

Lab Exercise Scoring Rubric

I – Planning

Student is well-prepared. Student is able to present a perceptive plan for investigation. Plan is clear, concise and complete. Able to critically discuss plan for experiment.	5
Well-presented plan or pre-lab, but needs some changes. Overall approach to problems is OK.	4
Plan or pre-lab is ok, but some help is needed. Not a very critical approach to problem OR plan or pre-lab are hard to follow due to disorganization of ideas.	3
Poor, ineffective plan needing considerable modification. OR does not consider important constraints and variables. OR Plan or pre-lab is hard to follow due to sloppiness, but most items are there.	2
Little idea of how to tackle the problem and much help needed.	1
Insufficient work or too sloppy to make any sense of plan or pre-lab OR no pre-lab.	0

II – Documentation and Journaling

Lab journal and experimental documentation is complete. Procedure followed is clear. Data is well organized and clearly identified. Changes to or deviation from original experimental plan is documented and explained. Circuit diagrams and plots are well organized, explained, and labeled. Loose pages are taped into journal in an organized manner.	5
Documentation is sufficient to recreate the experiment, but requires making some assumptions or documentation is not well organized, but clearly present.	4
Student's journal is incomplete or procedures data or analysis not fully documented. Journal is too sloppy to follow, but all items seem to be present.	3
Elements critical to understanding the experimental procedure or data are missing.	2
Documentation is unusable. Too sloppy to follow.	0

III – Performance

Student consistently and independently makes clear observations and measurements with correct tools and with appropriate precision and units.	5
Student often observes and measures important parameters, but may not relate the appropriate precision for instrument being used.	4
Student usually observes and measures correctly, but precision analysis is lacking.	3
Student's observation and measurements are poorly taken. Poor units and precision.	2
Student inconsistently and inaccurately measures. Few units or precision.	1

IV – Analysis

Student consistently and accurately summarizes observations and data. Cites appropriate relationships and generalizations with necessary limitations and assumptions.	5
Student is able to interpret data collected and present reasonable conclusions, but is not fully aware of limitations and constraints.	4
Student is able to reduce and organize observations and data, but is unable to formulate meaningful conclusions.	3
Student is able to organize data, but analysis and conclusions are lacking.	2
Student is unable to go beyond data collected OR too sloppy to follow.	0