

**Program Assessment Report**  
**Undergraduate Program**  
Department of Agriculture Economics and Agribusiness  
University of Arkansas  
2019-2020

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 survey of all graduating seniors
4. Confidential exit interviews with Department Head
5. Course/instructor teaching evaluations
6. Periodic feedback from alumnae

#### **D. Analysis of Results**

1. Student performance. Average enrollment in all undergraduate AGECE courses remains at historic levels. Undergraduate classes average 47 students fall semester and 60 spring semester. The enrollment numbers may have peaked after several years of increases. 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 in undergrad courses is a 2.85.

AEAB conducts student assessment of performance in the two campus core courses it teaches, AGECE 1103 (Principles of Agriculture Microeconomics) and AGECE 2103 (Principles of Agriculture Macroeconomics). The assessment consists of ten multiple choice questions asked on the final examination in each class. This assessment commenced in Fall 2009 and continues to the present. Class averages on the ten multiple choice questions in AGECE 2103 have ranged from 48% to 60%. The ten questions asked in AGECE 2103 range from very simple and basic to very difficult. The class averages on the ten multiple choice questions in AGECE 1103 have ranged from 58% to 86% and cover a similar range of level of difficulty. There is a gap in the data for AGECE 1103 due to the departure of a faculty member in late 2013, and data from 2014 are not available. 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. Clearly, substantial, across-the-board improvement would likely lead to a more rigorous treatment of the subject.

AEAB also conducts a set of questions which serve as a general program assessment. These nine 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 1103 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=104) is made up of students from the Fall 2019 offering of AGECE 1103. Group 2 (n=54) represents students who are, on average, sophomores and have taken only our introductory level courses, while Group 3 (n=72) represents students who are, on average, juniors or seniors and have taken our core courses and some of our upper division electives. This assessment was conducted as an unannounced, "pop" quiz in all

three groups. As the table shows, the average percent correct on the assessment for the Baseline group this academic year was about 31%, while Group 1 answered 64% correct, and Group 2 nearly 80% correct. This indicates positive knowledge gain throughout our students' time in our Agribusiness Program. The assessment questions can be found in the Appendix.

Percent Correct on Program Assessment Questions

	Group 2 n=72	Group 1 n=54	Baseline n=104
Q1	81.9%	57.4%	40.4%
Q2	69.4%	53.7%	19.2%
Q3	90.3%	75.9%	51.9%
Q4	98.6%	92.6%	46.2%
Q5	69.4%	57.4%	16.3%
Q6	73.6%	46.3%	20.2%
Q7	83.3%	90.7%	36.5%
Q8	73.6%	66.7%	21.2%
Q9	72.2%	38.9%	24.0%
Mean	79.2%	64.4%	30.7%

- Curriculum review. The increase in class enrollment has made scheduling difficult for some students, especially for junior and senior level courses offered only once a year. As noted in the Degree Changes section below, we have added courses and made changes to the curriculum to give students more flexibility to meet degree requirements.
- Exit interviews and electronic surveys. For several years, the Department Head of Agricultural Economics and Agribusiness has conducted confidential exit interviews with selected graduating seniors. Virtually all graduating seniors were complimentary of the quality of advising and instruction in the Department of Agricultural Economics and Agribusiness and the genuine one-on-one care of the faculty for students. Since the 2009-2010 academic year AEAB has conducted an on-line survey of all graduating seniors to supplement the exit interviews.

Data from the Qualtrics Undergraduate Exit Survey indicate students view the program as having high academic value. AEAB courses were commonly among those listed as most valuable across the curriculum and none were listed among the least valuable. This points to high quality instruction amongst the department's faculty. Most students participating in the Agricultural Business Club rated the experience favorably. The Agricultural Business Club is the department's registered student organization. Nearly 70 percent of graduating students had a job lined up at the time of the survey. This demonstrates the value of coursework in preparing students for careers. The vast majority of these careers were related specifically to the major. Among the courses students perceived to be most valuable were those that had specific career-focused skill sets at

their center. Students completing an internship rated the experience as extremely valuable.

4. The Department takes pride in its advising. Students can expect a personal touch in the advising they receive from the department. We target 1-20 student advisees per faculty member. The addition of two instructors in recent years has allowed us to keep faculty advising to manageable numbers. The Dean's Office has a professional academic advisor to assist our department with undergraduate advising. This staff member advises 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.
5. 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.
6. 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**

Enrollement growth of the past few years has increased average class size and has created difficulties for student class scheduling. Over the last three years, we have made a series of program changes to give students more options and scheduling flexibility. We have reduced the number of specifically required courses and grouped courses requiring students to take one or two of a group of three or four courses emphasizing main topic areas such as agricultural finance and management; agricultural policy; and agricultural marketing rather than one or two specific courses. Also, additional teaching resources have allowed us to offer some higher level courses twice a year rather than once a year. Together, these changes give students more flexibility to meet their degree requirements in a timely manner.

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

We implemented an on-line questionnaire for graduating seniors to supplement the traditional exit interview system. This on-line survey is conducted at the end of every academic term and up-dated as needed. We have used the results of this survey to guide the program changes noted above. We also collect program assessment data from nine questions from various core and elective courses from our program.

## 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