

Questionnaire for those interested in the Newton class

Since the amount of proofs we need to work through in order to see how Newton's fundamental laws explained Kepler's empirical laws will require a lot of stamina as the weeks go on, Prof. Hill and CurCom would like you to answer a few questions to help you and CurCom determine if the course is a good choice for you.

1. Self-assess (indicate all that apply): I have a sufficiently strong grasp of
Algebra 1-2 / Trigonometry / Algebra 3-4 / Pre-calculus / Calculus
that I could effectively help someone (like a younger sibling) study it without doing much review myself. NB: Calculus is not required for this course. This is just asking you to quickly but realistically self-assess.
2. Think of a proof that you have a command of and that you appreciated enough to want to share it with other people. In a single sentence — maybe with some long clauses *à la* Newton — what is a clear and accurate description *of the result* that you might give to entice someone into then hearing the proof?
3. Referring to the same proof.... Perhaps the proof had many steps, but even long proofs often have a particularly exciting step where a pivot of viewpoint occurs. Describe as briefly but as accurately as you can (maybe in just a single sentence), what was the pivot point in this proof?
4. Reading Newton's original work is significantly harder than learning Newtonian mechanics using modern methods (e.g., from *The Feynman Lectures*). What will sustain your interest and motivation through this long and difficult text?
5. A possibility that might or might not help this class cover *The Principia* better is to meet three times per week for one hour (for example, Mo/Tu/Th) instead of the Deep Strings standard of meeting twice per week for one-and-a-half hours (for example, Mo/Th). Do you have a preference, and if so why?