

CHEM program SLOs

Unit Name	SLO
Program (MNHS-CHEMIST-CHEM) - CHEMISTRY	Successful students will be able to analyze a chemistry problem and set up a reasonable approach to calculating the correct answer. This will involve dimensional analysis as well as significant figure calculations.
	Successful students will be able to apply the scientific method by stating a question, performing experiments and/or analyzing a data presentation.
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	Successful students will be able to calculate the pH of a weak acid solution using the appropriate K_a value.
	Successful students will be able to calculate the potential of a voltaic cell using the Nernst equation.
	Successful students will be able to explain the general differences that exist between weak acids and bases versus strong acids and bases.
	Successful students will be able to name general inorganic compounds.
	Successful students will be able to perform unit conversions within the metric system.
	Successful students will be able to set up a unit conversion using dimensional analysis and express the answer with correct significant figures.
	Successful students will be able to set up an equilibrium problem and solve for equilibrium concentrations.
	Successful students will be able to set up and execute general and intermediate chemical measurements in the lab using an analytical technique.
	Successful students will be able to set up and execute general and intermediate chemical reactions in the lab using a chemical technique.
	Successful students will be able to set up and execute general and intermediate chemical reactions in the lab using a chemical technique.
	Successful students will be able to set up and execute general and intermediate organic chemical reactions in the lab using an organic chemical technique.
	Successful students will be able to successfully plan the synthesis, purification, and characterization of many common aliphatic and aromatic compounds from a theoretical perspective and then carry out the actual techniques in the laboratory.
	Successful students will use experimental data to determine the rate law for a chemical reaction.