

March 9, 2021 Responses to Phys 114 survey

Thank you for your feedback! I thought hard about what folks told me ... here are some responses:

0. About my marking work turned in: People seemed happy with this (timeline, comments I make). I hope folks remember that excellent is 4-5 on warmups, 16-20 on hand-ins, good is 3-3.99, 12-15.99 and so on.

Please also realize that I am paying attention to the style you use to convey information. Especially in a hybrid semester where no one gives a seminar talk, these problems are a proxy for a talk you would have given to others.

Thus, I'm giving some credit for a few words of intro which sets up what you're looking for, sketch if appropriate, and light narration through the problem. Use steps 1-5 if that appeals to you ... another format if you prefer it. Thank you for understanding that enhancing scientific communication skills is one goal of Swat seminars!

1. Folks who watched them liked my videos. I like them too, especially when I watch them at 1.25x or 1.5x :-). They are time-consuming to make, but b/c folks like them I will do everything I can to keep them rolling out regularly!

2. Some folks liked the multiple texts, and are even reading the optional material. Some felt stressed that there is not one single text. Other prof's who have taught this seminar rarely use one book - several references for a seminar student is the norm in thermo/stat mech.

What to do? Here's my best shot: You may read only one text and do great in Phys 114! Really!

The original plan was:

- Read one text closely, take notes ... finish the reading.
  - Take time off to rest or do other things.
  - Go to the other text and skim - cherry picking new ideas or solidifying knowledge.
  - Try to do assigned problems, aim for Steps 1-3 on all probs.
- :-) Done!

**New plan** if you want one:

- Read one text closely, take notes ... finish the reading.
  - Take time off to rest or do other things.
  - Try to do assigned problems ... put aside those where you lack info to do it.
    - Either: Confer with friends who may have had time to read more
    - Or: Go to the other text and skim - simply hunt for the specific info to let you do problems you couldn't.
  - Make whatever new progress you can, aim for Steps 1-3 on all probs.
- :-) Done!

3. Some folks find the work level good. Some are overworked. Not a new story at Swat, but the hybrid/remote nature of this semester makes us more vulnerable to overwork.

I've taken some reading out of the syllabus for the next couple of weeks and/or moved some major ideas to later. If we are pressed for time, some work can drop off the syllabus entirely.

4. We'll cut back from 10 to 9 (or sometimes 8) assigned problems a week. 3 of them will still be turn-ins.

5. The warmups are popular. I know they take time, but they are meant to be a reality check for you on reading comprehension. I will redouble my effort to make them light, in terms of how much you need to calculate and write!

6. By popular consensus, we will address all problems, but we'll do so on a need-to-know basis. At the start of seminar, we'll classify them something like ...

A) This was really easy!

Someone tells us

Step 1: Subject of problem ... goal.

Step 4: What they got for answers

In rare cases this may prompt discussion; but let's try and keep it succinct, and use our forums, email, asynchronous postings, ...

B) This was of middling difficulty.  
Someone tells us  
Step 1: Subject of problem ... goal.  
Step 2: Setup  
Step 3: Concepts that are needed

We then commit to checking a posted solution for the details, including answers and reality checks.

C) This was to be handed-in so no matter how easy we found it ...  
Someone tells us  
Step 1: Subject of problem ... goal.  
Step 2: Setup  
Step 3: Concepts that are needed  
Step 4: Sketch of solution - skipping messy math - but bringing forth any worthwhile steps or tricks that folks would care about.  
Step 5: Reality check, points of interest

7. Finally, for problems of type B ... if we have time in our meeting, we revisit them  
Someone tells us  
Step 4: Sketch of solution  
Step 5: Reality check, points of interest