New Grading Rubrics for Signature Assignments
“Tropical Agriculture and the Environment”

Departments: Tropical Plant and Soil Sciences + Plant and Environmental Protection Sciences
Author: Scot C. Nelson (TPSS)

Department/Program Facts

- Number of faculty: TPSS (20-25) | PEPS (20-25)
- Number of students: TPSS (30-35) | PEPS (10-25)
- Number of graduates every year: TPSS (<10) | PEPS (<10)
- Is a new program: Yes. The academic programs of the two departments merged in Fall 2016.

Introduction

The goals of this project was to develop grading rubrics for the signature assignments for a new undergraduate program, Tropical Agriculture and the Environment (TAE).

There are 5 tracks in the new program, 4 of which lead students to areas that were previously associated with the TPSS program. The signature assignment for these tracks is an internship.

The 5th track leads students to an area that was previously associated with the PEPS program. The signature assignment for this track consists of two parts: an internship and a capstone course (PEPS 495).

The grading rubric designed for the internship is applied to all 5 tracks. The grading rubric designed for PEPS 495 applies to the track which requires this course.

Student Learning Outcomes

1. Demonstrate understanding of the science of agriculture and its interaction with the environment from molecules to ecosystems.
2. Demonstrate the ability to critically evaluate scientific evidence, knowledge and issues associated with agriculture in a dynamic world.
3. Demonstrate the ability to identify problems associated with agroecosystems and apply the scientific method to develop solutions.
4. Demonstrate proficiency in oral and written communication for both professional and lay audiences.

Grading Rubrics

Findings/Successful Strategies

Findings:

1. The grading rubric developed for the internships is completed by the internship supervisor, which may or may not be an employee of the University of Hawaii.

   - Previously, there was no grading rubric associated with the internships.
   - Students now have a clear understanding of what the program expects of them during their internships.

1. The grading rubric developed for the capstone course articulates the requirements and grading for the paper required for completion of the signature assignment.

   - Previously, there was no grading rubric associated with the capstone course.
   - Students now have a clear understanding of how the paper should be structured and how it will be graded.

Successful strategies: Use a top-down approach

1. Engage the PEPS department chair (the instructor of PEPS 495)
2. Engagement of the TAE curriculum committee (suggested revisions, approval of the grading rubrics)

Action Plans/Next Steps

Next steps:

Compare papers written in previous years to papers written using the new grading rubric.

Discuss with students their performance during the internships by using the grading rubric to frame the discussion.