Bio 290 SLO

Demonstrate Knowledge of gene expression of DNA through to the protein product

Compare and contrast prokaryotic and eukaryotic cell structure and composition

Properly use, calibrate and maintain a variety of laboratory equipment to include pH meters, spectrophotometer, documentation systems, micropipettes, centrifuges, and electrophoresis equipment

Calculate and prepare solutions in various concentrations (molarity, normality,percentage)

Handle, store and dispose of commonly used chemicals and biohazardous materials to include MSDS  (material safety data sheets) documentation

Maintain bacterial cultures utilizing sterile technique

Maintain a lab notebook documenting lab protocols, data collection and standard operating procedures

List the parameters of the different levels of biosafety and apply practices of general laboratory safety

Perform DNA extractions, DNA amplification and gel documentation

Explain the differences and uses of plasmids, phage, and transposans