Oral Pres 3 Coding Presentation Rubric

General

- Within time limits
- Tell a good story
- Clear speaking, audible in back of the room
- Each student speaks approx. equal time
- Slide numbers on slides
- Consistent color coding
- Citations used as needed
- Large, clear images with sparse wording
- Good color schemes (avoid dark blue on black or yellow on white)
- Look at everyone, not just the instructor
- Font size 18-point or larger everywhere
- Obviously practiced multiple times
- Slides have lots of images (not endless text)!

Explain the task you were given

- Briefly tell us about the simulation you are supposed to make
- It may help to run your sim once or twice early in the talk to help people understand

Explain Theory

- Show theoretical moment of inertia calculation using table of I's
- Do FBDs and solve force & torque equations. Show how a and/or α relates to I.
- Do before and after pictures with and energy problem. Show how v and/or ω relates to distance traveled (or angle rotated).

Code is easy to read and well-explained

- Clear variable names
- Consistent use of spacing & occasional line breaks to reduce headaches
- In presentation, code snippets are 18-point font or larger.
- Line numbers included on code snippets in presentation.
- When appropriate, include a shot of visuals next to code snippets to make it easy for us to follow along
- TIP: It may help to make a second copy of your code used solely for making nice snippets of code for your slides. Then you can move stuff around however you want.
- As you talk about variables, emphasize which parameters are vectors versus scalars to add clarity

Explanation of Euler-Cromer Method for animation

- Include comparison of ECM pseudo code (or normal math equations) to your actual code
- Use animations or some system to present ECM without overwhelming us (one step of method at a time)

Simulation produces clear visuals

- Include important arrows with labels in one version of your simulation. Ideally, numerical values are included in the labels. For dialing in sig figs in a label, see this code I wrote.
- In print statements, use digits to reduce sig figs (see documentation on print statements).

Use Plots to Verify Code matches both theoretical & experimental results

- Get data from an experimental group whose project matches your simulation.
- Ensure you run the code using parameters that match their real world experiment.

Wrap it up

- Remind us of the goals you had when making your simulation and that you achieved them