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**

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1) Effective Communication
2) Critical Thinking
3) Leading Agricultural Discourse
4) Designing Effective Cropping Systems
5) Financially Assessing Cropping Practices
6) Addressing Production Problems

**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.