

**Program Assessment Report Undergraduate Program**  
**Department of Agriculture Economics and Agribusiness**  
**University of Arkansas**  
**2024-2025**

Program: **Agriculture Economics and Agribusiness**

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**A. Goals**

To be the premier agricultural business and applied economics program in Arkansas, provide concentrations and specializations that are responsive to the needs of both students and industry stakeholders, and prepare students for success in the global marketplace.

**B. Expected Outcomes**

We expect all graduates to have the following skills and competencies:

1. Understand the fundamental principles which describe how markets operate in an economy
2. Ability to comprehend and analyze firm-level problems using basic economic principles, particularly those problems of businesses in the agricultural sector
3. Have the necessary written and oral communication skills to explain economics concepts
4. Have a working understanding of basic quantitative analysis tools and an ability to analyze data
5. Understand the impacts of government policies and general economic conditions on firms, markets and institutions
6. Be prepared for work in agribusiness or for a program of graduate/professional education.

**C. Program Assessment**

The continued growth of the undergraduate research program is critical to quality educational experiences and in developing leaders for the future. Below are the means in which the programs are assessed.

1. Student performance in courses
2. Curriculum review
3. Electronic and Confidential survey of all students in the program
4. Electronic and Confidential survey of graduating seniors
5. Professional and Faculty Advising
6. Course/instructor teaching evaluations
7. Periodic feedback from alumnae

## **D. Analysis of Results**

1. Student performance. Average enrollment in all undergraduate AGECE courses remains high. Undergraduate classes average 75 students in the fall 2024 semester and 63 in the spring 2025 semester. Student performance was assessed by each instructor based on a combination of homework assignments, class projects, papers/presentations, and quizzes/exams. This combination of performance measures enabled each instructor to assess the student's ability to: (a) Grasp fundamental principles and how to apply them to problem solving (papers, projects); (b) Analyze data and apply quantitative tools (homework assignments); and, (c) Master written and oral communication skills, both individually and in a team environment (papers, presentations, projects). Exams in each course provided instructors with a concise measure of each student's ability to successfully master course content, including principles, problem-solving skills, and ability to communicate. The average grade point average reported by undergrads completing our exit survey is 3.55.

### **Assessment of Social Science Core Curriculum Courses**

AEAB conducts student assessment of performance in the two campus core courses it teaches, AGECE 11003 (Principles of Agriculture Microeconomics) and AGECE 21003 (Principles of Agriculture Macroeconomics). The assessment consists of ten multiple choice questions asked on the final examination in each class. Class averages on the ten multiple choice questions in AGECE 21003 have ranged from 48% to 78%. The ten questions asked in AGECE 21003 range from basic to very difficult. The class averages on the ten multiple choice questions in AGECE 11003 have ranged from 58% to 86% and cover a similar range of level of difficulty. As would be expected, students do very well on the simple questions and do less well on the more difficult questions. Although efforts are made continually to improve student performance, the faculty are of the opinion that the range of difficulty is a good measure of the level for teaching the course. Since student abilities and aptitudes vary greatly across any given class, the faculty are more interested in uniform shifts up or down in the range of responses. Substantial, across-the-board improvement would likely lead to a more rigorous treatment of the subject.

### **Pre-and Post-Agribusiness Assessment Quiz**

AEAB also conducts a set of questions which serve as a general program assessment. These ten questions are pulled from core and elective courses in our Agribusiness Major. Students are asked to take the assessment quiz as college freshmen in AGECE 11003 before studying the materials; then they are tested on the materials again to evaluate gain in knowledge in the subject matter being evaluated. In the following table, the "Baseline" group (n=118) is made up of students from the Fall 2024 offering of AGECE 11003. Group 1 (n=86) is students from Spring 2025, juniors and seniors who have taken our core courses and many of our upper division electives. This assessment was conducted as a quiz in both groups, with a bonus awarded for participation. The weighted average percent correct on the assessment for the baseline was about 33%, while Group 1

answered 88% correct. This indicates positive knowledge gain throughout our students' time in our Agribusiness Program. The assessment questions can be found in the Appendix.

**Table 1. Percent Correct on Ten Program Assessment Questions**

	Group 1 n=86	Baseline n=118
Q1	77.2%	29.3%
Q2	75.0%	11.6%
Q3	96.0%	48.7%
Q4	94.6%	52.3%
Q5	88.7%	23.6%
Q6	66.5%	15.4%
Q7	78.3%	48.0%
Q8	76.9%	29.3%
Q9	90.0%	21.1%
Q10	95.4%	58.3%
Mean	88.2%	33.2%

### **Assessment of Written and Oral Communication Skills (Includes GELO 6.1)**

AEAB also assessed the written and oral communication skills of our students in the AGE 401V - Internship in Agribusiness course, which is part of a new requirement in our curriculum known as the Capstone Requirement. General Education Curriculum Goal 6 is accomplished in the course, partly by the completion of a 1,250 word essay and an oral presentation. The faculty member instructing the course evaluated student essays and oral presentations by use of the rubric attached in the appendix. The students' performance on the essay and oral presentation are used here to assess the written and oral communication skills of students in the AEAB. GELO 6.1 assessment summary scores are reported in Table 2.

**Table 2. Written and Oral Communication Assessment**

	Written n=112	Oral n=112
Mean	3.40	3.65
Minimum	1	1
Maximum	4	4

Note: student performance was rated on a scale of 1 to 4 (see appendix for details)

Based on the data available on written and oral communication assessment, the data showed that, on average, our students are performing at the 3-Milestone and 4-Capstone level in both written (mean=3.40) and oral (mean=3.65) communication by the time they

are juniors and seniors enrolled in our Agribusiness Internship course and Agribusiness Capstone Course.

2. Curriculum review. As noted in the Degree Changes section below, we implemented changes during the fall 2023 semester in response to an increasing awareness that some students in our upper division courses were not well prepared to complete these courses successfully. Our new curriculum addresses these issues by making our curriculum more prescriptive with a new pre-requisite core. Students are now monitored much more closely as they complete a set of critical 10000 and 20000 level courses and are offered assistance and guidance when they struggle. We have also continued to add additional sections of online courses to provide flexibility for our students.
3. **Electronic and Confidential survey of all students in the program.** During the spring 2025 semester, a program assessment survey was deployed to students in the program. Rather than only seeking feedback from graduating seniors, we sought feedback from our students at large. A summary of some of the key data are presented here.

The following two tables present a summary of the responses of undergraduate Agribusiness Majors to several key satisfaction survey questions. Table 3 summarizes the responses from all classes of students (freshmen to graduating seniors) and shows that, on average, Agribusiness students are highly satisfied with their overall experience at the UA, and with the Agribusiness (AGBS) Program overall. In the teaching of the Agribusiness Program, our students find that the teaching materials, faculty knowledge, program rigor, and the relevance of the program to their career preparation are highly satisfactory (between 85 and 93 percent satisfaction rate).

**Table 3. Undergraduate Agribusiness Students UA and Program Satisfaction**

	Mean	Percent	Obs.
Overall UA Satisfaction	4.69	94%	44
AGBS Overall Program Satisfaction	4.36	87%	44
AGBS Teaching Materials	4.41	88%	44
AGBS Faculty Knowledge	4.67	93%	44
AGBS Program Rigor	4.24	85%	44
AGBS Relevance to Career	4.29	86%	44

Note: measured using a five-point Likert scale

4. **Electronic and Confidential survey of graduating seniors.** Table 4 breaks down the responses to the same questions as presented in Table 3 but includes only seniors majoring in Agribusiness (seniors and graduating seniors). The responses show that Senior Agribusiness students are also highly satisfied with their overall experience at the UA, with the Agribusiness (AGBS) Program overall, and how the courses in the Program are being instructed in the classroom (between 87 and 96 percent satisfaction rate). The highest rating was for Faculty Knowledge in the Classroom, at 96 percent satisfaction rate. When comparing results from Table 3 and Table 4, the differences in satisfaction rates tell an interesting story. The Agribusiness Program satisfaction rates are substantially higher among the seniors compared to the overall group. Considering most

of the AGECE course offerings are completed by students in their junior and senior years, this indicates significantly higher satisfaction among our undergraduates when they are enrolled in a higher proportion of AGECE courses.

**Table 4. Senior Agribusiness Students UA and Program Satisfaction**

	Mean	Percent	Obs.
Overall UA Satisfaction	4.69	94%	16
AGBS Overall Program Satisfaction	4.50	90%	16
AGBS Teaching Materials	4.50	90%	16
AGBS Faculty Knowledge	4.75	95%	16
AGBS Program Rigor	4.25	85%	16
AGBS Relevance to Career	4.44	89%	16

Note: measured using a five-point Likert scale

5. Professional and Faculty Advising. The Department takes pride in its advising. Students get a personal touch from the department. We target 1-20 student advisees per faculty member. Due to growth in the Department, our faculty now average over 30 advisees per student. The Dean's Office has professional academic advisors that assist the department with undergraduate advising. These staff members advise all entering freshmen and transfer students until students have accumulated 60 credit hours. Students are transitioned to faculty advisors for their junior and senior years. Table 5 presents a summary of students satisfaction with advising.

**Table 5. Agribusiness Students Professional and Faculty Advising Satisfaction**

	Mean	Percent	Obs.
Bumpers Professional Advising Satisfaction	4.34	87%	44
Faculty Advising Satisfaction	4.34	87%	44

Note: measured using a five-point Likert scale

6. Course/instructor teaching evaluations. Course and instructor evaluations were conducted for each course to assess quality of instruction and course content. Summary data forwarded to the Department Head and feedback are shared with faculty during their annual evaluations. Each faculty member may view a copy of the student evaluations to assist in preparation of future classes.
7. Alumnae feedback. We invite alumnae to visit with faculty and students at fall and spring social events and for special occasions throughout the year. We have implemented a new on-line questionnaire for graduating seniors to get feedback on their experiences and to collect data to facilitate future communication with these new alumnae. We send an electronic newsletter to alumni and stakeholders 3-4 times a year. We receive comments and other feedback on items that appear in the newsletter.

## E. Changes to Degree Program

No major program changes this year.

#### **F. Changes to Assessment Process**

A summary of advising satisfaction was reported above in Table 5. These data have been collected previously but this was the first year these data were reported.

All satisfaction data was rescaled to be reported on a 5-point Likert scale

## Appendix - AEAB Program Assessment Questions

**Instructions: Choose the one alternative that best completes the statement or answers the question.**

1. A call option is said to be “in the money” when
  - a. the strike price is above the futures price
  - b. *\*the strike price is below the futures price*
  - c. the futures contract has expired
  - d. the futures contract enters the month of maturity
2. An import tariff shifts
  - a. the excess demand curve up
  - b. the excess supply curve up
  - c. *\*the excess demand curve down*
  - d. the excess supply curve down
  - e. both the excess supply and excess demand curve up
3. If the income elasticity of demand is -0.5
  - a. the good is a normal necessity
  - b. *\*the good is inferior*
  - c. the good is a normal luxury
  - d. the good is a substitute in consumption
4. The accounting equation states that assets equal liabilities plus
  - a. depreciation expenses
  - b. accounts receivable
  - c. *\*equity*
  - d. current-period debt payments
  - e. accrued interest
5. The quick ratio is computed as
  - a. total assets to total liabilities
  - b. *\*current assets less inventories to current liabilities*
  - c. total liabilities to total equity
  - d. total income before taxes to total assets
  - e. current interest to current assets
6. Trade occurs because
  - a. of trade disputes
  - b. *\*autarky prices differ*
  - c. of tariffs imposed by the exporting country
  - d. of good will between two countries
  - e. of political stability
7. Which best describes a monopsony?
  - a. A single seller
  - b. An organization with a single headquarters location
  - c. *\*A single buyer*
  - d. A single regulatory body
8. Which is the best example of third-degree price discrimination?
  - a. *\*student discounts at a movie theater*
  - b. bundle pricing
  - c. access fees
  - d. both (b) and (c)
9. Which would make both “at-the-money” put and a call options more valuable?
  - a. an increase in the interest (discount) rate
  - b. *\*an increase in volatility*
  - c. an increase in the futures price
  - d. passage of time
10. The rate of return on assets (ROA) uses a ratio to measure a firm’s:
  - a. liquidity
  - b. solvency
  - c. repayment capacity
  - d. *\*profitability*

Rubric for assessing written assignments				
Performance Area	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
<b>Context of and Purpose</b>	Demonstrates thorough understanding of context, audience & purpose. Responsive to assigned task(s). Focuses on elements of work	Demonstrates adequate consideration of context, audience and purpose and a clear focus on the assigned task(s)	Demonstrates awareness of context, audience, purpose and to the assigned task.	Demonstrates minimal attention to context, audience, purpose and to the assigned task(s)
<b>Content Development</b>	Uses appropriate, relevant and compelling content to illustrate mastery of subject, convey understanding, shaping the whole work.	Uses appropriate, relevant and compelling content to explore ideas within the context of the discipline and shape the whole work.	Uses appropriate and relevant content to develop and explore ideas through most of the work	Uses appropriate and relevant content to develop simple ideas in some parts of the work
<b>Disciplinary Conventions</b>	Demonstrates attention to and successful execution of a range of conventions particular to a specific discipline and/or writing task(s) including organization, content, presentation, formatting and style	Demonstrates consistent use of important conventions particular to a specific discipline and/ or writing task(s) including organization, content, presentation and stylistic choices	Follows expectations appropriate to a specific discipline and/ or writing task(s) for basic organization, content and presentation	Attempts to use a consistent system for basic organization and presentation
<b>Sources and Evidence</b>	Demonstrates skillful use of high quality, relevant sources to develop ideas that are appropriate for the discipline and genre of the writing	Demonstrates consistent use of credible, relevant sources to support ideas that are situated within the discipline and genre of the writing	Demonstrates an attempt to use credible/ relevant sources to support ideas that are appropriate for the discipline and genre of the writing	Demonstrates an attempt to use sources to support ideas in the writing
<b>Syntax and Mechanics</b>	Uses graceful language that skillfully communicates meaning to readers with clarity and fluency, virtually error free	Uses straightforward language that generally conveys meaning to readers. The language has few errors	Uses language that generally conveys meaning to readers with clarity, although writing may include some errors.	Uses language that sometimes impedes meaning because of errors in usage.
<b>Critical Thinking</b>	Accurately interprets evidence. Identifies the salient arguments pro and con. Thoughtfully analyzes and evaluates major alternative points of view. Draws warranted conclusions. Justifies results and procedures, explains assumptions and reasons.	Accurately interprets evidence. Identifies relevant arguments pro and con. Offers analyses and evaluations of obvious alternative points of view. Justifies some results, explains reasons. Fairmindedly follows where evidence and reasons lead.	Misinterprets evidence. Fails to identify strong, counter-arguments. Superficially evaluates obvious alternative points of view. Justifies few results, seldom explains reasons. Maintains or defends views based on preconceptions	Offers biased interpretations of evidence. Fails to identify/ dismisses relevant counter-arguments. Superficially evaluates alternative points of view. Argues using false/ irrelevant reasons. Defends views based on preconceptions.
<b>Problem Solving</b>	Constructs clear problem statement & multiple ways to solve problems. Thoughtful solution(s) proposed, elegant evaluation. Complete understanding of solution, reviews results thoroughly & specific consideration for further work	Problem statement adequate, some strategies apply. Proposal(s) indicate understanding, evaluations adequate. Implements solution on the surface, some consideration of further work needed	Begins to define problem, identifies only a single approach. Proposal doesn't address problem, evaluation brief. Implements solution but ignores relevant factors, little consideration of further work needed	Limited ability to define problem or strategies. Vague proposal, superficial evaluation. Does not directly address problem statement, superficial review of results
<b>Total Points</b>	<b>40</b>	<b>35</b>	<b>30</b>	<b>25</b>



Rubric for assessing oral presentations				
Performance Area	Capstone 4	Milestone 3	Milestone 2	Benchmark 1
<b>Organization</b>	Organizational pattern (introduction, conclusion, sequenced material in the body, transitions) clearly/ consistently observable and make the presentation cohesive.	Organizational pattern (introduction and conclusion, sequenced material in the body, & transitions) clearly and consistently observable within the presentation.	Organizational pattern (introduction and conclusion, sequenced material in the body, & transitions) intermittent within the presentation.	Organizational pattern (introduction and conclusion, sequenced material in the body, & transitions) is not observable within the presentation.
<b>Central message</b>	Central message is compelling (precisely stated, repeated, memorable, and strongly supported.)	Central message is clear and consistent with the supporting material.	Central message is understandable but is not often repeated and not memorable.	Central message can be deduced, but is not explicitly stated in the presentation.
<b>Delivery &amp; Preparedness</b>	Delivery techniques (posture, gesture, eye contact, expressiveness) make the presentation compelling. Speaker polished, confident, prepared and rehearsed.	Delivery techniques (posture, gesture, eye contact, expressiveness) make the presentation interesting. Speaker comfortable. Speaker satisfactorily prepared and rehearsed.	Delivery techniques (posture, gesture, eye contact, expressiveness) make the presentation understandable. Speaker tentative, adequately prepared and rehearsed.	Delivery techniques (posture, gesture, eye contact) detract from understandability of presentation. Speaker uncomfortable, read from notes, inadequately prepared.
<b>Style &amp; Timing</b>	Language choices imaginative, memorable, compelling and enhance the effectiveness of the presentation. Variety of supporting materials effectively utilized. Presentation length appropriate, met criteria.	Language choices thoughtful and generally support effectiveness of the presentation. Supporting materials were satisfactorily utilized. Presentation length appropriate and met criteria.	Language choices are mundane and commonplace and partially support the effectiveness of the presentation. Supporting materials were adequately utilized. Presentation length was appropriate, met criteria.	Language choices are unclear and minimally support the effectiveness of the presentation, not appropriate to audience. Supporting materials were insufficiently utilized. Length was over or under the set criteria.
<b>Critical Thinking</b>	Accurately interprets evidence. Identifies the salient arguments pro and con. Thoughtfully analyzes and evaluates major alternative points of view. Draws warranted conclusions. Justifies results and procedures, explains assumptions and reasons.	Accurately interprets evidence. Identifies relevant arguments pro and con. Offers analyses and evaluations of obvious alternative points of view. Justifies some results, explains reasons. Fairmindedly follows where evidence and reasons lead.	Misinterprets evidence. Fails to identify strong, counter-arguments. Superficially evaluates obvious alternative points of view. Justifies few results, seldom explains reasons. Maintains or defends views based on preconceptions	Offers biased interpretations of evidence. Fails to identify/ dismisses relevant counter-arguments. Superficially evaluates alternative points of view. Argues using false/ irrelevant reasons. Defends views based on preconceptions.
<b>Problem Solving</b>	Constructs clear problem statement & multiple ways to solve problems. Thoughtful solution(s) proposed, elegant evaluation. Complete understanding of solution, reviews results thoroughly & specific consideration for further work	Problem statement adequate, some strategies apply. Proposal(s) indicate understanding, evaluations adequate. Implements solution on the surface, some consideration of further work needed	Begins to define problem, identifies only a single approach. Proposal doesn't address problem, evaluation brief. Implements solution but ignores relevant factors, little consideration of further work needed	Limited ability to define problem or strategies. Vague proposal, superficial evaluation. Does not directly address problem statement, superficial review of results
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