Annual Program Assessment Report

Academic Year Assessed: 2022-2023
College: College of Agriculture
Department: Agricultural Economics & Economics
Submitted by: Diane Charlton, Certifying Officer for the DAEE

Program(s) Assessed:
List all majors (including each option), minors, and certificates that are included in this assessment:

<table>
<thead>
<tr>
<th>Majors/Minors/Certificate</th>
<th>Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Business</td>
<td>Farm Management, Agribusiness Management</td>
</tr>
</tbody>
</table>

Have you reviewed the most recent Annual Program Assessment Report submitted and Assessment and Outcomes Committee feedback? (please contact Assistant Provost Martha Peters if you need a copy of either one).

The Assessment Report should contain the following elements, which are outlined in this template:
1. Assessment Plan, Schedule, and Sources
2. What was done this assessment cycle – including rubrics, how data was collected, and who analyzed it
3. What was learned – including areas of strength and areas for improvement
4. How we responded
5. Closing the loop

Sample reports and guidance can be found at:
https://www.montana.edu/provost/assessment/program_assessment.html
1. Assessment Plan, Schedule and Data Source.

a) Please provide a multi-year assessment schedule that will show when all program learning outcomes will be assessed, and by what criteria (data). (You may use the table provided, or you may delete and use a different format).

<table>
<thead>
<tr>
<th>PROGRAM LEARNING OUTCOME (Student Outcomes)</th>
<th>2022-2023</th>
<th>2023-2024</th>
<th>2024-2025</th>
<th>2025-2026</th>
<th>2026-2027</th>
<th>Data Source*</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Demonstrate an understanding of how markets operate and the effects of extensive government policies on those markets</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AGBE 451RS Capstone Research Project</td>
</tr>
<tr>
<td>B. Use basic skills in mathematical and analytical reasoning and statistical techniques</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>AGBE 341 Exams</td>
</tr>
<tr>
<td>C. Be able to read and comprehend general articles in business and economics journals</td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td>AGBE 445 Case Studies and AGBE 451RS</td>
</tr>
<tr>
<td>D. Understand firm and farm level decision rules for the efficient operation of enterprises and the institutional structure and use of agricultural marketing systems</td>
<td></td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td>AGBE 341 Exams</td>
</tr>
<tr>
<td>E. Be able to analyze changes in market and general economic conditions in a broad array of settings and be able to determine the impact on various groups affected by those changes</td>
<td></td>
<td></td>
<td>x</td>
<td></td>
<td></td>
<td>AGBE 451RS Capstone Research Project</td>
</tr>
<tr>
<td>F. Have knowledge in supporting areas such as accounting, plant science, and animal science to better develop technical knowledge specific to agriculture and agricultural business; course choice flexibility added to certain supporting course areas to improve students' abilities to obtain complementary skillsets that will make them more marketable in the workforce.</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>AGBE 451RS Capstone Research Project</td>
</tr>
</tbody>
</table>
G. Be able to present ideas effectively in oral and written forms to those in the agricultural and related fields

*Data sources can be items such as randomly selected student essays or projects, specifically designed exam questions, student presentations or performances, or a final paper. Do not use course evaluations or surveys as primary sources for data collection.

b) What are the threshold values for which you demonstrate student achievement? (Example provided in the table should be deleted before submission)

<table>
<thead>
<tr>
<th>PROGRAM LEARNING OUTCOME</th>
<th>Threshold Value</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>E. Be able to analyze changes in market and general economic conditions in a broad array of settings and be able to determine the impact on various groups affected by those changes</td>
<td>The threshold value for this outcome is for 75% of assessed students to score above 2 on a 1-4 scoring rubric for Q2 of the final exam.</td>
<td>AGBE 451RS Capstone Exam</td>
</tr>
</tbody>
</table>

2. What Was Done

a) Was the completed assessment consistent with the program’s assessment plan?
   - ✔ Yes
   - ☐ No

b) If no, please explain.

c) How were data collected and analyzed? (Please include method of collection and sample size).

Method of collection: 2022-2023 Instructor of AGBE 451 provided a random sample of final exams to DAEE Resident Instruction Committee. Names of students were redacted.

Sample size: 5 student exams
Example Artifact:

2. (15 points total, 5 points each) A current proposal as part of the upcoming farm bill is to eliminate the current sugar policy. To summarize, the current U.S. sugar policy includes the use of a quota that limits imports of sugar from countries that can produce sugar at a price that is lower than the U.S., including Brazil, Thailand, and India.
   a. Using graphical analysis, identify the welfare gains/losses to U.S. consumers and producers from the elimination of the sugar import quota.
   b. You are hired by the American Sugar Alliance (U.S. sugar lobbyist) to talk to sugar beet growers in Montana about this upcoming farm bill. How will sugar beet growers in Montana be impacted by the elimination of the sugar import quota?
   c. In your new position, you then are asked to speak with candy manufacturers who use sugar as an input in their products. How will these manufacturers be impacted by the elimination of the sugar import quota?

<table>
<thead>
<tr>
<th>Student ID</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score (1-4)</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

Four out of the five sampled students (80%) received a score greater than 2 on the exam question. This exceeds the threshold of 75%.

d) Please provide a rubric that demonstrates how your data was evaluated.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Beginning - 1</th>
<th>Developing- 2</th>
<th>Competent- 3</th>
<th>Accomplished- 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determine impact of changes in market and general economic conditions on various groups</td>
<td>The student shows understanding of some basic economic concepts related to the problem, but is unable to evaluate the impacts of the changes in market or general economic conditions</td>
<td>There may be some mistakes in the graphical interpretation of the economic conditions, or the student might not set up or evaluate equations correctly to accurately interpret the impacts of the changes in market conditions</td>
<td>Mostly understands the change in market conditions and can illustrate the change and its impacts but might not articulate the economic significance well or fully understand its implications</td>
<td>Clearly understands the change in market conditions and can describe the impacts and economic significance of those changes using figures, equations, and/or other economic tools</td>
</tr>
</tbody>
</table>
3. What Was Learned

a) Based on the analysis of the data, and compared to the threshold values established, what was learned from the assessment?

The agricultural business program prepares students to analyze the effects of changes in market and general economic conditions on various groups. In the assessed problem, students were asked to determine the impact of removing an import quota on domestic producers who would have to compete with the foreign competition and domestic producers who purchase the commodity as an input to production. All but one of the students demonstrated understanding of the economic significance of the trade policy change for these different types of producers.

b) What areas of strength in the program were identified?

The exam illustrated students’ ability to analyze changes in economic conditions and welfare impacts for different types of economic agents.

c) What areas were identified that need improvement?

Some students had difficulty illustrating the removal of a quota in a graph. All students could improve their graphing skills and describing more clearly how to interpret their graphs.

4. How we responded

a) Describe how “What Was Learned” was communicated to the department, or program faculty.

Findings were disseminated to department faculty.

b) How are the results of this assessment informing changes to enhance student learning in the program?

Students are meeting the PLOs effectively. However, students can be challenged to interpret and describe graphs more clearly.

c) If information outside of this assessment is informing programmatic change, please describe that.
5. Closing the Loop

a) In reviewing last year’s report, what changes proposed were implemented and will be measured in future assessment reports?

No changes were proposed last year. Students effectively met PLOs.

b) Have you seen a change in student learning based on other program adjustments made in the past? Please describe the adjustments made and subsequent changes in student learning.

No

Submit report to programassessment@montana.edu