

UNIVERSITY OF ALABAMA
 Department of Physics and Astronomy
 PH 491/591 Fall 2022

Instructions:

1. This should be turned in as a team - one submission with all names
2. Nominal due date: 15 September 2022

Deliverable: preliminary data

At this point you have had about a week with your first major experiment, and should have some preliminary data in hand. We want to see the data!

There is no prescribed format or length for this deliverable. We do not intend for this to be a lengthy assignment. A collection of plots with minimal (but sufficient) descriptive text is acceptable, a larger narrative is unnecessary if you address the key points listed below. *If you've done this step right, it is re-usable as the starting point for the next deliverable.* We give some guidelines below.

Table 1: *Essential elements*

Item	Key characteristics
Experimental techniques	Primary procedures and equipment used. A list is fine, details not required.
Calibration data	How do you know the thing is working?
Preliminary experimental data	Include <i>preliminary</i> error estimates and proper units.
Plots	At least some of your data should be visualized. Ensure units, axes are correct and consistent.

Table 2: *Plan of Work Grading Rubric*

Item (points)	Unacceptable (0-5)	Developing (6-7)	Proficient (8-9)	Exemplary (10)
Techniques points x 2	Not identified	Too vague or lacking in detail	Clear and with all key details present	Multiple strategies and overlap/complementary
Calibration data points x 2	Not present or not appropriate	Present, but of poor quality	Present, good quality, uncertainty noted	High-quality data with significant analysis
Preliminary data points x 4	Not present or not appropriate	Present, but of poor quality	Present, good quality, uncertainty noted	High-quality data with significant analysis
Plots points x 2	Not present	Present but poor quality	Present and high quality	Multiple complementary plots of high quality