2022-2023

Plant and Soil Science BS

1-Professional Marketplace Skills

Goal Description:

Students completing the BS in Plant and Soil Science will develop the skills necessary to seek initial job placement as they begin their professional careers.

Providing Department: Plant and Soil Science BS

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

1-Job Application Skills

Learning Objective Description:

Students completing the BS in Plant and Soil Science will demonstrate job application skills.

RELATED ITEM LEVEL 2

1-Professional Employment Portfolio in AGRI 4120

Indicator Description:

All students seeking a degree in Plant and Soil Sciences are required to complete AGRI 4120 in their senior year. The course addresses essential skills necessary for job placement in the work force, including resume preparation and technical writing skills. Faculty will review student assignments compiled in a portfolio and assess student performance using a faculty-developed rubric.

Attached Files

AGRI 4120 Portfolio Rubric Matrix

Criterion Description:

We expect that at least 80% of PLSC students enrolled in AGRI 4120 would perform at an average level and score a 4 or higher on a scale of 1-5, for each of the components within the three parts of the portfolio. The 2019-2020 assessment cycle served as a benchmark and included nine students. We will collect data until 30 students are included in the data set.

Findings Description:

This year 89% of students (n=9) scored a 4 or better on all areas of the rubric.

RELATED ITEM LEVEL 3

1-Professional Employment Portfolio in AGRI 4120

Action Description:

This year we again meet the criteria, but we are still below the threshold of 30 students. So for the coming year we will not yet adjust this criteria.

RELATED ITEM LEVEL 1

1-Professional Online Identity

Learning Objective Description:

Students will develop a professional online identity.

RELATED ITEM LEVEL 2

1-LinkedIn Profiles

Indicator Description:

All students seeking a degree in Plant & Soil Sciences are required to complete AGRI 4120 as upperclassmen. During the completion of this course all students must develop a professional online identity using LinkedIn. Profiles are evaluated using a faculty-developed rubric, which is attached to this assessment plan.

Criterion Description:

Our expectation is that 70% of students will achieve at least a 3 out of 5 or greater on all aspects of the rubric. The 2019-2020 assessment cycle served as a benchmark and consisted of nine students. We will collect data until 30 students are in the data set.

Findings Description:

This semester all PLSC students (n=9) met the criteria of at least a 3 or better on all aspects of the rubric.

RELATED ITEM LEVEL 3

1- LinkedIn Profiles

Action Description:

While all student met the criteria, we are still below the threshold of 30 students to set to make updates to this criterion.

2-Knowledge of Key Disciplinary Concepts and Skills

Goal Description:

Students will be able to demonstrate competency as they develop knowledge and skills relevant to Plant and Soil Sciences.

Providing Department: Plant and Soil Science BS

RELATED ITEMS/ELEMENTS

RELATED ITEM LEVEL 1

2-Knowledge of Key Disciplinary Concepts and Skills

Learning Objective Description:

Students will be able to demonstrate competency in key areas of plant and soil sciences including properties of soil water.

RELATED ITEM LEVEL 2

2-Advanced Plant and Soil Science Assignment in PLSC 3440 Indicator Description

Indicator Description:

All students enrolled in the Plant and Soil Sciences (PLSC) Program must complete the advanced Soil Science course, PLSC 3440, in their final year of enrollment. Advanced PLSC courses address key concepts and skills relevant to the field of plant science. Five randomly selected student assignments from PLSC 3440 will be reviewed by faculty members with expertise in the field of PLSC. Faculty members will score the assignments using a scale of 1 - 5 with 3 (meets expectations), 4 (exceeds expectations) and 5 (far exceeds expectations).

Attached Files

PLSC 3440 Assessment Rubric

Criterion Description:

At least 70% of students will meet the expectation of a 3.5 or greater, on individual topic areas (soil water, knowledge of soil chemistry, and application of knowledge). The 2019-2020 assessment cycle served as a benchmark and consisted of five students. We will collect data until 30 students are included in the data set.

Findings Description:

Seventeen students from the 22-23 academic year were included in this analysis. The rubric was changed from the previous year, therefore differing numbers of students are in each category.

Category	number of students	number of students at 3.5 or greater	% of students at 3.5 or greater
Soil water potential	17	4	24
Soil water holding	17	16	94

Soil Colloids	17	9	53
Soil Reaction	17	16	94
Application of Knowledge	17	17	100

RELATED ITEM LEVEL 3

2-Advanced Plant and Soil Science Assignment in PLSC 3440 Indicator Description

Action Description:

While we are still below the threshold of 30 students (22) the areas of Soil Water Potential and Soil Colloids are two areas to keep an eye on as students fell short in those areas.

Update to Previous Cycle's Plan for Continuous Improvement

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

Closing Summary

We are not making changes until we have at least 30 students, in order to have more robust data to evaluate.

Update of Progress to the Previous Cycle's PCI:

In all areas we are still under 30 students, so we are not making changes until we reach the threshold of 30 in order to have more robust data to evaluate.

New Plan for Continuous Improvement

Closing Summary:

We have not met the 30 student threshold set in previous PCIs. However, after reviewing the specific Goals/Objectives/Indicators of this program, the faculty in agriculture have determined that these items do not wholly reflect the needs and goals of our current students. As a result, we will reevaluate all Goals/Objectives/Indicators to better match the needs of our program and the students who are part of it. It is expected that this will require a deep look at what is considered success in this area and will likely cause significant change to the Goals/Objectives/Indicators for the coming academic year.