within a research paper, they should only offer positive arguments and facts. Whether they feel strongly or genuinely about the issue or is undertaking the project purely as an intellectual exercise is irrelevant.

There are three learning goals of the thesis experience that reflect the six criteria above. First, through their work on the thesis, seniors are expected to command the *methods* suitable for their topic. For an empirical thesis, this means seniors should not only understand the relevant econometric techniques but also show awareness of the limitations of those techniques both in general and in the context of their own work. Theoretical work should display an understanding of how to construct a model, how to manipulate it and how to draw conclusions from it. Experimental work should reveal an understanding of current experimental protocols and their rationale. Second, students should

command the relevant literature. That is, they should be able to place their own work within the field (or subfield) so that the marginal contribution of the work is clear. They should also be able to relate the methods used to those of others in the same field or, when appropriate, different fields and know the relevant historical or institutional background. Finally, students should learn to write economics in a *style and tone* that reflects current conventions and preferences. Being able to identify a "fashionable" topic is useful, but an up-to-date treatment of the topic is essential. The tone should be factual and detached. The author may express the normative implications of their analysis but should do so without becoming an advocate. They should also identify and state the limitations of and possible difficulties with their broader conclusions.

Choosing a Topic

A first-rate thesis in economics is either an empirical paper or a theoretical paper or a combination of both. This means that you will either collect/acquire/organize and analyze data or you will build/modify/find and study a model (or both). A small fraction of seniors do experimental work as their theses. Such theses tend to have both an empirical and theoretical component.

The most important step in choosing a topic is deciding whether you will write an empirical thesis or theoretical thesis. You should look at some theses from previous years to understand what an empirical and/or theoretical thesis entail. Here are a few questions to consider as you choose your topic:

- What economic variables will I study? How are these variables measured? (Relevant for both empirical and theoretical theses.)
- What work has been done on this topic so far?
- Will I be able to find data? What econometric techniques will I use? (Empirical)
- What kind of model will I study? E.g., game-theoretic, competitive equilibrium, non-competitive equilibrium, decision-theoretic/behavioral? (Theoretical)
- What experiments will I run?

One way to understand what a thesis entails and to figure out what kind of thesis you want to write is to review some theses from previous years (available online at the Department website) and to evaluate them for yourself. Was the thesis empirical or theoretical? Was it successful? Did it look like the kind of work you would like to do? Do you need to adjust your course selections for this semester to better prepare yourself for writing your thesis? Can you do the analysis in a reasonable length of time? (Use at least two months of full-time effort as your estimate of time available.)

Make use of the resources and staff available in Firestone Library: The librarians include Bobray Bordelon (bordelon@princeton.edu), Charissa Jefferson (charissaj@princeton.edu), and Mary Carter (mc6838@princeton.edu). Please note that there is a deadline of Friday, December 12, 2025 to request data not held at Princeton University. Contact Bobray Bordelon (ext. 8-3211 or bordelon@princeton.edu) as soon as possible.

The Economics Statistical Services (ESS)

The ESS unit provides data analysis assistance to students enrolled in the economics department working on an independent research project like the Senior Thesis. If you need help with the application of statistical or econometric methods, or with the use of statistical software like Stata or R/RStudio, or help with collecting, downloading, cleaning or preparing data for analysis the ESS team is here for you.

ESS provides assistance through one-on-one-meetings, walk-in services, and online via data analysis tutorials. For more information about ESS please visit

https://economics.princeton.edu/undergraduate-program/ess/. If you have any questions, please contact Oscar Torres-Reyna <u>otorres@princeton.edu</u> .

Adviser/Advisee Assignments

Your Thesis Proposal/Adviser Request Form is due on Monday, September 15, 2025, by 11:59pm. Please submit your form online here: https://ecoforms.princeton.edu/2026-senior-thesis-advisor-request-and-proposal-form/. After having received your request form, you will be assigned an adviser by the faculty member overseeing senior independent work this year, **Prof. Andrea Wilson.** Professor Wilson will consider your topic and adviser request when making the final assignments. Principally because some faculty advise a small number of theses, some students will not be assigned a requested adviser or will receive an adviser who is not primarily an expert in the student's area of research interest. Please understand that a perfect match is not always possible. All faculty advising theses can guide the student through the process of writing a thesis with sound economic reasoning. All students are encouraged to seek advice and information from other faculty members with expertise in their research area. Student/Adviser assignments will be posted on Canvas on

Tuesday, September 24, 2025

Some seniors develop a working relationship with a faculty member who agrees beforehand to supervise their thesis. If a faculty member agrees to advise you, have them send a confirming e-mail to Gina Holland, the Undergraduate Program Manager (gholland@princeton.edu). These agreements can only be assured if Gina is notified before Professor Wilson undertakes the adviser/advisee match (i.e. before Monday, September 15).

We do not object to mutually agreeable exchanges of advisers between students. By "mutual," we mean that all parties (students and faculty) agree to the trade. Please have the relevant advisers notify (by e-mail) the Undergraduate Program Manager (gholland@princeton.edu) of any such trades.

Though it is rare, you may discover that you and your adviser are incompatible. If you cannot arrange a suitable trade, please email Professor Wilson before the end of October to discuss obtaining a new adviser (not always possible). Please do not try to work on an unsupervised thesis. Note, however, that changing advisers is not feasible after **November 1st.** Discuss the problem with Professor Wilson, who will try to arrange some alternative or additional help. <u>Do not leave this until it is too late in the academic year.</u>

Your Adviser and Your Schedule

Writing a senior thesis requires neither constant supervision nor complete independence. Opinions as to how much guidance an adviser should provide differ greatly among advisers (and seniors). Hopefully, over time, you will find out where the optimum is for you and your adviser. It is crucial your adviser likes your approach and output. To achieve this outcome, it helps to follow their recommendations. If you disagree with your adviser, it can be fruitful to discuss your differences. However, you are not required to follow every recommendation.

Once you find out who your adviser is, see them as soon as possible! When you reach out to your adviser (either during pre-matching or after being assigned), we suggest you attach your JP to your introductory email as a way of introducing yourself and your past experience with independent research. This will give your adviser an idea of your strengths, as well as those areas needing improvement. The following schedule should give you a general idea of time management after you have contacted your adviser. It is always a good idea to be ahead of schedule so that you can respond flexibly to unexpected difficulties and problems (and there are always unexpected difficulties). If you are late in getting your work to your adviser, you cannot expect them to give you timely feedback.

- 1) Settle on a topic in consultation with your adviser ASAP
- 2) Read background material
- 3) Complete a proposal (including outline, bibliography, primary sources, main modeling idea etc.) and submit it to your adviser and on Canvas by **Thurs**, **November 13, 2025.**
- 4) Submit a working title and a first draft of the Question/Methods/Sources sections of your thesis to Canvas by **Thurs, February 12, 2026.**
- 5) Submit the first draft of the Analysis & Results sections of your thesis to Canvas by **Tues**, **March 17**, **2026**.
- 6) Submit <u>digital copies</u> of your thesis (PDFs to <u>Thesis Central</u> and Canvas) and all senior exit forms online: (https://economics.princeton.edu/undergraduate-program/independent-work/senior-thesis/) before 4:00pm on **Thurs**, **April 9**, 2026.

Setbacks and flexibility. Uncertainty is an inherent feature of novel research. You may be lucky: your first attempt at data gathering and your empirical specification work smoothly, or your conjectures regarding a tractable theoretical model prove correct. However, setbacks are common: you may find that data collection takes longer than expected, or some data is not available after all, or it is in an unworkable format, or you discover that someone else has done something extremely similar to what you were proposing to do. This uncertainty is an additional reason to get started early so that you have time to cope with potential obstacles without compromising the quality of the thesis. Do not count on the process to work completely smoothly.

Do not expect your adviser to read drafts overnight. In general, if you give them adequate time to read drafts, you will get good feedback on your work. Give yourself adequate time to respond to your adviser's comments. Remember, your adviser is not just a grader but also someone who is willing to

help you write a better thesis. Take advantage of this; don't surprise your adviser with the finished work. Make sure you know what she/he thinks of your work long before the final version is due.

Extensions and Penalties

The penalty for submitting your outline or draft late is the following: Your adviser may not be able to respond to your questions and give you adequate feedback in time. As a result, you will not be able to correct and improve your work.

The penalty of submitting the final version of the thesis late is one-third of a letter grade for a submission that is up to one day late and two-thirds of a letter grade for a submission that is two days late, with greater penalties for later submissions as determined by a faculty committee. **Your adviser cannot grant extensions of time** and extensions are granted only in very rare (i.e., almost never) circumstances.

Neither time pressure from other academic or extra-curricular commitments, nor computer or printer problems are sufficient grounds for grants of extra time. Be sure to budget your time prudently.

Academic Infractions and Academic Fraud

As with all written work, you are expected to abide by the Honor Code and to complete your own work. Please be sure to review all Academic Regulations.

A senior thesis that contains academic infractions, or which is in any way the result of academic fraud will be reported to the Faculty-Student Committee on Discipline and may receive a failing grade. You must properly cite **all sources**—this includes (1) ideas, arguments, or language from other authors, (2) your own previously submitted work, and (3) any contributions from generative AI tools.

Building on work from a prior course or JP

If you plan to build on your own work from a prior course or from your Junior Paper,

- 1. You must have written permission from your senior thesis adviser. This written permission must be submitted to the Undergraduate Program Manager, Gina Holland at gholland@princeton.edu.
- 2. Your senior thesis must represent significant new work. You may not resubmit a paper that is identical or substantially similar to one previously submitted.
- 3. Copying and pasting text—whether entire paragraphs or individual sentences—from a prior paper is not allowed. Even if you are the original author, reusing text without clear citation is considered self-plagiarism and violates university academic integrity policies.
- 4. When submitting your final thesis, you must clearly self-cite the original work and submit a copy of the original paper.
- 5. Even with substantial new content and proper citation, the highest possible grade for a senior thesis that builds on prior work is an A-.

Please consult the senior thesis coordinator, Professor Wilson if you suspect that the topic, ideas or content of your JIW and Senior Thesis may overlap.

Generative AI use

The use of Generative AI is allowed but your empirical paper must reflect your own independent analysis, understanding, original thinking, and interpretation.

While AI can help with brainstorming, grammar, clarity, or troubleshooting technical tasks, it must never replace your ability to explain your methods, interpret your results, or synthesize the literature. Your paper should sound like you wrote it and reflect your understanding of the research, not that of a generative AI tool.

Key Expectations

1. Understanding Your Work

You are responsible for all content submitted. If generative AI tools is used in any way, you must fully understand and be able to explain any portion of your paper that was informed, drafted or influenced by these tools (e.g., data analysis, methods, results, and interpretations).

2. Appropriate Uses

- o Brainstorming research questions, outlines, or possible approaches.
- o Getting coding help or debugging assistance (e.g., in R, Stata, or Python), while writing and understanding the final code yourself.
- o Improving grammar, style, or clarity in your writing.

3. Prohibited Uses

- o Allowing AI to write large sections of your paper (especially the literature review, methods, or analysis) without substantial revision and critical input.
- o Using AI to summarize background information or the current literature without reading or the original source.
- o Using AI to fabricate data, tables, or citations.
- o Relying on AI-generated interpretations or conclusions that you do not understand.
- o Submitting AI-generated work "as-is" without modification or review.

4. Transparency and Disclosure

- o Students must inform their adviser in writing if they use a generative AI tool for any portion of their independent work.
- Students must include a generative AI statement on the cover page of the final senior thesis.
- Students are required to maintain a complete and accurate record of all interactions with generative AI tools (e.g., prompts and responses). This record must be included as an appendix to both the prospectus and the junior paper. Failure to do so may be considered a violation of academic integrity policies.

5. Accuracy and Verification

- o AI tools can produce content that is incorrect or fabricated. All AI-generated content must be verified for accuracy and credibility.
- If incorrect, misleading, or fabricated information generated by AI is included in your work, you will be held responsible and this is considered a violation of academic integrity.

A Note on Data

The feasibility of an empirical paper depends on the existence, availability, quality, and cost of your data. Firestone Library offers extensive data resources that will meet most students' needs. However, some specialized areas—such as insurance, international microdata, social media, and sports data—can be difficult or expensive to access. All initial requests to purchase or license data must go through the library, not through the department.

Finally, students may not obtain or use data in ways that violate a source's Terms of Use or licensing agreements. For example, scraping or downloading data from websites without explicit permission or in violation of the site's policies is prohibited.

These caveats should not discourage you in any way. Firestone can support most projects on a limited capacity, but your project is more likely to succeed if you consult **early** with our knowledgeable Economics and Data Librarians: Bobray Bordelon, Charissa Jefferson and Mary Carter.

Research Involving Human Subjects

If you plan to conduct research that involves **human subjects**, you are required to obtain approval from Princeton's **Institutional Review Board (IRB) for Human Subjects** before beginning your project. Specifically,

- You may not conduct any interviews, surveys, or have other direct interaction with individuals without IRB approval.
- You may not use individual-level data from any institution or dataset that contains personally identifying information, or information that could reasonably identify a person, without IRB approval. This includes data from hospitals, schools, prisons, or any other institution that includes information about individuals' mental health status, academic performance, income, criminal records, or other personal identifiers—even if you do not collect the data yourself.

In some cases, publicly available data may still require IRB approval if it contains identifiers or linkable information.

All human-subjects research must be approved by the IRB before any data collection or analysis begins. In addition, both you and your faculty adviser must complete the online human subjects training and certification process before submitting materials to the IRB. This training can be accessed here: https://ria.princeton.edu/Human-Research/Training These requirements are mandated by both the university and federal regulations. IRB applications should be submitted no later than December 2, 2024. For more information, visit Princeton's IRB website.

Grading Standards and Practices for Senior Thesis Research in Economics (ECO 499)

1. How your thesis will be assessed

- Participation: Students will receive a participation grade, which will contribute 5% to their overall thesis grade.
- Attendance: Seniors MUST meet all milestone deadlines in order to receive 5% participation grade.
- The remaining 95% of the grade will be determined as described below.
- Your primary adviser and the senior thesis committee will grade your thesis. Each will give the thesis a number grade between 0 and 100. The scale is 97-100 A+, 93-96 A, 90-92 A-, 87-89 B+, 83-86 B, 80-82 B-, 77-79 C+, 73-76 C, 70-72 C-, 60-69 D, below 60 F.
- If the two readers' grades are within 6 points of each other, then your final grade will be the weighted average with 1/3 weight to the adviser and 2/3 weight to the committee reader.
- If the two readers are 7 or more points apart, then both adviser and second reader will meet to discuss to see if they can come to resolution. If they cannot come to a resolution, then the 2nd reader committee will resolve the conflict.
- The numerical average is converted back to a letter grade. You will receive only the final letter grade and comments by both adviser and second reader. 2nd readers remain anonymous.

2. Evaluation criteria and Learning outcomes

The department expects undergraduate majors in the program to be able to demonstrate the following learning outcomes. Students should:

- A. Command the language of all three branches: Macroeconomics, Microeconomics and Econometrics.
- B. Understand the tools of all three branches sufficiently to be able to follow and participate in policy debates.
- C. Master the tools of at least one of these branches to the extent necessary to understand the existing literature.
- D. Acquire adequate knowledge of the institutional context and applications relevant to at least one subfield of economics or develop advanced training in the tools of one of the main three branches.
- E. Use this knowledge of methodological tools and applications to conduct original research.

A minimal requirement is for the student to show mastery of the language and concepts of economics and the ability to understand and participate in a policy debate. Hence, the thesis should provide evidence that the first three learning outcomes have been attained. A good or excellent thesis must provide correct and novel empirical or theoretical analysis or experimental work. By demonstrating mastery of advanced tools and conducting original research, good and outstanding students can demonstrate that they have achieved learning outcomes (D) and (E).

More specifically, the following are key components:

A senior thesis can be thought of as falling above, below, or on an imaginary line in the grading scale. In general, independent work that meets the top four criteria below will receive grades above the line (A+, A, or A-). Those that do not meet these four criteria will receive grades below the line (regardless of how well they fulfill the other criteria).

- 1) **Question or Problem**. A well-defined question or problem that requires economic analysis and that is motivated (in terms of the economics/finance literature and/or the proposed methodology), feasible (in terms of the available data for empirical projects, and the available mathematical and computational methods for theoretical projects), and presented explicitly and early in the document.
- 2) **Innovation and Independence.** Demonstration of insight and independence of thought or approach, whether in terms of the question or problem posed, the methodology specified, or the results.
- 3) **Methodology.** A well-developed, appropriate, and sophisticated methodology (an empirical approach or a theoretical modeling strategy) that informatively addresses the question or problem. For empirical projects, this means (1) a clear statement of the hypothesis or hypotheses, (2) a detailed characterization of the data set and why it was chosen, (3) the identification and justification of the statistical and econometric technique used (for example, linear or probit regression analysis), (4) careful and thorough implementation of the technique, and (5) review and discussion of applicable test statistics. For theoretical projects, this means (1) a complete statement of the structure of the model, (2) justification of solution methods (for example, closed-form analytical or numerical solutions), and (3) solution of the model.
- 4) **Results.** An explicit statement and discussion of the new results emerging from the project and their relevance to economics and/or finance. This discussion should also include details of (1) how the results relate to economic intuition and/or the findings of related previous research, (2) possible limitations of the results, and (3) directions for further research.
- 5) **Structure.** A visible, easy-to-follow structure consistent with the conventions of economics. A reader can easily identify sections that typically occur in papers in the economics/finance literature, such as Title, Abstract, Introduction, Literature Review, Methodology, Results, Conclusion, and References.
- 6) **Literature Review.** The situating of the question or problem in the literature—not an attempt to exhaustively cite the literature, but rather to establish a link between the question/problem and the existing literature in economics/finance.

- 7) **Style.** Lucid, informative, readable sentences; well-defined key terms and concepts; appropriate gauging of readers' knowledge; presentation of sufficient context; clear and concise writing.
- 8) **Source Citations.** The proper and consistent use of a citation style found in the economics/finance literature—such as APA style or Chicago style.

Grading Rubric (ECO 499)

Grade	Range	Description
A+	97-100	An A + senior thesis meets all of the criteria and makes a significant contribution to the Economics/Finance literature.
A range	90-96	An A thesis fully meets all criteria. An A- thesis fully meets the top four criteria and is competent with respect to the other four.
B range	80-89	A thesis in the B range is problematic in terms of any of the top four criteria (e.g., has a well-defined question/problem but a poorly rationalized methodology and inconclusive analysis, or an imprecise question/problem but an interesting set of results derived with appropriate methodology, or a competent analysis of a well-defined question but with only limited new insight or limited applicability) and is competent with respect to the other four criteria.
C range	70-79	A thesis in the C range is faulty in terms of any of the top four criteria and may be less than competent with respect to the other four.
D	60-69	A thesis in the D range is deficient in most of the criteria and adds nothing to one's understanding of the subject beyond what might be gleaned from superficial reading in the area. Even a D independent research project, however, must demonstrate that the writer has some knowledge and understanding of the economic issues.
F	0-59	An F thesis is similar to D work in that it fails to meet most criteria. A failing grade indicates that the student did not research the subject at all adequately and/or fails to bring economic tools to bear on the problem.

Formal Submission Requirements

Please use the citation style of the *American Economic Review (AER)*.

- 1. A title page with the title, your name, your adviser's name, and the date on the front page.
- 2. A second page with honor code and generative AI pledges (available on Canvas)
- 3. A third page with the completed AI Checklist (available on Canvas)
- 4. A detailed table of contents.
- 5. A complete bibliography.
- 6. The manuscript must be typed, double-spaced, with one-inch margins.
- 7. **Appendix documenting any use of generative AI tools,** including a log of prompts and responses, if applicable. This appendix should clearly describe how AI was used and reflect your compliance with the generative AI policy.
- 8. An abstract is optional.
- 9. Digital copies of the thesis are due **Thursday**, **April 9**, **2026**, **before 4:00pm**. You must submit your thesis to both Thesis Central and Canvas. <u>Do not submit the copies to your adviser directly</u>.
- 10. Please remember to number the pages.
- 11. All economics senior exit forms must be submitted online with your thesis to complete your submission. Only complete submissions will be accepted.

Students must retain copies of all data, programs, and output used in their analysis and be prepared to make them available for review upon request. This includes any code used to construct variables, clean data, or generate results presented in the paper.

Seniors are asked to stay within the recommended page limits for an empirical senior thesis (50-80 pages). Theses significantly longer than 80 pages should be shortened by presenting the same material more concisely or by narrowing the focus of the thesis. However, theoretical theses tend to be shorter than 50 pages. Efforts to "pad" a thesis to make it seem longer, by including irrelevant graphics or using abnormally large typeface and margins will typically result in a lower grade. The recommended page limits do not include bibliographies and appendices. Please be sure that your valuable computer files are backed-up.

A hard drive failure or corrupted storage media will not excuse a late submission.

Thesis Funding

Funding is available for research expenses. In order to be considered for funding, students must apply through \underline{SAFE}

Prizes

The following prizes will be awarded by the Department of Economics this academic year:

<u>The John Glover Wilson Memorial Award</u>: Prize awarded for the best essay on international economics or politics by a student in the Department of Economics.

<u>The Walter C. Sauer Prize</u>: An annual Prize awarded to the student whose thesis or research project on any aspect of U.S. foreign trade is judged most creative. Joint eligibility between Economics, Politics, and WWS.

The Griswold Center for Economic Policy Studies Prizes: Awarded annually to the top five policy relevant theses.

<u>Burton G. Malkiel *64 Senior Thesis Prize in Finance:</u> Awarded annually for the most outstanding thesis in the field of finance.

<u>The Elizabeth Bogan Prize in Economics</u>: Awarded annually for the best thesis in Health, Education, or Welfare.

<u>The Daniel L. Rubinfeld '67 Prize in Empirical Economics</u>: Awarded annually for the best thesis in empirical economics.

The Hugo Sonnenschein Prize: The best senior thesis in economic theory.

<u>The Wolf Balleisen Memorial Prize</u>: An annual prize for the outstanding thesis by a senior in the field of economics

<u>Halbert White '72 Prize in Economics</u>: Awarded annually to the most outstanding senior economics major as evidenced by excellence in departmental coursework, and creativity in the junior papers and senior thesis.

An archive of ECO theses is stored in the Mudd Manuscript Library; we advise you to look at some prize-winning theses, especially ones related to your research area, to get a better idea of what a good thesis should be.

https://dataspace.princeton.edu/handle/88435/dsp013n203z151

Title of Paper

BY

Student Name

Advised by: Professor Adviser Name



Submitted to Princeton University

Department of Economics

In Partial Fulfillment of the Requirements for the A.B. Degree

April 9, 2026

HONOR PLEDGE:

This paper represents my own work in accordance with University regulations.
Signature
AI DISCLOSURE:
(You must include one of these two statements, and sign below):
I did not use Generative AI in the development of this paper.
Signature
or
I disclose that I used Generative AI in the development of this paper under the guidance of, and with the full
knowledge of my faculty adviser. An appendix documenting all generative AI prompts and responses is included.
Signature

Senior Thesis Generative AI Use Checklist

Students must complete this checklist to disclose any use of generative AI tools in the development of their Senior Thesis. This form must be submitted alongside the required appendix.

Please check all that apply:
Brainstorming research ideas
Refining or narrowing the research question
Outlining the structure of the paper
Identifying relevant literature or references
Summarizing academic literature
Generating citations or bibliographic entries
Editing or rephrasing written content
Checking grammar or clarity of writing
Generating code or assisting with programming
Analyzing data or interpreting results
Creating figures, tables, or visualizations
Explaining statistical methods or concepts
Translating text or converting formats
Other (please specify)

^{**} Please keep in mind, even if you complete this checklist, your empirical paper must still reflect your own independent analysis, understanding, original thinking, and interpretation. Generative AI may assist with tasks, but it cannot replace your intellectual contribution.