# Annual Program Assessment Report for Plant Science Crop Science Option

Academic Year Assessed: 2019-2020 College: College of Agriculture Submitted by: Alan Dyer

#### **PROGRAM ASSESSED**

Major: Plant Science Option: Crop Science

#### **ANNUAL ASSESSMENT PROCESS**

Data are collected as defined by Assessment Plan

YES\_X\_\_\_ NO\_\_\_\_

Population or unbiased samples of collected assignments are scored by at least two faculty members using scoring rubrics to ensure inter-rater reliability.

YES\_\_X\_\_\_\_\_NO\_\_\_\_\_

Areas where the acceptable performance threshold has not been met are NONE

YES\_\_\_\_\_ NO\_\_\_\_\_ NA\_\_X\_\_\_

Assessment scores were presented at a program/unit faculty meeting.

YES\_\_X\_\_\_ NO\_\_\_\_

The faculty reviewed the assessment results, and responded accordingly (Check all appropriate lines)

Gather additional data to verify or refute the result. \_\_X\_\_\_

Identify potential curriculum changes to try to address the problem \_\_\_\_\_

Change the acceptable performance threshold, reassess \_\_\_\_\_

Choose a different assignment to assess the outcome \_\_\_\_\_

Faculty may reconsider thresholds\_\_\_\_\_

Evaluate the rubric to assure outcomes meet student skill level \_\_\_\_\_

Use Bloom's Taxonomy to consider stronger learning outcomes \_\_\_\_\_

Choose a different assignment to assess the outcome\_\_\_\_\_

OTHER:

Does your report demonstrate changes made because of previous assessment results (closing the

loop)? YES\_\_\_\_ NO\_\_X\_\_\_

Assessment Plan, Schedule, and Data Source.

Assessment Planning Chart					
	2017- 2018	2018- 2019	2019- 2020	2020- 2021	2021- 2022
Program Learning Outcomes\Data Source	AGSC 356	AGSC 341	BIOM 421	AGSC 428	AGSC 356
1) Effective Communication	x	X	X		X
2) Critical Thinking	X		X		Х
3) Leading Agricultural Discourse				X	
4) Designing Effective Cropping Systems		X			
5) Financially Assessing Cropping Practices	x	X		Х	Х
6) Addressing Production Problems			X	X	

# Threshold Values:

Student performance assessed on a strict percent basis with 70% being passing. Action thresholds are mean scores below 75% or more than 10% of the sample scoring below 70%. Either threshold will trigger a reassessment of curricula and mapping of actions to address the shortfall.

## 2. WHAT WAS DONE

Was the completed assessment consistent with the plan provided? YES\_\_\_\_\_NO\_\_X\_\_\_ If no, please explain why the plan was altered.

The 2019-2020 assessment was completed as planned. For the 2018-2019 assessment, while student performances were assessed by outside faculty, the instructor failed to share assessment data with the program faculty committee.

## 3. HOW DATA WERE COLLECTED

Students were assigned a disease problem associated with a particular crop and were asked to write an extension guide to address proper identification of the disease problem, description of conditions that favor disease development and methods for assessing financial impacts (Appendix A). Finally, the guide was to provide actions that would help ameliorate the problem. Students were told beforehand their guides would be used for assessment of learning outcomes. Due to a new course coming in 2021, student enrollment was lower than anticipated (n=3). Guides were provided to Drs. Kevin McPhee (Plant Breeder) and Qing Yan (Plant Pathologist) for evaluation. Their assignment was to evaluated effective communication, critical thinking and addressing production problems. They were to provide a percent evaluation for each outcome with a score of >70% being passing and >80% being mastery.

# 4. WHAT WAS LEARNED?

Due to a new course in plant disease management being offered in 2021, crop science enrollment was light with three students being evaluated. The lowest individual score among the students was a score of 78% for effective communication and the highest score was 92% for addressing production problems. The overall means were 86%, 86% and 90% for effective communication, critical thinking and addressing production problems. Scores reflect effective instruction on these learning outcomes but oral communication should be evaluated in the future. Written communication may also warrant additional concentration.

## ADDITIONAL DATA COLLECTED:

Additional data is collected following a exit interview and meeting of the crop science student body. These results are presented to the head of the plant science department as well as to the student body. Result are available upon request from Dr. Alan Dyer.