

# **CHEM 314: Standard Addition grading rubric**

**\_\_\_/50 pts Total**

**\_\_\_/10 pts Lab Technique**

*Determined based on efficiency and preparedness for lab in addition to the accuracy and precision of measurements.*

**\_\_\_/10 pts Standard Addition Plots (3)**

*Graphs present, and professionally presented with a title, axes labels, line of best fit, r-squared value, and error bars.*

**\_\_\_/5 pts Summary Table**

*Table completely filled in with lines of best fit, r-squared values, and concentration of dye including an estimate of error.*

**\_\_\_/10 pts  $S_x$  Calculation**

*Hand written and easy to understand estimation of error.*

**\_\_\_/15 pts Discussion**

*Compare results on the basis of S:N, standard addition graphs, concentrations of Red #40, and error associated with measurements. State how matrix effects would be detected and if there is evidence for them in your data.*