

### PHYS 161 – 3<sup>rd</sup> Presentation Rubric (8-11 minutes)

Total of 40 points for this presentation. Expect 10% deduction if not routinely using the equation editor & making own figures.

#### Data collection & prep day adequate? (14 pnts)

no attempt	bad	ok	good
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#### Intro (Title slide, goal slide)

no attempt	bad	ok	good
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#### Procedure (clear, concise, complete, figures) (4 pnts)

no attempt	bad	ok	good
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#### Energy Theory (b4 & after figure, eqt'n, result for $v$ or $\omega$ , formatting)

no attempt	bad	ok	good
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#### Energy Data ( $v$ vs $h$ or $v$ vs $x$ plot, theoretical and experimental data, formatting)

no attempt	bad	ok	good
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#### Torque Theory (FBDs, equations, result for $a$ or $\alpha$ , formatting)

no attempt	bad	ok	good
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#### Torque Data (at least one plot each of $\theta$ vs $t$ , $\omega$ (or $v$ ) vs $t$ , theoretical and experimental data, formatting)

- Option 1: discussion of  $\alpha$  non-constant supported by reasoning and appropriate graph
- Option 2-4: compare  $I_{th}$  to  $I_{exp}$  using slope of  $\omega$  (or  $v$ ) vs  $t$ ?
- Option 5a: compare  $I_{th}$  to  $I_{exp}$  using slope of  $\omega$  (or  $v$ ) vs  $t$ ?
- Option 5a: compare  $I_{th}$  to  $I_{exp}$  using slope of  $\omega$  (or  $v$ ) vs  $t$  **AND** plot of  $I$  vs  $x$  (showing both th & exp)

no attempt	bad	ok	good
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**Errors** (adequate attempt made to quantify errors and relate it to % difference). It may help to read the handout "Brief Error Analysis linked online).

no attempt	bad	ok	good
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**Wrap-Up** (do they revisit the initial goal, do they summarize the main results, if appropriate mention how to best improve or redo the experiment, etc)

no attempt	bad	ok	good
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**Overall Formatting** (appropriate italics, units, color schemes, fonts and font sizes, figures large/well-labeled, etc)

no attempt	bad	ok	good
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**Overall Speaking** (eye contact with students, volume, response to questions, etc)

no attempt	bad	ok	good
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**Equal effort per student?**

no attempt	bad	ok	good
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**Within 8-11 minute time limit?**

no attempt	bad	ok	good
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