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Teaching and Educational Method

From Zero to Thesis in Two Years: A Curriculum Plan for Engaging Undergraduates in Honors Research

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Abstract
An undergraduate honors program in agricultural economics confers a multitude of advantages, fosters an enriching academic experience, and propels students toward professional excellence within the agricultural sector. A major difficulty that many programs must manage is how to get more students interested and engaged in these programs, particularly as new pathways to our programs are developed. There is a lack of standardization concerning honors content and processes, particularly for transfer students. In programs that are commonly considered "found" majors, students may have the potential for honors research, yet are not sure how to engage in the short two years in the major. This article details existing honor program structures and offers a pathway toward a rigorous and comprehensive curriculum tailored to students who have two years to complete their program. The first year focuses on building a strong foundation in their field. In the second year, students embark on a specialized research project under the guidance of experienced faculty mentors. At the program's conclusion, participants will have engaged with the complexities of agricultural economics and honed their critical thinking, research, and communication skills.

1 Introduction

One common way to engage students in research is to enroll strong students in honors colleges and undergraduate research experiences, and mentor them through the writing of an honors thesis. As the number of undergraduates coming from farming backgrounds declines and high school dual enrollment increases, many programs are left with a smaller body of students from which to draw academically strong and ambitious students as first-time in college (FTIC) freshmen. For example, in the authors' department, only 13.3 percent of FTIC students graduating from 2018 to 2023 in agricultural economics started in agricultural economics, 57 percent transferred in from community and state colleges, and the average credits for those transfer students was 55 credits (just shy of an associate's degree, on average). Even once a talented candidate or even a few candidates enroll, it may be difficult to provide a quality program for these students that fully prepares them to engage in research as undergraduate students. Given the breadth of career pathways available to students in agricultural economics and agribusiness, programs may struggle with providing an honors program that enriches the experience for the students while still allowing for a non-FTIC student to graduate on time and with honors. This article offers insights into how to incorporate research into existing curricula and bolster the individual research process required to equip students with an understanding of the intricate interplay between economics and agriculture within two academic years. We argue that it is not only possible but also rewarding to offer a chance for undergraduate-driven research to non-FTIC or within-institution transfer students to better fill the pipeline of agricultural economists well into the future.

Academic administrators and professors have long made efforts to provide differentiated instruction and curriculums to excelling undergraduates. Undergraduate honors education somewhat resembles organized attempts at K–12 gifted education in the United States, which began in the late

1800s (Rinn and Plucker 2019). Kutzke et al. (2020) surveyed honors and non-honors students, and they found that interest in honors may increase if connections between honors and their majors/colleges were more apparent. A primary benefit of an honors program in agricultural economics is the provision of a highly challenging and intellectually stimulating environment for students who may not fully know what agricultural economists do. This is increasingly important as we grapple with preparing our students for graduate programs in agricultural economics when our undergraduate programs may not fully encapsulate the mathematical and econometric skill set required for success in a graduate program even within the same institution.

As early as 1988, Lester Manderscheid sounded the alarm with an article in the *American Journal of Agricultural Economics* on "Undergraduate Educational Opportunities in the Face of Declining Enrollments." At that time, agricultural enrollments had dropped 35 percent in only one decade at our land-grant institutions (Manderscheid 1988). Even more concerning is the impending "enrollment cliff," which some attribute exclusively to the drop in the fertility rate brought on by the 2008 to 2011 recession (Copley and Douthett 2020). Just this year, the AAEA Presidential address focused on the demographic cliff, pointing to concerns such as rising college costs, outside opportunities, and social shifts in the perceived value of higher education (Nayga, Liu, and Kassas 2024). Like the concern raised by Manderscheid in 1988 and echoed by Nayga in 2024, many of us are left wondering what we can do with the finite pool of students in the brief time we have them to ensure the field of agricultural economics will endure into the future.

To have future agricultural economists, we must expose students as early as possible to our field and the possibilities therein, even as we shift our recruitment efforts to community colleges and degree pathway programs (Nayga et al. 2024). Honors research provides an opportunity to (1) expose students to the types of research done in our field, (2) create a pipeline of students who participate in our annual meetings, and (3) draw better students to our field in the hopes of attracting a better student body overall. Honors students are generally expected to engage in advanced coursework that delves into the intricate economic principles governing the agricultural domain. This enhances their theoretical knowledge and hones their ability to apply economic models to real-world agricultural scenarios. Commonly, programs are focused on a four-year approach that is typical of an honors college; however, this is potentially missing a large number of these transfer students.

The authors of this paper have embarked on this effort over the last few years when it came to our attention that only around 1 percent of our undergraduate students had completed a thesis in a five-year period (2018–2023). Through targeting junior students and following the program, we define in this paper, we have increased our honors students to 10 percent of our student body and are engaging over 50 percent of students who were eligible to complete an honors thesis in this Spring 2024 graduation term. The remainder of this paper will summarize existing institutional frameworks for honors research, defining key features of various program types. Next, we propose a framework for engaging students in under a two-year timeline, including concrete examples of curriculum and institutional adjustments that can be a model for engagement at other "found" major[1] programs. Finally, we provide an assessment of our program and define characteristics of students likely to be successful in this program.

2 A Review of Honors Programs

Honors programs are valuable because they emphasize research and independent analysis, promoting a culture of curiosity and scholarly exploration. However, there are several structures to honors programs that are worth discussing to provide a common language for the experience. Research experiences for undergraduates (REU) include any educational activity where undergraduate students actively engage

[1] While all programs probably have their own flavor of within university transfer students, many of our "found" majors come from engineering (30 percent) and business (20 percent).

with the research process concerning problems in their discipline (Zimbardi and Myatt 2014). While a student need not be involved in an honors program to engage with REU, an honors thesis within an REU is a common theme among many programs. In honors research, students are typically guided by qualified faculty members from their institution, allowing for impactful mentorship and collaboration on original research projects. This exposure develops research expertise and nurtures critical thinking and communication skills. These skills are vital for disseminating findings effectively to diverse audiences.

2.1 An Overview of Honors Study Frameworks

Some programs require a thesis to graduate "with honors" while others are strictly based on a grade point average (GPA) requirement. Some universities have students enroll in an "honors college" and require specific coursework in addition to a thesis. Other programs may not specify courses but rather require a certain number of credit hours to be honors sections of already offered courses. Graduating with honors from an American university solely based on GPA involves maintaining a certain GPA throughout your undergraduate years. This recognition is often categorized into tiers, such as cum laude, magna cum laude, and summa cum laude, each representing varying levels of distinction based on GPA. Universities set GPA thresholds for each honors level, such as a GPA between 3.5 and 3.7 for cum laude, between 3.7 and 3.9 for magna cum laude, and above 3.9 for summa cum laude.[2] Meeting the GPA threshold places a student into consideration for these honors. Sometimes to achieve these designations, they must fulfill other academic requirements of their chosen major and any additional criteria specified by the university or college. These requirements usually relate to a minimum number of credit hours in specific subjects. Upon graduation, if all the established criteria are met, they are granted the appropriate honors designation, often indicated on their diploma and official transcripts.

On the other hand, an honors certificate often involves completing an honors thesis—a research project displaying a student's expertise in their field. The process often includes signing up for the certificate program, selecting a focused topic, creating a proposal detailing objectives and methods, conducting a thorough literature review, collecting and analyzing data, and drawing conclusions. In this model, students often enroll in research credit in their final semester as they prepare their thesis for final submission to the college, university, and/or a student research journal. Typically, a student works closely with a faculty advisor and is expected to contribute innovative ideas to their chosen field. This is a rigorous academic endeavor that highlights the student's commitment to academic excellence and is often celebrated with a public presentation or defense. Unfortunately, while some high-achieving students actively look for research opportunities and plan to graduate with honors, other high-achieving students do not have the knowledge or mentoring needed to seek out research experience, thus losing out on this important skill set and the opportunity to achieve honors status (Martins and Goss 2023).

Finally, a university honors college is an exclusive academic program that appeals to particularly motivated and high-achieving students. It typically offers an enriched learning environment within the larger university setting. Students admitted to the honors college, often as freshmen, are presented with a specialized curriculum emphasizing critical thinking, interdisciplinary exploration, and heightened engagement with their chosen fields of study. Classes are typically smaller in honors colleges, fostering closer interactions between students and faculty. This facilitates a more personalized education experience with greater opportunities for discussions and collaborative learning. Faculty who teach honors courses are more likely to encourage engagement in the areas of student–faculty interaction, learning strategies, and collaborative learning (Miller, Silberstein, and Bracka Lorenz 2021). An additional advantage of the honors college approach is the sense of community it promotes. Honors

[2] This GPA designation also differs by institution; some institutions for example require a 4.0 for the summa cum laude designation and have the breaking point between cum laude and magna cum laude at 3.75. For further examples, see the University of Florida's College of Agricultural and Life Sciences honors requirements, https://cals.ufl.edu/getinvolved/honors/honors-requirements/.

students often reside together in dedicated housing, creating an environment where education extends beyond the classroom. This encourages a collaborative exchange of ideas and the potential for lifelong friendships among peers who share a passion for learning. These strategies are often priorities for those who work in honors colleges or with honors students (Miller et al. 2021).

2.2 Drawbacks of Current Honors Frameworks

While honors programs can provide a valuable experience to undergraduates, there is a lack of consistency in these programs, and many of the existing frameworks are not accessible to the current student composition of many programs. One of the most substantial disadvantages is the variation in program quality. This can lead to difficulties meeting graduate program admissions criteria within our same field and a lack of the quantitative skills emphasized heavily in our graduate programs. This can be addressed by providing more rigorous research experiences to a select group of students who are targeted by their junior year as capable of rigorous research as proposed in section 4 of this paper.

A key concern of the lack of a standardized framework is that it can intensify educational inequities. Students enrolled in institutions with robust and well-regarded honors programs may benefit from more opportunities and resources, while those in institutions with weaker programs may lose opportunities for valuable academic experiences. This inconsistency further expands the gap between privileged and disadvantaged students.

Finally, graduating with honors and being part of an honors college learning community are often not accessible to transfer students, particularly when the GPA requirements are tied only to the university GPA (no community college hours factor as part of the calculation), and the honors courses are all offered at the freshman or sophomore level replacing general education classes that transfers have likely already achieved credit for and would be penalized from duplication.[3] Figure 1 illustrates for the authors' institution, the average credit hours brought in by each honors designation. Please note that at the University of Florida, students cannot earn "High Honors" or "Highest Honors" without writing a thesis. This means that engaging transfer students in honors credits is challenging and must be well-

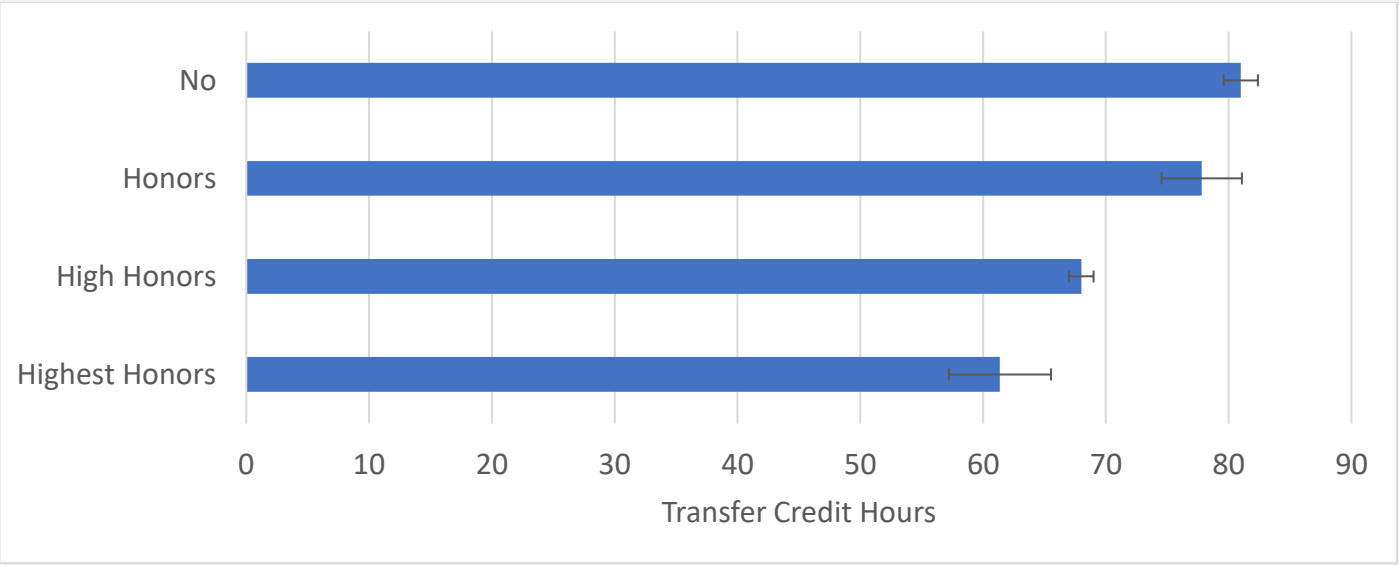

Figure 1: Example Average Credits of Agricultural Economics Graduates Upon Entering Studies at an R1 Four-Year University from 2018 to 2023 (N = 465)

[3] Some universities charge double tuition for "excess credit hours," which means all credits above a threshold (usually 130–150 credits). This means that transfer students are penalized if they want to try to take lower-level honors classes as these classes would not count toward their degree.

thought-out as the existing systems do not account for the challenges of being a community college transfer student, no matter how stellar the student.

A standardized approach could have clear program objectives that align with academic standards; more uniform requirements for admission, progression, and completion (such as GPA thresholds, course prerequisites, and credit hour requirements); and a more structured curriculum that covers essential topics in agricultural economics. This has the potential to improve learning outcomes by ensuring that students have competencies relevant to agricultural economics careers. Standardization also facilitates faculty collaboration and coordination in delivering the program, enabling faculty members to focus on providing effective teaching, mentoring, and support services to students. Perhaps the greatest benefit though is the increased opportunity for equitable access. Standardized admission criteria and transparent procedures promote equitable access to the honors program, ensuring that all eligible students, regardless of background or institution, have equal opportunities to participate and benefit from the program.

3 Standard Framework: Two-Year Program

To account for inconsistent curriculum and educational inequities, and to fill the pipeline of agricultural economists, we propose a framework to engage students in an honors research program beginning in their junior year. Figure 1 outlines a timeline for students who come to our programs as juniors (i.e., in their fifth semester of an eight-semester degree). If presented with a timeline like in Figure 2 early, students might find the prospect of doing a research project less intimidating and doable, even within two years.

Given the timeline in Figure 2, junior-level professors should start to engage students' interests in research and begin discussing possible research opportunities with students (see the timeline for the

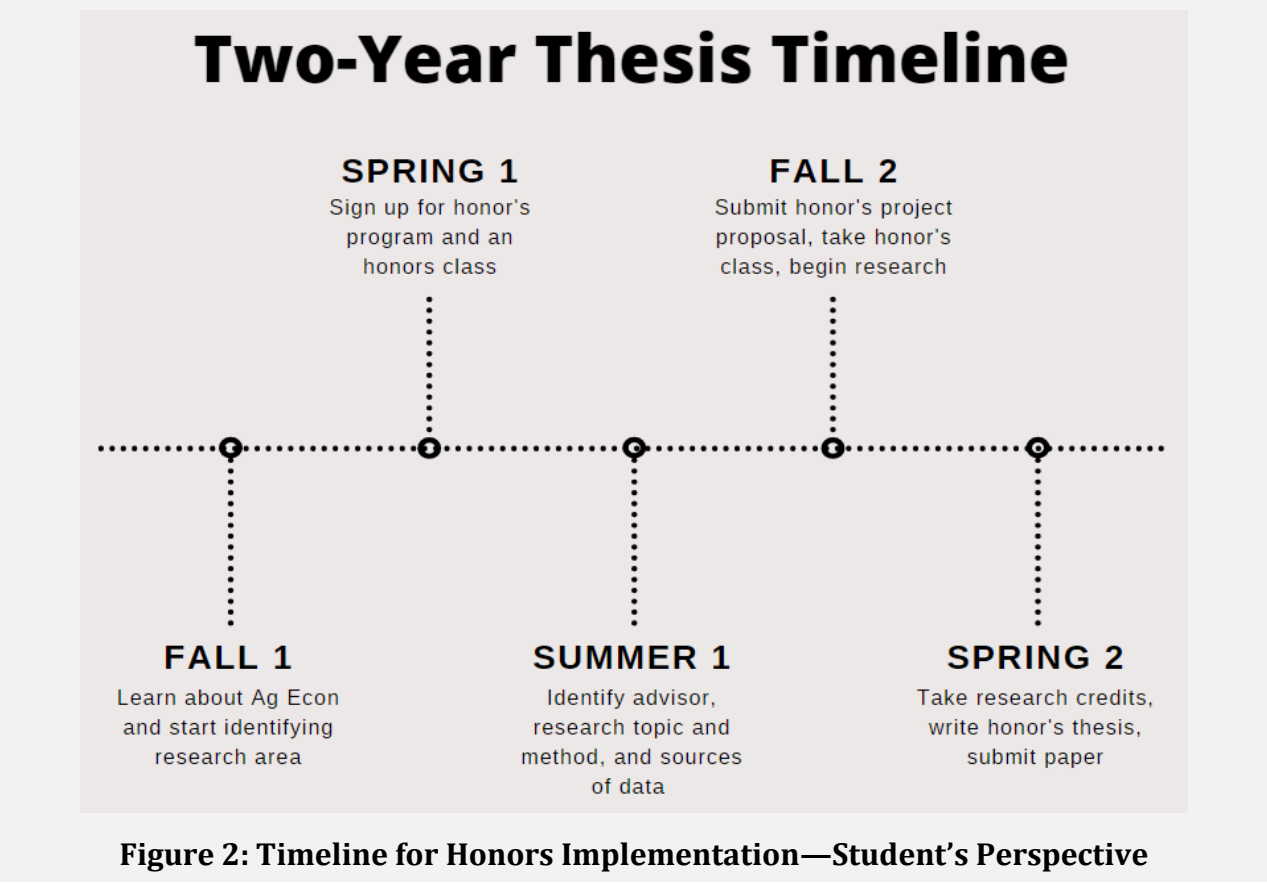

Figure 2: Timeline for Honors Implementation—Student's Perspective

professor in Figure 3). At many institutions, students must establish a university GPA before they can enroll in an honors program so getting them interested in the first semester ensures that they can enroll by their second semester (see the second node in Figure 3). At that point, it becomes imperative that the student begin to take honors classes or honors sections of classes to start meeting the honors credit requirements (typically between 9 and 15 hours). This is most easily facilitated by an agricultural economics program having honors sections of some of their junior-level classes (see next section for greater details).

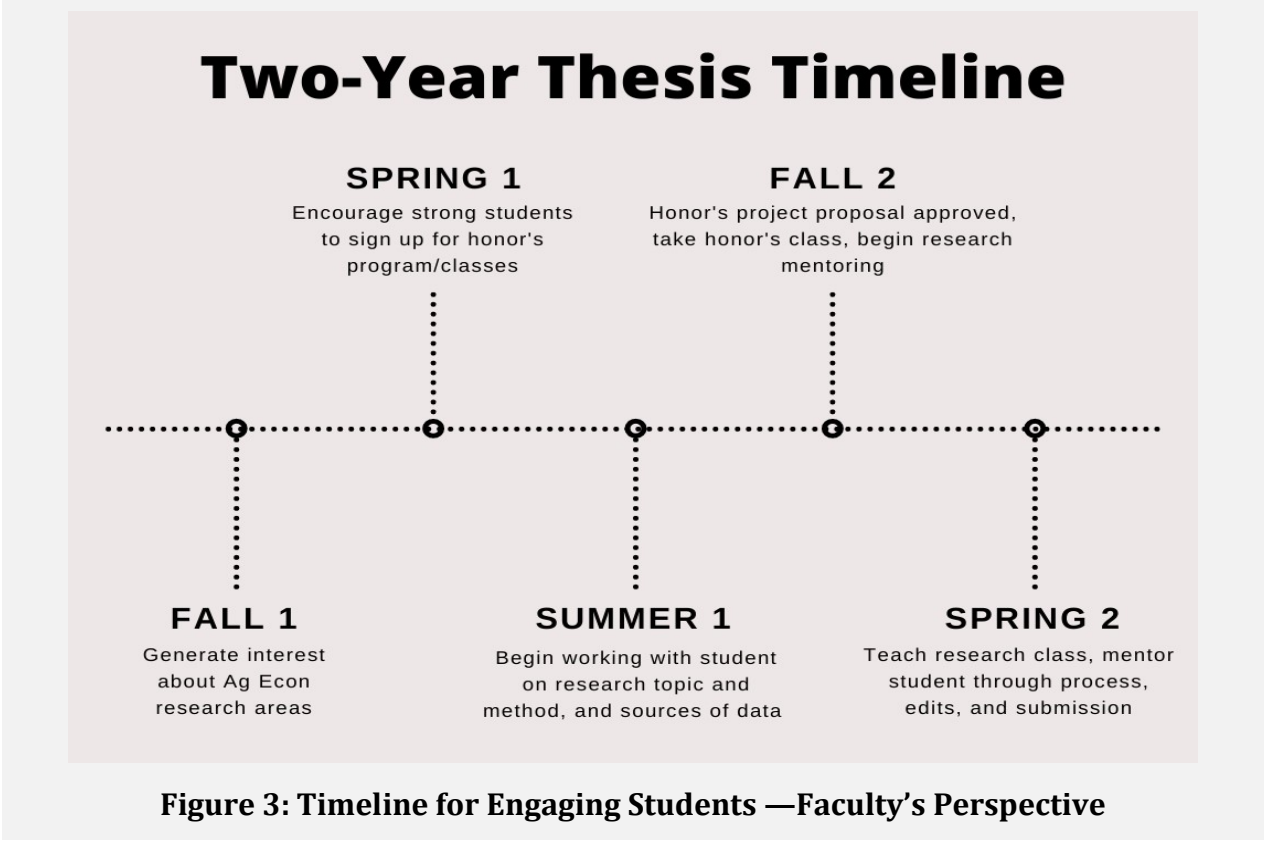

Figure 3: Timeline for Engaging Students —Faculty's Perspective

Once a student has committed to an honors certificate program, identifying a potential research area and the most appropriate mentor must happen quickly (ideally by the end of the junior year, as shown in Figure 2). While it is often the case that students will choose mentors who are their current professors, it is helpful if the undergraduate coordinator or honors coordinator[4] encourages students to seek mentors whom they may not have in class but who study the topic area of interest of the student. It may also be helpful for the research coordinator in each department to have an ongoing list of all faculty, their current projects or research interests, and their willingness to take on students. Many faculty engaged in large research projects that could benefit from undergraduate research assistance may not teach undergraduate students in their first or second semester after transferring. This limited exposure to students may make it challenging to pair the student with an appropriate mentor given their limited exposure to the field and viable research questions.

Once a topic area and mentor are chosen, it is critical that the student work on gathering background information and work with the mentor to identify sources of data. Often, it is the expectation that the student is not the one primarily responsible for data collection due to (1) a short

[4] Although not all programs will have an honors coordinator currently, we recommend in this standardized approach to create this service role because it helps tremendously to engage students in honors research and provides a consistent message about requirements.

timeline, (2) a lack of knowledge of research ethics and the Institutional Review Board process, and (3) inadequate technical skills in data cleaning and manipulation. If a student is going to participate in data collection, summer is the best time to do this while the course load is lowest for the student, and more one-on-one time can be spent with the mentor. The honors proposal is often due at least one semester before the graduating semester of the student (node 4 in Figure 2). This proposal is usually a short (1–2 page) abstract identifying the topic, contribution to literature, research questions, methodology, and data sources. In addition, if the student has not done so already, they should be taking classes for honors credit. It is highly recommended that the student be enrolled in coursework relevant to their thesis topic. It is also helpful for the student and mentor to begin meeting at least two times per month to ensure that the literature review and exploratory data analysis are progressing; if appropriate, this is when the student should apply for research conference presentation funding or other opportunities to highlight their research project. The next two sections outline course adaptations and structures that are supportive of this research process. These timelines culminate in a written work, at a minimum, and perhaps a publication, presentation (defense), or symposium participation requirement. Each institution keeps a repository of these theses, which can serve as examples to future students engaging in honors research.

4 Engagement in Class-Based Research

Understanding an honors thesis as a project is vital for the honors program and involves recognizing its project components, stages, and process in nature. We suggest three stages for engaging honors students toward the final honors thesis in our proposed two-year honors program. The three stages include a project management foundation, a class-based project (or an extension-based project) in an honors class, and an honors research class. Honors students can apply their developed project management and research skills to the final honors thesis and then complete the honors program.

4.1 Project Management Foundation

Requiring honors students to develop project management knowledge and skills before undertaking the honors project and thesis has proved effective (Reutter et al. 2010). As shown in the timeline (Figure 1), we suggest enrollment in an honors course in the second semester of the program, and ideally, this course should provide insights into research project management as it may be the first course a student takes that even discusses the idea of primary research. We propose integrating project management basics in a seminar/workshop-type or standalone course. For agricultural economics departments already offering research seminar courses, project management principles, tools, and techniques can be easily integrated into the seminar topics. If there are no such classes, perhaps in a principles of agricultural economics class, the professor can offer “application Fridays” where they showcase the applied work of their colleagues to draw attention to research and research methods that are commonplace in the department. The key here is to pique the interest of students in our field and the research that we do in the hopes that they will consider engaging in research in some way.

Alternatively, developing a standalone one-credit project management foundation course (PMC) can be considered. It is important to note that this PMC should be open to all students, not only potential honors, or strong students. The PMC aims to equip students with essential project management skills that enhance their ability to excel in class-based projects and research endeavors. This course covers the entire project lifecycle, from initiation to closure, and emphasizes practical skills necessary for successful project execution. The course makes students recognize the intricate nature of the project and research and the need for a systematic approach. This course merges the worlds of academia and project management, providing students with tools that streamline their projects and the research process. By integrating project management basics into honors programs, honors students will be well-prepared to approach their class-based projects and research with a structured and efficient mindset, leading to

higher quality outcomes and an enriched academic experience. Also, it is important to note that project management knowledge and skills are crucial when engaging honors students in class-based projects and research.

4.2 Class-Based Research Projects

Most honors students are required to take honors classes. These classes are sometimes offered at the college or university level; however, there is often an opportunity for programs to provide honors sections of regularly offered courses where students in these sections are asked to complete a class-based project or other additional course deliverable. This helps overcome the issues of duplicated general education classes that transfer students would have with taking "traditional" honors classes. For some institutions, class-based research projects are called "individually designed projects" (University of California, Davis 2023). The class-based project aims to evoke students' research interests and engage students in honors research and thesis development without a requirement that an entire thesis is produced in one semester and should be considered as a stepping stone toward the bigger project.

It is recommended that honors students conduct the class-based project with the support and supervision of course instructors in a structured way. The faculty and students should work to develop a project that fits within the scope of the class and provides challenging opportunities for the student while being achievable in one semester as a supplement to typical course activities. The project should be designed to be flexible, manageable, and consistent (Reutter et al. 2010). For example, the student may participate in a data analysis project in a junior-level statistics class[5] (Box 1), or the student may participate in a commodity price analysis project in an agricultural price analysis class (Box 2). In these two examples, the assignments are additional to what the class is already doing and to meet the requirements of the honors college they must constitute a 20 percent difference from the regular section of the course. The completed project should have at least one course deliverable, such as a project report, a presentation, a poster for conference presentations, and a learning reflection. Supplements 1 and 2 lay out the differences between the honors section and the regular section of these two courses.

It is important to highlight the significance of carefully managing the workload associated with class-based research projects in non-honors courses. While it is commonly perceived that integrating honor students and class-based projects into an existing course might impose a substantial burden on faculty, it is essential to acknowledge that some additional workload may arise in the context of accommodating a class-based project. Nevertheless, various strategies can be employed to effectively manage and distribute this workload.

The first strategy we consider is to use existing class projects. The honors component can be an extension or enhancement of the regular existing class project. Since the foundation is already laid during the standard coursework, the additional workload should be manageable. For instance, in the above-mentioned commodity price analysis project, incorporating a trading simulation for honors students adds complexity and depth to their learning experience. Moreover, involving PhD students and Teaching Assistants (TAs) in class-based research can allow the faculty to focus more on the honors components. TAs can play a crucial role in providing additional support to students, assisting with logistics, and managing the day-to-day aspects of the project. PhD students gain valuable experience in mentoring and teaching, contributing to their professional development.

There are additional benefits, either for teaching an honors course or adapting an existing course to accommodate honor students with a class-based project, for faculty and graduate students. First, faculty can transform their existing non-honors course into a potential honors course. It contributes to the institution's overall academic excellence. Also, the faculty taking on the challenge of adapting a

[5] This class ideally covers both descriptive and inferential analysis but stops short of being an "econometrics" course. The project in this case would more closely resemble "exploratory data analysis" and be a good starting point for a topic of interest.

Box 1: Data Analysis Assignment

This honors project will require students to collect their secondary data set from online data portals or a research faculty and analyze an economic phenomenon of interest. The analysis should tell a story about food, agriculture, and/or natural resources. It will involve using statistical tools learned throughout the semester, including descriptive and inferential statistics and their full interpretation. There will be three components of this assignment: (1) a 1-page proposal identifying the data source(s) and study objectives, (2) your Excel workbook with all original data and tables and figures provided in tabs, and (3) a professional report of your data analysis.

Learning Objectives:

1. Collect and organize data of interest to the student.
2. Analyze data using descriptive and inferential statistics.
3. Interpret descriptive and inferential statistics.
4. Create and explore research questions about a collected data set.
5. Display complex information in a visually appealing and creative way.
6. Present an application of data analysis in a coherent and informative format.

Box 2: Commodity Price Analysis Assignment

The Agricultural Price Analysis (APA) for honors students extends a regular APA project. It includes more sophisticated analyses regarding commodity price change and prediction, and several mocked trading simulations.
The APA project includes a commodity review, mocked trading, trading analyses, price prediction article review, commodity selecting, three months of price tracking and analysis, and fundamental analysis. The final deliverables include a trading report, an article review, a final price analysis report, and a poster.
Learning Objectives:

1. Develop analytical and project management skills in terms of agricultural commodities in the futures markets.
2. Explain the factors that influence the fluctuation of agricultural commodity prices.
3. Apply the economic knowledge and skills learned in class through analytic and experiential learning activities.
4. Analyze the commodity price changes using various analytical techniques.
5. Display the ability to do independent research on a specific commodity.

course for honors students can gain additional teaching, advising, and instructional accomplishments. This can lead to professional growth and recognition within the academic community. Faculty members who successfully adapt their courses for honors students and mentor honors students may include the honors work in the tenure/permanent status and/or promotion packets (Tenure and Promotion packets) packet and receive institutional recognition.

Concerns exist regarding administrators' ability to motivate faculty to create honors adaptations. Proposed systemic approaches include utilizing an honors and/or research coordinator for student

inquiries, streamlining the matching process, and fostering effective communication as mentioned previously. The coordinator can help match interested faculty with honors students, streamlining the process and ensuring effective communication. This helps identify willing and able faculty members, creating a network of support for honors initiatives. Administrators should consider implementing incentives, such as recognition, awards, or even additional professional development opportunities, for faculty who take on honors course adaptations and/or the role of a coordinator. In summary, emphasizing the benefits for faculty, coupled with a systemic approach involving a coordinator and incentives, can contribute to overcoming resistance and encouraging more faculty to adapt their courses for honors students.

4.3 Honors Research Thesis Class

If a student is required to write a thesis for their honors program, they are typically required to enroll in research hours[6] during their final semester. The supervisor for this course will ideally be the faculty mentor for the thesis (identified in the student's junior year), but it may also be a course facilitated by a central instructor with input from faculty mentors. The faculty mentor or course facilitator should engage students in a constant cycle of submission, review, and revisions so that each week in the semester marches the project forward (see Figure 4). If following a sixteen-week semester, this class should move the student through the process of finalizing their thesis. Box 3 outlines a sixteen-week timeline for writing the thesis in one semester under the assumption that students have some foundation through the preparation of their proposal and engagement in either project management or course-based research. Supplement 3 provides a syllabus template for this course addressing issues related to satisfactory/unsatisfactory grading and course expectations.

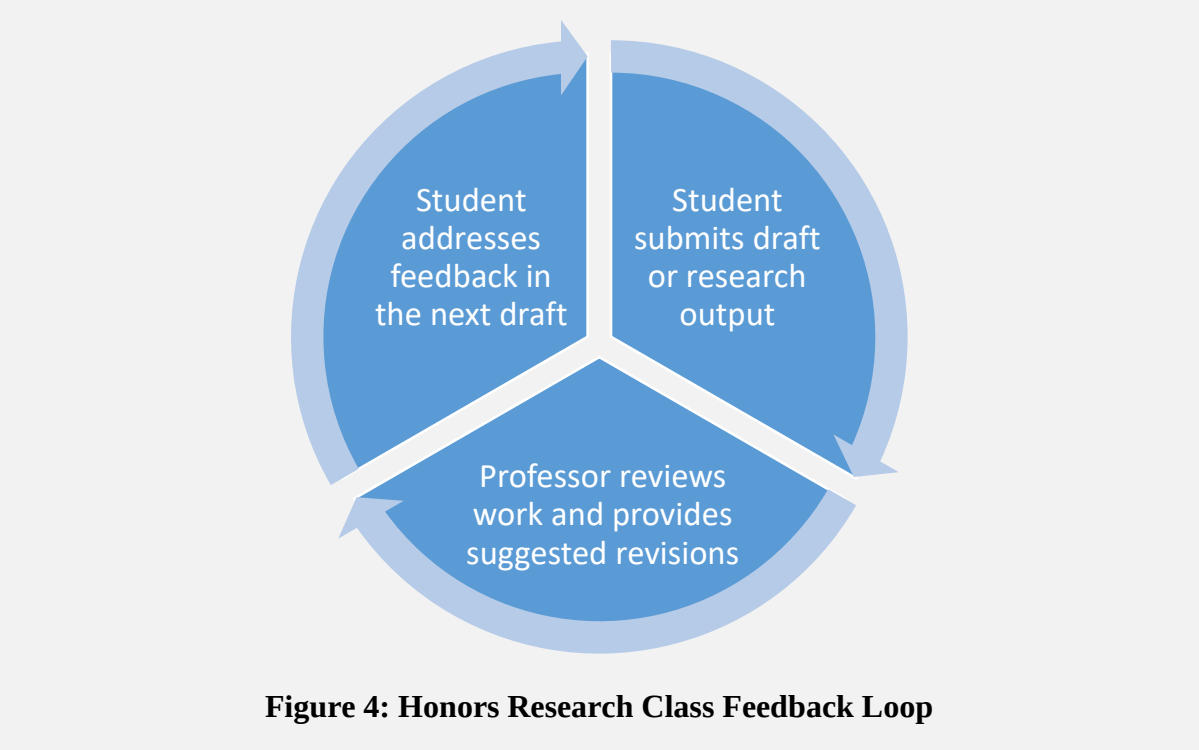

Figure 4: Honors Research Class Feedback Loop

[6] It is common for students to be enrolled in three credits, but it is also possible that a student enrolls in fewer hours if (a) they already have their required honors credits with other courses and do not want to pay the course fees, or (b) if a student is in danger of running into excess credit hours or some other administrative issue that makes taking three credit hours impossible but they still need the class even though there are zero credits associated with it.

Given that students who enroll in the research class have project management experience through their PMC, course-based research, and proposal submission, the timeline provided in Box 3 should be doable. Nevertheless, there are always challenges that are not anticipated throughout the course of the semester. For example, there may be too few responses from a survey to draw any meaningful conclusions, a student may not have adequate data analysis skills and may need a great deal of support, or a student may become despondent when they realize that they are soon to graduate, and they hate research. While each of these issues can delay research for those of us who are full-time researchers, for students, they can mean the difference between graduating with honors and not graduating with honors. It is recommended that faculty be supportive of students during these trials and

Box 3: Zero to Thesis in 16 Weeks

Week	Class Meeting Topic	Deliverable	Revision
1	Thesis Outline	Outline draft	
2	Source Management Software + Literature Review	Annotated bibliography	Outline draft
3	Literature Review	Finalize literature review	Finalize relevant sources in the bibliography
4	Literature Review/Data and Methods	Begin the data and methods section	Literature review
5	Data and Methods	Finalize the data and methods section	Discuss progress on data and methods
6	Exploratory Data Analysis	Analysis/Results: Descriptive statistics	Data and methods
7	Preliminary Results	Analysis/Results: Inferential statistics	Discuss result interpretations
8	Results	Excel spreadsheet	Discuss result interpretations
9	Results	Finalize results	
10	Spring Break		
11	Introduction	Introduction	Results
12	Discussion	Discussion	Introduction
13	Limitations/Future Research	Limitations/future research	Discussion
14	Finalize Thesis Formatting	Formatted thesis	Limitations
15	Submit Final Thesis	Final thesis	Final thesis
16	Presentation/Poster	Presentation/poster	

*Formatting, grammar, and style will be addressed throughout the semester.

tribulations and continually be willing to pivot, as necessary. Remember that today's students may be your colleagues tomorrow and the future of our field—a little bit of encouragement and empathy goes a long way.

5 Program Assessment

The authors of this paper have worked with several honors students using this particular method. Each is unique and presents different opportunities and challenges. The feedback we have received from students has been overwhelmingly positive. They appreciate the structured approach with consistent meetings and weekly goals while having the opportunity to develop their ideas and opinions. If faculty mentors serve as facilitators and provide support and resources, students and faculty report that this approach is more than worthwhile.[7] It is also worth noting that 57 percent of eligible students approached by the honors coordinator in 2023 about doing a thesis chose to do so and are poised to graduate with high honors this semester.

It is vital that mentors must guide honors students to be successful. It is therefore important to identify when a student is on a successful or unsuccessful path. Fortunately, many of these challenges can be mitigated by a good honors coordinator. This service appointment is appropriate for someone with an undergraduate teaching appointment who has a passion for undergraduate research and a talent for connecting bright students with faculty members who match their research interests. Therefore, they are expected to be knowledgeable about the ongoing research and skills of the rest of the faculty. This allows for a more efficient matching between advisor and student, and limits the potential challenges and bottlenecks each pair may face.

It is unrealistic to expect all students who have a high GPA to engage in honors research and here may be warning signs that arise over the course of multiple semesters that a student might not be able to complete the honors research program. The characteristics of successful and unsuccessful honors students using this method are identified below (Box 4). These criteria are based on the experience of the authors when dealing with students and are beyond what an honors coordinator could identify. Faculty members should alert the honors coordinator quickly, should some of the listed struggles become apparent in the mentoring relationship."

6 Conclusion

Undergraduate honors programs in agricultural economics offer an array of benefits that extend beyond conventional education in the classroom. Their rigorous curriculum, problem-solving focus, and experiential learning components collectively empower students with a comprehensive skill set. This enables honors students to solve skilled problems as gifted researchers and become valuable contributors to the agricultural sector. As such, honors programs represent an invaluable opportunity for ambitious future agricultural economists to excel in their academic pursuits and thrive as professionals in the agricultural field, even if they were delayed in getting to these programs.

[7] A list of completed honors theses for the College of Agricultural and Life Sciences can be found at https://ufdc.ufl.edu/collections/ufhonors

Box 4: Successful v. Unsuccessful Honors Student Characteristics		
Characteristic	**Successful Honors Student**	**Unsuccessful Honors Student**
Time Management	Effectively balances academic responsibilities, extracurricular activities, part-time employment, and personal commitments. Utilizes tools such as calendars, planners, and to-do lists to organize and prioritize tasks.	Struggles to meet deadlines and fulfill obligations due to poor time management skills. Procrastinates on assignments, leading to rushed work and subpar outcomes. Often feels overwhelmed by competing demands and responsibilities.
Resilience	Actively seeks out challenging courses, independent research opportunities, and internships related to their field of study. Demonstrates enthusiasm for learning and actively participates in class discussions and extracurricular activities. Learns from setbacks and failures, seeking feedback, and implementing strategies for improvement. Maintains a positive attitude and persists in the face of obstacles, demonstrating resilience and adaptability.	Displays disinterest in academic pursuits, frequently skipping classes and showing minimal engagement. May lack enthusiasm for coursework and be indifferent toward opportunities for intellectual growth or career advancement. Becomes discouraged by academic challenges or setbacks, often giving up without seeking assistance or feedback. Shows little resilience in the face of failure and may withdraw from difficult situations rather than persist.
Accountability	Takes responsibility for academic performance and behavior, meeting deadlines, and fulfilling obligations to the best of their ability. Seeks help when needed and acknowledges mistakes or shortcomings.	Shifts blame onto external factors or individuals, making excuses for poor performance or behavior. Demonstrates a lack of accountability by failing to take ownership of academic responsibilities or learn from mistakes.
Self-Discipline	Maintains a disciplined approach to studying and coursework, setting aside dedicated time for learning and adhering to a consistent study schedule. Demonstrates self-control in managing distractions and staying focused on academic tasks.	Exhibits a lack of self-discipline in academic pursuits, frequently procrastinating or succumbing to distractions. Struggles to establish and maintain effective study habits, leading to inconsistency in effort and productivity.
Reflection	Engages in regular self-reflection on academic performance, learning experiences, and personal growth. Seeks feedback from peers and mentors to identify areas for improvement and develop strategies for ongoing development.	Shows limited reflection on academic experiences or performance, often failing to recognize patterns or identify areas for improvement. May resist feedback or be unwilling to acknowledge shortcomings, hindering growth opportunities.

Throughout the proposed two-year program, emphasis is placed on project management, revision, and the research process. This proposed curriculum would be further bolstered by collaborative projects and group discussions, enabling students to learn from their peers and cultivate a diverse skill set essential for future careers in agricultural economics. By the program's conclusion, participants will have a better understanding of the complexities of agricultural economics and the types of contributions made by those in our field. In addition, they will have honed their critical thinking, research, and communication skills. Graduates of this honors program will be well-prepared to contribute meaningfully to the agricultural industry, whether as policy analysts, researchers, consultants, or advocates. In this way, we can ensure a bright future for our field even as our present is ever-changing.

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