

Assessment, Improvement, Measurement (AIM) Report: 09/12/2014

Plan Year: 2013-2014

Unit: Biotechnology

Coordinator(s): Deborah Sullivan-Davis, Karman Wheeler, Keith Allen

Reviewer: Tammy Liles

| Objective or Outcome | Measure(s) | | | | | |
|--|---|--|---|---------------------------|--|--------------|
| | Measure Text | Achievement Target | Results | Achievement Target Result | Use of Findings/Next Steps | Assess Month |
| SLO 2 - PLO # 12 - Students will be able to perform documentation and data analysis, create documents, and communicate results. | Pre- and post-lab reports will be assessed for proper documentation, critical analysis of data, effective use of visuals (graphs, tables, etc), and clear interpretation of results. | 90% of students will demonstrate effective documentaiton, data analysis, document creation to visually communicate results, by scoring 80% or better on pre- and post-lab reports. Instructors will use a grading rubric to assess competency. | After evaluating pre- and post-laboratory reports 90% of students have demonstrated effective documentation, data analysis, and document creation by scoring 80%. | Met | Based on 3 cycles this measure was achieved by all students, and as such will remain in the corriculum without changes. | April |
| SLO 3 - PLO #14 - Students will be able to demonstrate proficiency in preparing, maintaining, and storing biological and/or chemical materials. | 1. Solution preparation - By measuring conductivity in multiple solution preparations (reproducibility and conductivity evaluations, storage, and label completeness) with less than 30% error. 2. Storage - Rubric for storage and preparation | 90% of students will be able to prepare solutions with less than 30% error as measured by soluiton conductivity, and then properly store and label the solutions as per rubric. | Student♦s demonstrated improvement since cycle 2 while preparing solutions that had less than a 30% error rate as measured by solution conductivity. However, this still seem to be a difficult technique to master within one training year. | Met | This objective has been met but more practice and instructions will need to be developed in order to allow the student more hands on training. | April |
| Students will be able to follow SOPs, protocols, and procedures. | Student laboratory notebooks will be assessed for inclusion and completeness of SOPs, protocols, and procedures, using established rubrics. | 90% of students will score at least 80% on components relating to SOPs, protocols, and procedures as assessed by rubrics. | This has been met. More than 90% of students has scored greater than 80% on this objective. | Met | New learning objectives will include more interpretation of the data, also, students will incorporate additional critical thinking. | April |