**Executive Summary**

(After completing the questions on the next few pages, please replace this area with a written executive summary of the questions that follow, including your data analysis, findings, action plan, and improvements you have already made. This will be the top sheet of your report. This summary should be at least a paragraph, and can definitely be longer if desired.)

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| *1. Demonstrate proficiency in agricultural sciences/engineering by employing the scientific method to solve agricultural problems.* | | *2. Be able to employ safe work habits as prescribed in the "Injury, Illness Prevention" (IIPP) for the workplace employed, including but not limited to handling and storage of hazardous materials.* | | *3. Demonstrate mastery of the technical and soft skills needed for successful employment in Crop Science (Agronomy, Pomology, Viticulture, and enology, or oleoculture.)* | | *4. Apply the principles of ecology, soil science, and plant science to crop management problems.* | | *5. Develop integrated pest management programs for specific crops.* | |
| **81%** | | **89%** | | **87%** | | **82%** | | **78%** | |
| **Students Passed** | **Students Assessed** | **Students Passed** | **Students Assessed** | **Students Passed** | **Students Assessed** | **Students Passed** | **Students Assessed** | **Students Passed** | **Students Assessed** |
| **499** | **614** | **177** | **198** | **350** | **404** | **502** | **615** | **50** | **64** |

Upon analyzing and interpreting this data, the lowest success rate that was revealed was measured at 78% and the highest success rate was 89%. It is felt that the instructors in the Plant Science discipline are instructing students in an above average manner. However, even with a solid high student success rate there continues to be room for improvement. More interactive modalities need to be infused within the Plant Science area of instruction. With additional pedagogies student retention and success rate perhaps will improve. When possible, reinforcement of the importance of safety and the IIPP must be infused into our instruction. Within each course in the Plant Science discipline, principles of ecology, soil science, and environmental sustainability are infused into the curriculum. By incorporating these principles the student has a greater ability to use critical thinking skills as they made management decisions regarding both their personal and academic life.

**Faculty Included in the Preparation and Sharing of this Report:**

Mike Morales

Dale Pollard

Phil Brumley

Gilbert Hernandez

**Please provide a brief and cogent narrative in response to each of the following questions.**

1. Provide a quantitative analysis for each PLO your CLOs inform. Provide the total number of students who passed/total number of students assessed in each PLO column *and* the corresponding PLO passing rate as an aggregated percentage*.*

**AWARD (and corresponding PLO) Students Passed/Assessed TOTAL RATE**

A.S. Degree: Crop Science

1. *Demonstrate proficiency in agricultural sciences/engineering by employing the 499/614 81%*

*scientific Method to solve agricultural problems.*

1. *Be able to employ safe work habits as prescribed in the "Injury, Illness Prevention" 177/198 89%*

*(IIPP) for the workplace employed, including but not limited to handling and*

*storage of hazardous materials.*

1. *Demonstrate mastery of the technical and soft skills needed for successful 350/404 87%*

*employment in Crop Science (Agronomy, Pomology, Viticulture, and enology, or*

*oleoculture.)*

1. *Apply the principles of ecology, soil science, and plant science to crop management 502/615 82%*

*problems.*

*5. Develop integrated pest management programs for specific crops. 50/64 78%*

1. Reflect on, consider and analyze the data you have. ***What does your CLO data tell you about how your students are achieving PLOs?*** *Be detailed, descriptive and analytical* in this qualitative assessment of each PLO in relation to your CLO data. **Are your results satisfactory?**

With a low of 78% and a high of 89% of student success rate, it is apparent that the students are performing above average in all areas. In simple words, it is evident that the students are responding well to the individual CLO’s from each course, therefore their performance in the PLO’s is a direct reflection of their CLO’s success.

1. Your department and the college should be making improvements based on student learning outcomes assessment, and we need to continue to document and share the improvements and progress you have already made. Did you make any changes in your CLO or PLO statements or analysis during the last cycle or recently? Did you receive funding for resources requests that were aimed to improve assessment results? Did you make any improvements in the areas of teaching and instruction processes, your courses, or your program? *Please explain your accomplishments and provide details about your efforts.*

In the past year changes have been made to the CLO by changing the words that were selected in the old CLO’s to describe what the students were going to be able to do at the end of the course. This clarified to the students what was expected of them. Normal instructional funding was used to improve the success rate of the students by upgrading instructional equipment to more modern equipment that is used in industry. In addition to upgrading instructor web pages, and utilizing blackboard to include the courses offered in a two year span, students can view a flow chart of curriculum. One can now have the information of when classes are being offered and the order in which to take these classes to complete their degree in a timely fashion. This has greatly reduced the number of students who missed a sequenced class and then were behind schedule. In the Plant Science program, major courses are offered on an every other year basis thus, if the student misses a course, it would be two more years before the course would be offered again. The student would have to stay additional year(s) in order to finish their two year degree.

1. **Action Plan.** Based on the assessments and analysis you have provided, please consider what changes or improvements you would like to make, which might include updating your CLO statements, modifying course outlines, rethinking instruction efforts, using different assessment instruments, asking for additional resources to improve assessment results, etc. ***Based on the analysis, provide an action plan for improvement that draws on your assessment results and efforts.***

The action plan would be to increase the opportunity of cooperative learning by implementing group management projects within the different courses that are being offered in the Plant Science Program. These assignments reinforce the principles of ecology, soil science, plant science and environmental sustainability. Furthermore, reinforcement of the importance of safety and the IIPP must be infused into appropriate courses offered in the Plant Science Discipline.