Course _____ JEM: Rubric A - Lab Reports and Projects Eval Initials ____

Student or Team_____ Exercise Title _____

Ref #	Dimension Maps to Learning Outcome	1: Poor	2: Average	3: Excellent	Score
1	**Abstract/Summary** **3a**	Several major aspects of the experiment are missing, student displays a lack of understanding about how to write an abstract	Abstract misses some major aspects of carrying out the experiment or the results	Abstract references most of the major aspects of the experiment, some minor details are missing	
2	**Introduction** **3a**	Very little background information provided or information is incorrect	Some introductory information, but still missing some major points	Introduction complete and well-written; provides necessary background principles for the experiment	
3	**Experimental procedure** **2c, 3a**	Missing several important experimental details or not written in paragraph format	Written in paragraph format, still missing some important experimental details	Well-written in paragraph format, most experimental details are covered	
4	**Results: data, figures, graphs, tables, etc.** **2c, 3a**	Figures, graphs, tables contain errors or are poorly constructed, have missing titles, captions or numbers, units missing or incorrect, etc.	Most figures, graphs, tables OK, some still missing some important or required features	Figures, graphs, tables are correctly drawn, are numbered and contain titles/captions.	
5	**Discussion and Analysis** **2c**	Very incomplete or incorrect interpretation of trends and comparison of data indicating a lack of understanding of results	Some of the results have been correctly interpreted and discussed; partial understanding is still evident	Important trends and data comparisons have been interpreted correctly and discussed, good understanding of results is conveyed	
6	**Design of Experiment** **2c**	Lab objectives not met. Inappropriate procedure designed.	Most lab objectives met. Incomplete procedure designed.	Objectives of the lab met, appropriate procedures designed.	
7	**Conduct Experiments** **2c**	Setup, implementation and outcomes not successfully accomplished. Meaningful data not produced.	Some error in setup, implementation or outcomes. Successful collection of data, but validity is suspect.	Setup, implementation and outcomes successfully accomplished with production of meaningful data	

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8	**Computer-based Methods** **2d**	Inappropriate choice and use of tools. Fundamental errors in computation and calculation.	Some tools inappropriately chosen or incorrectly utilized. Some errors in computation and calculation.	To choose and correctly utilize appropriate computer-based tools. Computation and calculation yield relevant results.	
9	**Knowledge of Electric Circuits** **1c**	Incorrect design, analysis or construction of electric circuits used in lab.	Some errors in design, analysis or construction of electric circuits used in lab.	Correct design, analysis or construction of electric circuits used in lab.	
10	**Knowledge of Logic Design** **1c**	Incorrect design, analysis or programming of logic design used in lab.	Some errors in design, analysis or programming of logic design used in lab.	Correct design, analysis or programming of logic design used in lab.	
11	**Conclusions** **3a**	Conclusions missing or missing the important points	Conclusions regarding major points are drawn, but some are misstated, or could be better stated.	All important conclusions have been clearly made, student shows good understanding.	
12	**Spelling, grammar, sentence structure** **3a**	Frequent grammar and/or spelling errors, writing style is rough and immature	Few grammar/spelling errors, generally readable with some rough spots in writing style	All grammar/spelling correct and very well-written, readable style.	
13	**Appearance and formatting** **3a**	Sections out of order, too much handwritten copy, sloppy formatting	Sections in order, contains the minimum allowable amount of handwritten copy, formatting is good, but could still be improved	All sections in order, well-formatted, very readable.	
14	**Multi-disciplinary Participation** **3c**	No discrete roles	Discrete roles were somewhat defined and followed	Each member had a specific role that involved multi-disciplinary participation.	

Adapted from Balik, MSE Dept, NSCU Spring 2003 Developed by Spurlin, Fahmy, Alderman Fall 2004 8/10/04 Revised 3/24/11, 6/17/11