

Biomanufacturing Skills

Laney College

Outcome	Institutional Outcomes	Assessment Method
<p>Program level outcome # 1 Setup and manipulate laboratory equipment, carry out experimental procedures and identify possible sources of error Bio 75 SLO # 1 Demonstrate competence in using laboratory equipment and techniques used in class Chem 30A SLO # 4 Perform laboratory techniques correctly using appropriate safety procedures.</p>		<p>Assessment PLO # 1 Bio 75 SLO # 1 Analysis of skill demonstration Chem 30A SLO #4 Random laboratory checks by different instructors to evaluate whether safety practices are being followed. Accuracy of student results will be evaluated for one or two experiments.</p>
<p>Program Level outcome # 2 Maintain a laboratory notebook according to standard scientific guidelines. Bio 75 SLO # 4 Effectively document observations and conclusions in a laboratory notebook and communicate the scientific information using formal laboratory reports and oral presentations.</p>		<p>Assessment PLO # 2 Bio 75 SLO# 4 Analysis of student kept notebooks.</p>
<p>Program level outcome # 3 Write clear, well documented lab reports using the language of science Math 208 SLO # 3 Prepare data to be analyzed using a spreadsheet program. Chem 30A SLO # 5 calculate experimental values from laboratory data and interpret the results.</p>		<p>Assesment PLO # 3 Math 208 SLO # 3 Analysis of exam questions Chem 30A SLO # 5 Questions drawn from laboratory worksheets will assess student's ability to draw conclusions from experimental data.</p>
<p>PLO # 4 Apply mathematical problems to solve quantitative problems. Math 208SLO # 4 Estimate dosages, concentrations and dilutions Chem 30ASLO # 1 use dimensional analysis to solve quantitative problems and evaluate the results of calculations to make sure they are physically reasonable.</p>		<p>PLO # 4 assessment Math 208 Analysis of exam questions Chem 30A SLO # 1 A selection of test questions including unit analysis and stoichiometry will be evaluated for varying levels of success.</p>