Assurance of Student Learning Reflection 2024-2025		
Ogden College of Science & Engineering	Agriculture & Food Science	
MS in Agriculture 052		
Stephen King		
Is this an online program? No	Please make sure the Program Learning Outcomes listed match those in CourseLeaf. Indicate verification here Yes, they match! (If they don't match, explain on this page under Evaluation)	

<u>Instructions</u>: For the 2024-25 assessment, we are asking you to reflect on the last three-year cycle rather than collect data. It's important to take time to look over the results from the last assessment cycle and really focus on a data-informed direction going forward. In collaboration with your assessment team and program faculty, review each submitted template from 2021-2024 and consider the following for each Program Learning Outcome, add your narrative to the template, and submit the draft to your ASL Rep by May 15, 2025.

Program Student Learning Outcome 1	
Program Student Learning Outcome	Program Student Learning Outcome 1: Graduate students will communicate effectively in written formats.
Evaluation	This learning outcome is still relevant to the program.
Measurement Instruments	The current instrument utilized to assess this outcome is a scientific abstract. While the brevity of the artifact facilitates data collection, it may not fully assess the student's ability to communicate effectively in written formats. A more robust instrument most likely is needed to better assess this outcome.
Criteria & Targets	Over the past three years, this criteria has been met with a success rate ranging from 88-100%. Redesigning the instrument will allow for greater flexibility in establishing criteria and targets which should lead to a more in-depth assessment.
Results & Conclusion	As mentioned above, students consistently met assment targets. However, in some cases, students that went on to complete a thesis had difficulty communicating effectly and required substantial guidance from their research committees. The instrument most likely needs to be updated and include more rigor. Having the instrument in a required course helped facilitate data collection. Additionally, while the premise of the learning outcome doesn't need to be changed, it should be restated to better describe the goal.

**IMPORTANT	- Plans	for
Next Assessment	Cycle:	

SLO 1: Graduate students will create well-organized and evidence-based written documents that clearly communicate complex agricultural concepts, demonstrating the ability to analyze information, evaluate sources and arguments, and synthesize ideas appropriate for academic and professional audiences.

SLO 1 will be evaluated by a research white paper submission in a graduate level research methods course.

Program Student Learning Outcome 2		
Program Student Learning Outcome	Program Student Learning Outcome 2: Graduate students will communicate effectively in oral formats.	
Evaluation	This program outcome is still relevant and should be continued for assessment.	
Measurement Instruments	Students give an oral presentation in graduate seminar that is evaluated utilizing a rubric. The rubric needs updating to better evaluate the student's ability to convey scientific data. While the rubric focuses more on presentation skills and less on the substance of the information being conveyed.	
Criteria & Targets	For the last three years, students consistently met targetthe ranging from 95-100%. Targets and criteria will need updating if the instrument is changed.	
Results & Conclusion	The artifact of an oral presentation in graduate seminar works well to assess this outcome. Improvements upon the instrument need to be made to better distinguish between the quality or substance of the information to be communicated and how to what level it is disseminated to the audience. Restating the learning outcome is needed to better describe its goals.	
**IMPORTANT - Plans for Next Assessment Cycle:	SLO 2: Graduate students will effectively communicate scientific information related to agricultural research through clear, accurate, and audience-appropriate presentation formats, demonstrating the ability to translate complex data and findings into meaningful insights for academic, professional, and public audiences.	
	This outcome will be assessed via a professional presentation in the graduate seminar course. A rubric will be utilized as an instrument. Contained within the rubric will be categories that not only evaluate presentation skills, but also gauge the students ability to assimilate and convey data to their audience. Instead of a target score covering all rubric categories, targets for individualized categories within the rubric will be assigned.	

Program Student Learning Outcome 3

Program Student Learning Outcome	Program Student Learning Outcome 3: Graduate students will use appropriate agricultural experimental designs, perform proper data analysis procedures, and make valid interpretations on research questions.
Evaluation	While relevant, the outcome has consistently been met over the past three years. Other outcomes should be considered.
Measurement Instruments	Two instruments were utilized to assess this outcome, a final assessment and experimental design assignment. Both were adequate in assessing the outcome.
Criteria & Targets	Targets were consistently met ranging from 86-100% of the students. Criteria and targets will be changed to match new outcome.
Results & Conclusion	Students enrolled in the experimental design course consistently met targets set. Data suggest that students are able to demonstrate this knowledge in a classroom setting. While important, the students aren't assessed in a more comprehensive and applied way.
**IMPORTANT - Plans for Next Assessment Cycle:	New SLO 3: Students will evaluate and apply advanced concepts in agriculture to identify and solve problems relevant to their area of specialization.
	SLO 3 will be evaluated during the thesis defense or capstone project for non-thesis students. A rubric will serve as the instrument for this SLO.

To add more outcomes, if needed, select the table above and copy & paste below.