

Annual Academic Assessment Report
(MS/Agricultural Economics and Agribusiness)
(April 11, 2022)
Contact: Lanier Nalley lnalley@uark.edu 575-6818

Results of analysis of assessment of Student Learning Outcome

Non-Thesis MS

The problem-solving rubric was utilized for nine students presenting their case study results in AGEC 5011 seminar. Students were evaluated by the seminar instructor (Anderson) based on their presentation materials as well as on personal interaction through group meetings with the instructor throughout the semester.

Non-Thesis Students Problem Solving Summary results

	Excellent (4)	Above Average (3)	Average (2)	Needs Improvement (1)	Average student score on a 1-4 scale
Define Problem	28	6	0	0	3.78
Identify Strategies	12	18	0	0	3.33
Propose Solutions / Hypotheses	24	6	2	0	3.56
Evaluate Potential Solutions	8	18	2	0	3.11
Strategy to Implement Solution	12	15	2	0	3.22
Evaluate (Potential) Outcomes	4	21	2	0	3.00

- The majority of students performed above average or higher.
- Students' ability to define problems and propose solutions/formulate hypotheses were particularly high. Students scored a bit lower on their ability to evaluation solutions and outcomes, but their abilities in those categories are still generally well above average, with none below average

Summary of Findings.

Assessment Measure Case Study Project - Non-Thesis Students

- Students will be given a case to examine during the seminar period.
- This will be indirectly evaluated by the seminar instructor.
- Seminar instructor will examine how students utilized the appropriate theories and methods and why those concepts were ideal for the problem being examined.

Acceptable and Ideal Targets

- Students will be able to successfully complete and present their case study analysis.
- Acceptable: Fifty percent (50%) of students will be able to successfully develop a solution to the issue identified in the case and use appropriate theories to develop their conclusions.
- Ideal: All students will be able to successfully develop a solution to the issue identified in the case and use appropriate theories to develop their conclusions.

Key Personnel

- Seminar Instructor (Anderson)

Summary of Findings.

- Due to administrative changes at the University level, AEAB is no longer able to enroll students in two semesters of Seminar for a single credit. This change was made on short notice in Fall 2021. Because of this change, all MS students in the program who had not already completed their Seminar requirement were enrolled in Fall 2021 for that semester only. The Spring 2022 Seminar class was not offered, as no students still needed the credit. The Spring case study was therefore not completed. Instead, students in the Fall 2021 Seminar class were given additional assignments to provide a basis for assessment. Of the 4 non-thesis students enrolled in Seminar in Fall 2021, three had already completed the case study in Spring 2021 and had thus already been assessed. The remaining non-thesis student was a sponsored student. This assessment will pertain only to that student. All students in the Fall 2021 Seminar class were asked to complete two writing assignments interacting with peer-reviewed journal articles and two professional presentations. The second of these presentations included an overview of the student's home-country economy and required collection, summary, and basic analysis of data to evaluate the economy's strengths and weaknesses. This is the primary basis for an assessment of the student's analytical abilities summarized in this section.
- The non-thesis student who was assessed generally performed well in collecting and working with data and in summarizing basic analysis. The student appeared to have some difficulty with evaluating the implications of the analysis, though, to be fair, data availability for that student's country is quite limited and so the ability to make inferences from that data was also necessarily limited. The student also faced significant language challenges that hampered clear communication of relatively complicated concepts.

Recommendations

- Given the required changes to the department's long-standing arrangement for enrolling students in Seminar for two semesters, the use of the Fall offering to evaluate non-thesis students through multiple assignments appeared to work well. Moving forward, it appears that the number of non-thesis students in the program will be minimal and may consist entirely of sponsored students. The approach to assessment taken this Fall worked quite well in this situation and should be employed as the primary means of assessment moving forward. The home economy analysis assignment provided sufficient basis for student assessment; however, students from countries with limited data may need to be given an alternative assignment – perhaps a regional rather than country-level evaluation, for example.
- The Problem Solving rubric was utilized for the non-thesis student making a home economy presentation in AGEC 5011 seminar. The student was evaluated by the Seminar instructor (Anderson) based on presentation materials as well as on personal interaction through individual meetings with the instructor throughout the semester.

- Non-Thesis Student Problem Solving Summary results

Define Problem	Above Average
Identify Strategies	Above Average
Propose Solutions/Hypotheses	Average
Evaluate Potential Solutions	Needs Improvement
Strategy to Implement Solutions	Average
Evaluate (Potential) Outcomes	Average

- The student performed at an average or higher level on all but the evaluation of potential solutions, likely due to limited experience with that sort of exercise; though, as noted, the student was somewhat hampered by data limitations.
- Student showed the capability of using data-driven reasoning to define problems and identify strategies.

STUDENT LEARNING OUTCOME 2: COMMUNICATION

Graduates will enhance their ability to prepare, organize, and deliver information to effectively communicate (orally, written, and electronically) with scientific, professional, and non-technical audiences.

Summary of Findings

- The Oral Communication rubric was utilized for the non-thesis student in AGE 5011 Seminar. Student was evaluated by the instructor (Anderson) based on a personal introduction presentation and a home economy presentation, in-class interaction, and personal interaction with the instructor throughout the semester.

Non-Thesis Student Oral Communication Summary results

Organization	Above Average
Language	Needs Improvement
Delivery	Average
Supporting Material	Average
Central Message	Above Average

- Non-thesis student scored well on oral communication. Student is an ESL speaker, and language skills were something of a challenge. Student was average or better in organizing, conveying, and supporting a written message.

Assessment Measure 2. Theses / Case-study project report

B. Summary of Findings

One non-thesis student was assessed against the Written Communication Rubric based on two written assignments in the Seminar class requiring the students to interact with journal articles. In general, the non-thesis student's written communication ability appears to be about average, allowing for the fact that the student is ESL. Student is generally competent in expressing a point, but could use practice with handling the conventions of grammar and syntax. Typical for less experienced scholars, the student could also use more training in appropriate academic style.

Written Communication Summary results: Non-Thesis Student

Content and Purpose	Above Average
Content Development	Average
Genre & Disciplinary Conventions	Average
Sources & Evidence	Above Average
Control of Syntax	Needs Improvement

Thesis MS

The Oral Communication Rubric was utilized for nine students presenting their final thesis results (Defense). The students were evaluated by the professors constituting their committee (a total of 31 evaluations were submitted by faculty; the number of evaluators ranged from two– five: committees consist of a minimum of three members but not all faculty submitted their assessment). The results are below

Thesis Oral Presentation Summary results

- The majority of thesis students are performing “above average” or higher.

	Excellent (4)	Above Average (3)	Average (2)	Needs Improvement (1)	Average student score on a 1-4 scale
Organization	20	11			3.645
Language	16	11	4		3.387
Delivery	16	12	3		3.419
Supporting Material	12	14	5		3.225
Central Message	16.5	12.5	2		3.467

The Problem Solving Rubric was utilized for nine students presenting their final thesis results (Defense). The students were evaluated by the professors constituting their committee (a total of 31 evaluations were submitted by faculty; the number of evaluators ranged from two – five: committees consist of a minimum of three members but not all faculty submitted their assessment). The results are below

Thesis Students Problem Solving Summary results

	Excellent (4)	Above Average (3)	Average (2)	Needs Improvement (1)	Average student score on a 1-4 scale
Define Problem	20	8	3		3.548
Identify Strategies	15	11.5	3.5	1	3.306
Propose Solutions / Hypotheses	14.5	15.5	1		3.435
Evaluate Potential Solutions	14.5	12.5	3	1	3.306
Strategy to Implement Solution	15	14	2		3.419
Evaluate (Potential) Outcomes	16	12	3		3.419

- The majority of thesis students are performing “above average” or higher.

The Written Communication Rubric was utilized for nine students presenting their final thesis results (Defense). The students were evaluated by the professors constituting their committee (a total of 31 evaluations were submitted by faculty; the number of evaluators ranged from two– five: committees consist of a minimum of three members but not all faculty submitted their assessment). The results are below

Thesis Written Communication Summary results

	Excellent (4)	Above Average (3)	Average (2)	Needs Improvement (1)	Average student score on a 1-4 scale
Contest and Purpose	17	12	2		3.483
Content Development	13.5	13.5	4		3.306
Genre & Disciplinary Conventions	12.5	15.5	3		3.306
Sources & Evidence	17	9	4	1	3.161
Control of Syntax	16	12.5	2.5		3.435

- The majority of thesis students are performing “above average” or higher.

Combined Thesis and Non-Thesis evaluation

Core content exam

- All students (Thesis and non-thesis) are required to take Microeconomics principles (AGEC 5103- Huang) and Quantitative Methods (AGEC 5403-Nalley). Students will be examined on key concepts at the beginning of each class and again at the end of each class.
- This will be directly evaluated by the course instructor.
- The change in percentage correct will be report

Acceptable and Ideal Targets

- Acceptable: Students will show an average increase of 20% after taking the course, i.e. on average students will correctly answer 35% of the questions at the beginning of the course and 55% or better by the end of the course.
- Ideal: Students will show an average increase of 40% after taking the course, i.e. on average students will correctly answer 35% of the questions at the beginning of the course and 75% or better by the end of the course.

Summary of Findings.

- For the fall 2021 term, all student in AGEC 5103 Microeconomics principles were administered the basic content quiz at the beginning of the semester and again at the end of the semester. The average result on the quiz was forty eight percent (48%) correct at the beginning of the semester and seventy six percent (76%) at the end of the semester. The average score improved 28 percentage points.
- For the fall 2021 term, all student in AGEC 5403 Quant Methods for AGEC were administered the basic content quiz at the beginning of the semester and again at the end of the semester. The average result on the quiz was fourteen percent (14%) correct at the beginning of the semester and eighty three percent (83%) at the end of the semester. The average score improved 69 percentage points.

Mastery of course subject matter

- Students will be assessed as to how well they comprehend material in their course of study.
- Students will be indirectly assessed by course instructor.
- Students will be given a series of assignments, exams, and/or projects to demonstrate their knowledge of key Agricultural Economic Concepts and demonstrate their ability to use the appropriate concepts in a given situation.
- Students will be assessed grades based on their demonstrated mastery of core concepts and appropriate use.

Acceptable and Ideal Targets

- Acceptable: At least 50% of the students should complete their course of study with a "B+" average (3.33 GPA on a 4.0 scale)
- Ideal: At least 75% of the students should complete their course of study with a "B+" average (3.33 GPA on a 4.0 scale)

Summary of Findings.

- As seen in the table below, students have averaged over 3.33.

Type of MS Student	Number of Students	Average GPA
Total	29	3.76 (83% > 3.33; 66%>3.75)
Thesis	13	3.68 (92% > 3.33; 69%>3.75)
Non-Thesis	16	3.68 (75% > 3.33; 63%>3.75)

- **Any changes to degree/certificate planned or made on the basis of the assessment and analysis**
None
- **Any changes to the assessment process made or planned.**
None

