# **Agriculture MS**

# **Develop Knowledge And Skills**

#### **Goal Description:**

Students will develop knowledge and skills relevant to advanced agricultural science.

RELATED ITEMS/ELEMENTS- - - -

**RELATED ITEM LEVEL 1** 

## Development of Students' Knowledge And Skills

## **Learning Objective Description:**

Students, through the Master of Science Curriculum, will demonstrate a global perspective of agriculture while also gaining scientific and technical knowledge with research and analytical skills in agriculture and related sciences.

**RELATED ITEM LEVEL 2** 

#### Written And Oral Comprehensive Exams

#### **Indicator Description:**

All MS students pursuing the thesis route are required to successfully complete an oral examination, and all MS students pursuing the non-thesis route are required to successfully complete a written comprehensive exam. A committee of faculty members with expertise in the subject area will evaluate students' oral and written performances using a faculty-developed scoring mechanism rating depth of knowledge base, theoretical concepts, and soundness of argument, critical thinking, and originality/insight. Scoring results in Fail, Low Pass, Pass, and High Pass.

#### **Criterion Description:**

Faculty expect 100% of the graduate students will pass their exam on their first attempt of their oral or written comprehensive examinations. Technical knowledge in the various fields of agriculture with a scientific comprehension with masterly level answers will be expected.

#### **Findings Description:**

All fifteen of the MS students were successful in at least meeting the expectations of passing their comprehensive examination or oral examination. Individual assessments were scored as 1-Failed to meet expectations, 2-meets minimum expectations, 3-meets expectations, 4- exceeds expectations.

Fall Semester students

Non-Thesis - 7 students (100%) met expectations, scored a 3.

Thesis - 2 students met expectations, scored a 3, and 1 student exceeded expectations, score = 4.

Spring Semester Students

Non-Thesis - 5 students (100%) met expectations (score=3),

Thesis - 4 students met expectations (score =3) and 1 student exceeded expectations, score = 1.

Students have demonstrated success in assimilating facts and articulating their responses to scientific and theoretical questions at a level that demonstrates mastery of agriculture and met the expectations of the committee.

RELATED ITEM LEVEL 3

# Written and Oral Comprehensive Exams

## **Action Description:**

All fifteen of the MS students were successful in at least meeting the expectations of passing their comprehensive examination or oral examination. Individual assessments were scored as 1-Failed to meet expectations, 2-meets minimum expectations, 3-meets expectations, 4- exceeds expectations.

Students demonstrated success in assimilating facts and articulating their responses to scientific and theoretical questions at a level that demonstrates mastery of agriculture and which met the expectations of the committee. However, a goal is to move to a higher percentage of students achieving a level of 4- exceeds expectations on their comprehensive oral or written exams. For the next cycle, we will set our first step that 20% of all masters students completing the oral or written examination will meet the 4- exceeds expectations level.

## **Professional Development**

#### **Goal Description:**

Students will learn the skills necessary to compete in the professional marketplace

RELATED ITEMS/ELEMENTS - - - - - - -

RELATED ITEM LEVEL 1

# **Development of Marketplace Skills**

## **Learning Objective Description:**

Students pursuing a Master of Science in Agriculture will demonstrate competency in communication skills, professional presentation skills of scientific knowledge.

**RELATED ITEM LEVEL 2** 

#### **Professional Assignment**

#### **Indicator Description:**

All students seeking a MS Degree will be required to complete AGRI 6140 which addresses essential and advanced skills necessary to compete in the professional marketplace and develop essential skills for oral and electronic presentation of scientific research. Faculty will review student assignments and access student performance on selected assignments using a faculty-developed scoring system. Students will be expected to review scientific documents and perform written and oral reviews of literature. Professional presentations will be developed and presented to faculty.

#### **Criterion Description:**

Faculty evaluations will indicate that at least 80% of the students enrolled in AGRI 6140 will perform at an acceptable level and score a 80% (adequate evidence of knowledge) or higher on a scale of 0-100. Clarity of scientific information will be reviewed closely - weakness last year.

#### **Findings Description:**

Students were expected to read, reflect and evaluate a journal article in their area of expertise for submission. Students were also expected to make a professional presentation based on original or secondary research. All students completed both major assignments with 88% meeting or exceeding, on average, the standard established for them.

Students generally performed better on the journal article reflection compared to the professional presentation. Areas needing improvement are depth of analysis and following appropriate presentation formats common in professional circles.

RELATED ITEM LEVEL 3

#### **Development of Marketplace Skills**

#### **Action Description:**

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Students generally performed better on the journal article reflection compared to the professional presentation. Areas needing improvement are depth of analysis and following appropriate presentation formats common in professional circles.

# **Update to Previous Cycle's Plan for Continuous Improvement**

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

Emphasis continues to be placed on presenting scientific information via oral and electronic presentations.

# **Update of Progress to the Previous Cycle's PCI:**

The curriculum and course content, along with expectations, demonstrated that students are successful in understanding and responding to questions that demonstrate a mastery level in agricultural science.

Specifically in the graduate seminar course, students generally performed better on journal article reflection compared to the professional presentation. Areas needing improvement are depth of analysis and following appropriate presentation formats common in professional circles (a majority of our students are non-thesis).

## Marketplace Skills and Graduate Exit Exams (Oral and Written)

#### **Closing Summary:**

All students completed both major assignments with 88%, on average, meeting or exceeding the standard established for them. Generally, this is a positive outcome, but our goal is for 100% to at least meet the expectation. Based on these findings, we will continue monitoring student performance on an annual basis. We must be diligent in continuous assessment of this learning objective to ensure that our students are prepared to enter the marketplace.

More specifically, students generally performed better on the journal article reflection compared to the professional presentation. Areas needing improvement are depth of analysis and following appropriate presentation formats common in professional circles.

All fifteen of the MS students were successful in at least meeting the expectations of passing their comprehensive examination or oral examination. Individual assessments were scored as 1-Failed to meet expectations, 2-meets minimum expectations, 3-meets expectations, 4- exceeds expectations.

Students demonstrated success in assimilating facts and articulating their responses to scientific and theoretical questions at a level that demonstrates mastery of agriculture and which met the expectations of the committee. However, a goal is to move to a higher percentage of students achieving a level of 4- exceeds expectations on their comprehensive oral or written exams. For the next cycle, we will set our first step that 20% of all masters students completing the oral or written examination will meet the 4- exceeds expectations level.