

Program Assessment Report
Ph.D. in Crop, Soil, and Environmental Sciences
University of Arkansas
2020-2021

Program: Ph.D. in Crop, Soil, and Environmental Sciences

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- **Results of analysis of assessment of Student Learning Outcome**

The expectation is that the majority of students are receiving an excellent education and developing knowledge and skills to be proficient or demonstrate mastery as scientific professionals. Given limited data (rubrics submitted for one graduating Ph.D. student during 2020-2021), results were combined from 2018-2021. While a limited dataset, results indicate that Ph.D. students are sufficiently strong in student learner outcome performance. For five graduating students over the four academic years, greater than 80% of students demonstrated a median performance at the mastery level for all outcomes except writing, which was rated 3.6, or between proficient and mastery. Acceptable target goals are for 70% of Ph.D. students defending their dissertation to score “proficient” or greater, and ideally for 90% of Ph.D. students defending their dissertation to score “proficient” or greater.

- **Any changes to degree/certificate planned or made on the basis of the assessment and analysis**

There are currently no changes planned for the Ph.D. degree; however, the AFLS College may want to evaluate whether it is worth reinvesting resources into a faculty position to bring back the Scientific Writing course. Accumulating data suggest that students could use more mentoring in scientific writing throughout their careers, despite rating within the “proficient” range at the defense, especially as different skills and approaches more effectively connect with different target audiences.

- **Any changes to the assessment process made or planned.**

With a limited number of CSES Ph.D. students graduating each year, the department has to be diligent in making sure that advisors and graduate students remember to have advisory committee members complete Graduate SLO Assessment rubrics at the conclusion of every defense. To institutionalize the implementation of assessment during dissertation defenses, the departmental practice of informing new graduate students about the CSES Graduate Student Handbook, including that each CSES graduate student **must** inform the CSES Department (i.e. the CSES Department Head and CSES Office Manager) of a scheduled defense **two weeks prior** to the defense and obtain a “CSES Exit” packet that includes the CSES Graduate SLO Assessment rubric should continue and become routine. The promotion of this informal CSES policy has been important in getting rubrics completed and returned to Daniela Kidd in 115 PTSC. Every student and advisor must continue to be encouraged to complete the rubrics and encourage all committee members to complete the rubrics. Otherwise, with limited data, it is

difficult to determine if a sufficient percentage of the student body is achieving proficiency in all stated learning outcomes. Consideration of an electronic form could be helpful in promoting submission of Graduate SLO Assessment rubrics while maintaining anonymity.