

## AME 21216 – Score Sheet

A1 – Galileo's Inclined Plane

NDID#: \_\_\_\_\_

Lab Section (Day/time): \_\_\_\_\_

For more details on any of the items below, please refer to the lab handout.

| Item and Description   | Points Awarded | Possible Points |
|--|----------------|-----------------|
| <b>Technical writing</b> – Using the correct format, address all questions from the lab handout in the paragraphs.               |                | 5               |
| <b>Equation of motion, <math>x</math> vs. time <math>t</math>, for a ball rolling down an inclined plane</b>                     |                | 2               |
| <b>Plot of measured distance <math>x</math> vs. time <math>t</math> for the inclined plane with a <i>quadratic curve fit</i></b> |                | 4               |
| <b>Extrapolated value of <math>g</math> with uncertainty (this should go in the caption of previous item)</b>                    |                | 3               |
| <b>TOTAL</b>   |                | 14              |

**IMPORTANT:** A **data dump** is when you include all of your raw data in one or more tables. Many students make the mistake of thinking more is better. However, the vast majority of readers are not interested in that level of detail. If anyone is interested in seeing all of your raw data, they will ask to see your lab notebook.

The graders will deduct points if you include a data dump in this or any future tech memo.

## Technical Writing

- Include a *brief* summary of the procedure.
- Discuss the results using college-level English.
- Answer the suggested talking points at the end of the lab handout.
- Do *not* write a first-person narrative. Rather, write it as a declaration of objective observations, scientific facts, and logical deductions.

## Guidelines for Deliverables

- Use a 12 point “serifed” font such as Times New Roman.
- Document should be double-spaced.
- Document should have 1” margins in all directions.
- Page numbers are required centered at bottom of screen.
- Equations must be numbered.
- All variables must be italicized.
- All variables in equations must be defined (i.e. “where  $c$  is the speed of sound”).
- Theoretical curves should always be smooth and continuous.
- Measured data should be individual markers. If there are more than 20 measured data points, you connect them or use a continuous line.
- Plots should always have axes clearly labeled with units.
- Plots should always be centered with captions *beneath* labeled Fig. 1, etc.
- Captions should be the same font as the rest of the document.
- Do NOT use the \* symbol to denote multiplication.
- NO TITLES ON GRAPHS

**References** – Tech memos must include at least one reference. These can be data sheets from the lab website, articles from the internet, the textbook, etc. References should follow the ASME format. (<https://www.asme.org/shop/proceedings/conference-publications/references>)