

**Undergraduate Honors Thesis
in
Managerial Economics**

-Handbook-

Department of Agricultural and Resource Economics

Program Coordinator: Dr. Kristin Kiesel

Email: kiesel@ucdavis.edu

Office: SSH 2147

This program is designed to assist outstanding, committed and hard-working students majoring in Managerial Economics to think clearly and coherently about economic matters and to develop their analytical skills.

Learning objectives:

This program is especially effective for students who want to:

- develop research, writing and presentation skills for work in a wide variety of business-related fields and careers
- continue their studies at the graduate level

It gives students the opportunity to work closely with a faculty member over the course of two quarters and get involved in academic research.

Learning outcomes:

With the guidance of a faculty advisor, the student will prepare an original, independent research paper (honors thesis, typically between 20 and 30 pages) which should be of sufficient quality and interest to present to an employer or a graduate school, and perhaps even be published in some form. Participating students will also be asked to present their results to a wider audience.

Prerequisites:

In order to apply to the program, interested students must meet the following requirements:

- Major in Managerial Economics
- Senior standing
- A minimum 3.5 GPA (overall)
- ARE 100B
- ARE 106 (may be taken concurrently)
- ARE 155 (may be taken concurrently)

Program Application:

In order to apply to the program, students must:

- decide on a general area of research and
- develop a preliminary research idea

Students must contact the program coordinator before the last day of instruction in the spring quarter (see Program flyer for exact deadline). The program coordinator will provide initial feedback on their ideas and match students with potential faculty advisors based on interest. Once the program coordinator matches a student with a faculty advisor, the student joins the cohort of honors students for that year.

Enrollment in ARE 194HA/B:

Once students are matched with a faculty advisor, they are required to follow up with their advisor to further define their thesis topic. Prior to enrolling in 194HA, students have to submit a 1-2 page write up that clearly states their thesis question and outlines their research idea. This write up should include at least one academic article and address how they plan to approach

answering the question. The faculty advisor has to approve the thesis topic and will meet with the student to fill out and sign the advising form (see Appendix A).

Students will contact their advisor prior to the start of the fall quarter. They need to submit a first draft no later than the first week of instruction. The signed advising form needs to be handed in to Managerial Economics Advising no later than the 10th day of instruction to enroll in 194HA.

Suggested Time Line for ARE 194HA/B:

Fall Quarter

1st week of instruction: one/two page outline of your idea

2nd week: improved one/two page outline

The faculty advisor will have to approve this write up and sign the advising form no later than the 10th day of instruction. Student will take the form to Managerial Economics Advising to officially enroll in 194HA.

3rd week: 5-page outline of the paper

The outline should include an introduction, literature review, description of the data or their sources, description of a theory framework and empirical strategy.

4th week: 10-page outline of the paper

At this point the paper should include a comprehensive literature review, empirical strategy and the student should have access to the data.

5th week: Students share their research question and initial progress with faculty members and graduate students during the **Honors student coffee hour**¹ for additional feedback.

End of November: 15-page draft

The draft should include some preliminary empirical results.

Winter Quarter

1st week of instruction: Complete first draft

This complete draft includes basic empirical results and the full structure of the paper: Abstract Introduction, Literature Review, Data Description, Empirical strategy, Discussion of Results, and Conclusion (20-30 pages, plus appendices).

3rd week: Address the weaknesses of the first draft

Based on received feedback, the analysis and the quality of the draft should be improved.

5th week: Robustness checks and extensions

At this point the paper should basically be complete. Students should focus on discussing implications of their findings such as policy recommendations, as well as the robustness of their results, limitations and possible extensions of their analysis.

¹ This event will be hosted jointly with the Economics Department.

End of February: Present your research question and findings (on 6-8 slides) to students and faculty during **Department brown bags**.²

Beginning of March: Turn in the complete paper for grading, **no later than the last week of instruction**.

Note: Students are also encouraged to present at the UC Davis undergraduate research conference in the following spring quarter (<https://urc.ucdavis.edu/conference/>).

Grading:

Each quarter of work earns students 4 units such that they will receive a total of 8-letter graded units for the thesis. Grading is deferred until 194HB is completed. An in-progress grade is assigned at the end of the first quarter. The letter grade will be assigned by the faculty advisor after the completion of the honors thesis. It is based on effort, engagement, quality of the project, analysis, results, and overall write up of the honors thesis. Faculty advisors will provide constructive feedback throughout both quarters (see also suggested timeline) and base the assigned final grade on the rubric (Appendix B). You can invite another professor within our department or from another department to co-supervise your thesis (this person may act as the second reader if he/she agrees).

Honors at graduation

Completion of the 194H sequence does not translate into conferral of *High* or *Highest* Honors at graduation. Conferral of these honors also depends on grade-average requirements (see General Catalogue), not just on the thesis.

Withdrawal from the program

If a student experiences difficulties following the suggested time line of the program, and/or wishes to withdraw from the program, he/she needs to contact the program coordinator immediately to discuss further steps.

Deciding on a Thesis Topic (Guidelines for Students):

The most important aspect of successfully completing this program is deciding on and developing a thesis topic. The topic should be interesting to **you**, this is **your** thesis, and answering **your** question will take many hours of work. The program coordinator and faculty will help you to refine your question and make you more efficient at finding and analyzing the relevant literature and data.

Recommendations for how to decide on a topic

If you do not know what area you are interested in and are looking for ideas, try reading the *Economist*, the *Wall Street Journal*, the *New York Times*, etc. until you find an interesting and relevant topic. If there were some ARE classes you particularly enjoyed, or some ARE professors you might be interested in working with, think about the topics covered in those classes and explore the research ARE faculty are pursuing (e.g., by looking at their faculty websites). You can also contact and talk to them directly about your interests.

² The brown bags will be organized around topics and hosted jointly with the Economics Department.

Once you decide on an area of interest, start writing down one or more questions within this area that you would like to answer. Most research questions are motivated by a desire to establish 'causation'. The more specific you are, the easier it will be to look for data to try to investigate this question empirically. For instance, you could ask: What are the effects of allowing farmers to sell irrigation water in local economies? What is the effect of nutritional labeling guidelines on consumer valuation of healthier products? What is the effect of zoning laws on a local housing supply? What are the consequences for economic development of isolating a country from international trade? How have price supports and regulations on agricultural commodities affected innovations?

We discourage questions that deal with future impacts. For instance, it is a lot harder to try to answer how global warming and climate change will affect California's economy. There are no data available to answer this question yet. One could try to answer how the drought has affected California's economy, however and then motivate this question in a broader context. The results can be used to draw implications for potential future challenges regarding climate change.

Begin to outline potential answers to the questions. You might quickly realize that one question leads to another, and that you will have to do more research to decide on an approach.

You can begin this process during the summer. After receiving initial input from the program coordinator or faculty advisors, find academic papers that are related to your topic and published in economic journals. (e.g. top general interest economics journals such as Quarterly Journal of Economics, American Economic Review, Journal of Political Economy as well as field journals such as American Journal of Agricultural Economics, Journal of Development Economics, Journal of Environmental Economics and Management, Resource and Energy Economics, Journal of Financial Economics, etc.). You can also start looking for potential data sources.

At least some of your references should have been published in the last 10 years and recent developments and current challenges can motivate your topic. A good resource of current research are NBER working papers (<http://www.nber.org/papers.html>). The following publications can also serve as a good starting point to connect your ideas with recent important issues: Journal of Economic Perspectives (<http://www.aeaweb.org/jep/index.php>), Economic Policy (<http://www.economic-policy.org/>), Annual Review in Economics (<http://www.annualreviews.org/loi/economics/>). Finally, depending on your topic, one way to think about writing a thesis is framing it as a policy evaluation or brief prepared for an elected official. In this context, it often helps to frame questions in terms of extremes—e.g. no regulation, government provided goods and services, or something in between (e.g. private provision with some kind of regulation. One additional good reference to look for information on public policy topics is: www.gao.gov.

Appendices:

Appendix A: Advising form

Appendix B: Grading rubric

Department of Agricultural and Resource Economics
Undergraduate Honors Thesis Form – Fall _____

Name: _____

Date: _____

Student ID: _____

Faculty Advisor: _____

UCD email address: _____

CRN: _____

The Undergraduate honors program permits outstanding, committed and hard-working Managerial Economics majors to complete an in-depth research thesis that makes an original contribution and is of sufficient quality and interest to present to an employer or a grad school, and perhaps publish in some form.

Based on your expressed preliminary interests, your faculty advisor will help you to refine your question and make you more efficient at finding and analyzing existing literature and data. S/he will not give you a question—you must come up with your thesis question. **Your advisor needs to approve your final research question no later than the 10th day of the instruction during the fall quarter.** You and your advisor can specify their agreed upon structure regarding meeting times (e.g. once a week, biweekly with email check in, etc.), expectations, and provided feedback throughout (see also Suggested time line in the Handbook).

Specific expectations, format, and intermediate milestones for the completion of ARE 194HA¹ and HB:

(use reverse if more space is required)

Faculty Advisor's Signature

Coordinator's Signature

*Students are required to submit this form to Student Services, 1175 SS&H, no later than the 12th day of instruction during the fall quarter, in order to enroll in ARE 194HA.

¹ Grading for the fall quarter will be deferred (“IP”) until completion of the thesis in winter quarter.

GRADING RUBRIC FOR UNDERGRADUATE HONORS THESIS

This rubric can be used to provide feedback to students by circling or underlining the phrases that best describe the current state of their work. Faculty advisors will also use this rubric to assign a final grade for the honors thesis.

Specific comments:

	Outstanding A+	← A	A-	B+	Satisfactory B	Needs improvement
INTRODUCTION	Descriptions of topic comprehensive Link to larger context well thought out			Description of project complete Link to larger context established		Description of project incomplete Link to larger context missing or unclear
RESEARCH QUESTION	Research question clearly defined Goals/objectives/hypotheses clearly and effectively stated Motivation demonstrates complex understanding			Research question identified Goals/objectives/hypotheses are stated Motivation developed		Research question inadequately represented Goals/objectives/hypotheses vague or incomplete Motivation lacking or underdeveloped
METHODOLOGY AND EMPIRICAL APPROACH	Methodology compelling Analysis, evaluation and synthesis conveys understanding and shapes stated objectives Empirical support well utilized			Methodology appropriate Analysis, evaluation and synthesis developed Empirical support presented		Methodology insufficiently developed Analysis, evaluation and synthesis limited Empirical support selective or inadequate
LITERATURE REVIEW	Body of literature thoroughly discussed Research question clearly contextualized among literature and materials cited Contrasting views and perspectives discussed to advance research topic			Body of literature summarized Research question situated among literature and materials cited Contrasting views and perspectives discussed		Body of literature inadequately discussed Research question minimally situated among sources and materials cited Discussion of contrasting perspectives is limited
CONCLUSIONS AND IMPLICATIONS	Conclusions well developed Implications qualified and well supported Significance of results concisely stated			Conclusions developed Implications linked to findings Significance of results discussed		Conclusions lacking Implications vague or unqualified Significance of results unclear
WRITING	Writing clearly and effectively communicates ideas Writing is appropriately nuanced and eloquent Organization is clear and effective Sources and citations are used correctly			Writing straightforward and generally conveys meaning Few grammar, spelling, or punctuation errors Organization is developed Sources and citations are included		Writing obscure, and meaning unclear in places Grammar, spelling, or punctuation errors Organization accidental or not developed Sources are not cited or not used correctly