

# Program SLOs

## Chemistry

A.S. Degree – Chemistry, Science-General

<b>Chemistry Program Student Learning Outcomes From the 2009/2010 PrOF (Program Review)</b>		
<b>Outcome Number</b>	<b>Outcome Title</b>	<b>Outcome Description</b>
P-SLO 1	Scientific Method	Understand the Scientific Method which includes the ability to: •Demonstrate critical thinking skills. •Be able to establish testable hypotheses. •Interpret, manipulate and quantify generated data. •Draw sound conclusions from collected data and observations.
P-SLO 2	Written Communication	Be able to write clearly about chemistry, demonstrating knowledge of basic chemical terminology and understanding of fundamental concepts in chemistry. •Demonstrate logical development to problem solving. •Present data clearly. •Demonstrate validity of data and analysis of experimental error.
P-SLO 3	Demonstrate Content Knowledge	Demonstrate content knowledge •Develop test taking skills. •Develop note-taking skills. •Develop time-management skills. •Become competent in using available resources. •Develop the skills necessary to organize and catalog large quantities of information.
P-SLO 4	Use Appropriate Laboratory Techniques	Students will be able to use appropriate laboratory techniques proficiently. Skills to be mastered will depend on the goal of the student as indicated below: Science majors lab techniques include: following written directions, measurement, pipetting, graphing, titration, synthesis, observation of physical changes, observation of chemical changes, filtration, neutralization, quantitative analysis, qualitative analysis, calorimetry, chromatography, spectroscopy, analytical instrumentation, Additional laboratory techniques relevant to science majors can be found in the SLO's for physics, biology, or geology labs (depending on student's field of emphasis.) Allied Health Track lab techniques include: following written directions, measurement, pipetting, graphing, titration, synthesis, observation of physical changes, observation of chemical changes, filtration, neutralization, qualitative analysis, calorimetry, Additional laboratory techniques relevant to allied health majors can be found in the SLOs for biology labs required for this career option.