ABET Student Outcome 6 (ELEN): Conduct Experiments, Data Acquisition & Analysis an ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions

Level of Achievement: Level of Achievement: Level of Achievement: 2 Below Expectations Meets Expectations Exceeds Expectations Lab Safety Practices unsafe, risky Observes good lab Always observes good behavior in the lab. safety procedures. lab safety procedures. Experimental Procedure Does not follow Experimental procedure Uses logical experimental often followed. experimental procedures. occasional oversidh procedures. leads to loss of efficiency. Data Gathering and Simplistic plan that doe: Can formulate Formulates experimenta not recognize full scope reasoable experimental Documentation plan to attain stated of study; Data collected plans; carefully objective; carefully are not all documented. documents data documents data some measurements notcollected. collected. recorded. Tool Selection Operatio Needs guidance to sele Can select and operate Can select and operate appropriate and appropriate equipment appropriate equipment and instruments with and instruments to equipment; is tentative in operation of minimal guidance. perform experiment. instruments. Data Analysis and Applies appropriate Analyzes and interprets Analyzes and interprets Interpretation theory to data when data using appropriate data carefully using theory; accounts for prompted, may appropriate theory: misinterpret physical some measurement erroaccounts for significance of theory; is statistically. measurement error aware of measurement statistically. error but does not fully account for it statistically.

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