

Agriculture MS

Goal 1-Professional Communication Skills

Goal Description:

Graduate students will be able to communicate scientific data in a professional manner.

Providing Department: Agriculture MS

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

Goal 1- Objective 1: Oral Communication Skills

Learning Objective Description:

Students will demonstrate professional oral communication and presentation skills that are relevant to scientific data.

RELATED ITEM LEVEL 2

Goal 1- Objective 1. Indicator 1: Short Three Minute Presentations in AGRI 6140

Indicator Description:

All students seeking the MS Degree in Agriculture will be required to complete AGRI 6140, a course that helps students develop essential skills for oral and electronic presentation of scientific research. Students will develop short three minute presentations based on either their research or that of their faculty advisor, and deliver these presentations to a team of two faculty members. Presentations will be evaluated using a faculty-developed rubric totaling 100 pts.

Criterion Description:

Faculty expect that at least 70% of the students will score a 80% or better on their short three minute presentations.

Findings Description:

Out of 8 students, all 8 (100%) scored 80% or better on their short 3 minute thesis presentation.

RELATED ITEM LEVEL 3

Goal 1- Objective 1. Indicator 1: Short Three Minute Presentations in AGRI 6140

Action Description:

We will push this criterion until we have findings for 30+ students.

RELATED ITEM LEVEL 2

Goal 1- Objective 1. Indicator 2: Twelve Minute Presentations in AGRI 6140

Indicator Description:

All students seeking the MS Degree in Agriculture will be required to complete AGRI 6140, a course that helps students develop essential skills for oral and electronic presentation of scientific research. Students will develop 12-minute presentations based on either their research or that of their faculty advisor, and deliver these presentations to a team of two faculty members. Presentations will be evaluated using a faculty-developed rubric totaling 100 pts.

Criterion Description:

Faculty expect that at least 70% of the students will score an 80% or better on their twelve minute presentations.

Findings Description:

Out of 8 students, 7 (87.5%) scored 80% or better on their short 12 minute “long” presentation.

RELATED ITEM LEVEL 3

Goal 1- Objective 1. Indicator 2: Twelve Minute Presentations in AGRI 6140

Action Description:

We will push this criterion until we have findings for 30+ students.

Goal 2- Advanced Agricultural Science Knowledge and Skills

Goal Description:

Graduate students will demonstrate knowledge and skills relevant to advanced agricultural science.

Providing Department: Agriculture MS

RELATED ITEMS/ELEMENTS -----

RELATED ITEM LEVEL 1

Goal 2- Objective 1: Analytical Skills

Learning Objective Description:

Students completing the Master of Science Curriculum will exhibit research and analytical skills related to agricultural science.

RELATED ITEM LEVEL 2

Goal 2: Objective 1. Indicator 1: Research methods knowledge

Indicator Description:

Completion of the master of science curriculum requires that students complete AGRI 6350: Research Methods. This course is designed to incorporate statistical design with applied research methods in order to address the design of agricultural experiments. During the course, students will complete a research project. The ability to identify hypothesis statements, statistical design, experimental design, and the alignment of these items will be evaluated on this research project.

Criterion Description:

Faculty expect 70% of graduate students will score an 80% or better on their research project, indicating mastery of statistical and experimental design knowledge.

Findings Description:

Nine out of eleven students (82%) enrolled in AGRI 6350 scored 80% or higher on their research projects.

RELATED ITEM LEVEL 3

Goal 2: Objective 1, Indicator 1: Research methods knowledge

Action Description:

Some non-thesis students felt that the research topics covered in the class were not closely related to their academic or major background. Since most students concentrate on animal science, incorporating more animal science topics into the curriculum would be beneficial, so this will be the action taken by the faculty teaching this course.

Update to Previous Cycle's Plan for Continuous Improvement

Previous Cycle's Plan For Continuous Improvement (Do Not Modify):

Closing Summary

Our continuous improvement plan involves two main goals. Firstly, we will continue assessing students' written and oral communication skills through evaluations of abstracts and three-minute thesis presentations. This will ensure their proficiency in both formal scientific communication and engaging general audiences. Secondly, we will intensify data collection on comprehensive exam performance to identify any deficiencies among graduating graduate students, even though the affected group is relatively small. By addressing these areas of improvement, we aim to enhance the overall quality of education and provide a well-rounded academic experience for our students.

Update of Progress to the Previous Cycle's PCI:

As faculty, we discussed areas of improvement for individual MS students as they finished their comprehensive exams. We also assessed students' performance on abstract evaluation and three-minute thesis presentations.

New Plan for Continuous Improvement

Closing Summary:

We will continue gather data on Short Three Minute Presentations and Twelve Minute Presentations until we have 30+ students. We will modify the types of research data (e.g. more animal science data) given to students used to assess students' mastery of statistical and experimental design knowledge. We will continue to pool faculty comments taken from Comprehensive Final Exams, summarize them, and act upon them in order to improve academic performance of future students.