# Sustainable Agriculture and Food Environment MAG

## Goal 1- Technical Agriculture Knowledge

### **Goal Description:**

Graduate students will utilize technical knowledge to defend sustainable agriculture viewpoints.

**Providing Department:** Sustainable Agriculture and Food Environment MAG

RELATED ITEMS/ELEMENTS ----

**RELATED ITEM LEVEL 1** 

### Goal 1- Objective 1: Sustainable Agriculture Knowledge

### **Learning Objective Description:**

Students will demonstrate advanced technical knowledge in a variety of topics relevant to sustainable agriculture.

**RELATED ITEM LEVEL 2** 

# Goal 1- Objective 1. Indicator 1: Sustainable Agriculture Knowledge in SAFE 5373 and 5312 Indicator Description:

Courses are taught on a rotating basis, therefore SAFE 5373 will be taught in odd fall/even spring years and SAFE 5312 will be taught in even fall/odd spring years. Assignments and/or embedded test questions will be evaluated for both courses.

#### **Criterion Description:**

In SAFE 5373, embedded test questions focusing on microbiology, food safety and food regulation will be evaluated. In SAFE 5312, a writing assignment focused on marketing strategies will be evaluated using a rubric. In both courses, it is our expectation that 70% of our students score a 70% or better on the assessments in SAFE 5373 and 5312. Ten students have been included in the assessment of odd fall/even spring rotating classes, we will continue to collect data until 25 students are included in the assessment.

#### **Findings Description:**

In SAFE 5312, 100% of our students scored a 70% or better on the writing assignment focused on marketing strategies. This brings the total to 23 students for this assessment.

**RELATED ITEM LEVEL 3** 

# Goal 1- Objective 1. Indicator 1: Sustainable Agriculture Knowledge in SAFE 5373 and 5372 Action Description:

To to implement embedded test questions focusing on microbiology, food safety, and food regulation in SAFE 5373 and assess students' performance to ensure that 70% of students score 70% or higher on the assessments.

RELATED ITEM LEVEL 1

### Goal 1- Objective 2: Written Debates in SAFE 5311 and 5351

### **Learning Objective Description:**

Students will demonstrate the ability to write and defend an opinion using technical knowledge of sustainable agriculture.

**RELATED ITEM LEVEL 2** 

# **Goal 1- Objective 2. Indicator 1: Written Debates in SAFE 5311 and 5351 Indicator Description:**

Courses are taught on a rotating basis, therefore SAFE 5311 will be taught in odd fall/even spring years and SAFE 5351 will be taught in even fall/odd spring years. Writing assignments from each course will be evaluated using rubrics.

### **Criterion Description:**

In SAFE 5311, students select an agricultural topic of their own choosing and write a 6-10 page paper supported by scientific literature and real-life examples. The issues paper will be evaluated by rubric, and it is our expectation that 70% of our students score a 70% or better on the assessment. In SAFE 5351, a writing assignment focused on marketing strategies will be evaluated using a rubric, with a goal that 70% of students achieve at least a 3 out of 4 or greater on rubric components. Ten students have been included in the assessment of odd fall/even spring rotating classes, we will continue to collect data until 25 students are included in the assessment.

### **Findings Description:**

We will update this part shortly.

In SAFE 5311, students selected an agricultural topic of their own choosing and wrote a 6-10 page paper supported by scientific literature and real-life examples. The issues paper was evaluated by rubric, and 86% of our students scored a 70% or better on the assessment. This brings the total to 28 students for this assessment.

**RELATED ITEM LEVEL 3** 

# **Goal 1- Objective 2. Indicator 1: Written Debates in SAFE 5311 and 5351 Action Description:**

to evaluate students' written assignments using rubrics to assess their ability to effectively communicate and defend their opinions on sustainable agriculture topics.

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

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

### **Closing Summary**

The plan contains two learning objectives, one that focuses on student performance on technical information and the second on student abilities to write and defend their position on key issues. This allows for an understanding of background perceptions, a gauge of learning of knowledge related to the field, and an assessment of written communication and reasoning skills.

We will continue to identify courses taught in each of these areas that can provide assessment data and working with instructors to develop rubrics for identified assignments. Additionally, we will likely break our threshold of 25 responses for this cycle and be able to make alterations to our plan going forward so that we can have a more complete understanding of where our students are coming from and how the program directs and prepares them for the future.

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

The Sustainable Agriculture and Food Environment MAG program aims to equip graduate students with technical knowledge to defend sustainable agriculture viewpoints. To improve the program, the department should focus on the following steps. Firstly, they should continue collecting data on student performance in courses like SAFE 5373 and 5312, which cover microbiology, food safety, food regulation, and marketing strategies. By evaluating embedded test questions and writing assignments using rubrics, the department can assess students' understanding and achievement of sustainable agriculture knowledge. The goal is for 70% of students to score 70% or higher on the assessments. It is also important to expand the assessment pool from ten students to at least 25 to gather a more comprehensive understanding of student performance. Based on the assessment results, the department can make necessary adjustments to curriculum and teaching methods to better prepare students for the future.

In the Sustainable Agriculture Certificate program, the focus is on students' ability to communicate and discuss sustainable agriculture knowledge effectively. To enhance this aspect, the following steps can be taken. The department should continue gathering data by evaluating writing assignments using rubrics in

courses like SAFE 5351 and 5371. Students should be encouraged to write 6-10 page papers supported by scientific literature and real-life examples on agricultural topics of their choice. The goal is for 70% of students to score 70% or higher on the assessment rubrics. Additionally, it is crucial to gather data from at least 25 students before making any significant changes to the assessment plan. By analyzing the assessment results and student feedback, the department can make improvements in the curriculum and instructional methods to foster better communication and discussion of sustainable agriculture knowledge among the students.

### **New Plan for Continuous Improvement**

### **Closing Summary:**

The key focus for both programs should be on gathering sufficient assessment data, evaluating student performance using rubrics, and making necessary adjustments to the curriculum and teaching methods based on the findings. This continuous improvement plan will help ensure that the programs effectively equip students with the technical knowledge and skills required to defend sustainable agriculture viewpoints.