**Rubric: Experiment 3: Chem 6614
*Determination of the Concentration of Ni(II) and Cu(II) in an Unknown Mixture***

***via Atomic Absorption Spectroscopy and Standard Addition***

 **/50**

**\_\_\_2 industry standard followed**. Subsections titled

**\_\_3 Purpose:** states actual desired goal and is done succinctly in full sentences

 Which technique ? which species studied ? concentration units used ?

\_\_ **4** **Procedure:**

 \_\_\_\_ reference to handout for Exp 3

 \_\_\_ Instrument ID (if not here, in Observations)

 \_ \_\_ Conditions (slit, wavelength, lamp current, # averages and timing etc. for each element measured)

 (can also be in Observations if not in Procedure) …

**\_\_/\_6 Observations**

 \_\_\_ tables of A vs standard add for both Ni and Cu

 \_\_\_ table labeling and titles clear

 \_\_\_ instrument and settings explicit (detailed ID of AAS ,slit, wavelength, lamp current, #

 averages etc. for each element-can also be in Procedure)

**\_\_/15 Calculations**

\_\_\_\_linear regressions done correctly and recorded clearly : plots/equations/r2

\_\_\_\_ Calculations for Cdil (Ni), Cdil(Cu) shown

\_\_\_ back calculation for dilution factor (x 50🡪 ppm of original unknown)

\_\_\_\_ conversion to mol/L from ppm present and correct

\_/\_**15 Results reported actual**

 \_\_ Ni original concentration reported and correct

 \_\_\_ Cu original concentration reported and correct

\_\_\_ /3 **Worksmanship**: legible, spelling/English correct; clear evidence of good faith effort; no egregious/sloppy errors

**Other Comments**