

AP Physics 1 – Summer Assignments

Welcome to AP Physics 1. I looking forward to seeing all of you in class in the Fall, but before that happens, there is some work I'd like you to do over the summer to prepare yourself for the upcoming year. In order to efficiently move through the year there is some information that I'm going to expect you to know and be prepared to work with from the start. Some of this is introductory physics, but much of it is skills that you will need in order to succeed in the class. Please read through this entire sheet before you begin any of the assignments.

There is a Physics digital textbook that I'm going to have you use for the summer work. Please go to the following link to access the book – you can go through it online or download a PDF version:

<https://openstax.org/details/books/college-physics-ap-courses>

You should work through the material in the AP Physics 1 folder from the counseling site in the following order (Note: all page number references for the digital textbook are based on the PDF version – if you use the web version, you'll just need to go to the appropriate section. End of chapter *Conceptual Questions* and *Problems & Exercises* are not complete in the web version, so you will need the PDF version to get those – I'm not sure about the EPUB version so to be safe you should use the PDF):

1. Read through Chapter 1 of the digital textbook (pp. 7-30).
2. You should feel comfortable doing any of the *Conceptual Questions* and *Problems & Exercises* at the end of the chapter.
3. Read [02 U1 Reading](#).
4. You should feel comfortable doing any of the U1 assignments (ws, quiz, and test).
5. Read sections 3.2 and 3.3 from Chapter 3 of the digital textbook (pp. 101-115).
6. Also read [09 U4 Reading 2](#) which contains similar information to sections 3.2 and 3.3.
7. You should be comfortable doing the problems on [10 U4 trigpractice](#).
8. You should be comfortable answering any of the *Conceptual Questions* 1-12 at the end of Chapter 3 (pp. 132-133).
9. You should also be comfortable working with any of the *Problems & Exercises* 1-24 at the end of Chapter 3 (pp. 135-137).

Note: For all of the above, don't feel like you need to answer every question and work every problem (although you could if you want). I recommend you look through them to see if they pose any problems and answer/work on at least 1 or 2 from each section. If there are any that look particularly challenging, definitely take the time to try and work through them. It is going to be expected that you know this material and can do these problems – if you get completely stuck on anything, don't hesitate to email me. I check my email on a regular basis over the summer...it shouldn't ever take me more than 2-3 days to reply and it will usually be quicker than that.

None of the work from above needs to be turned in – it is hopefully mostly review. The sections below have assignments you should be prepared to discuss on the first day of school in September. I expect you to take the time to go through and complete these.

10. Read sections 2.1-2.3 of Chapter 2 in the digital textbook (pp. 35-45).
11. Complete *Problems & Exercises* 1-15 from Chapter 2 of the digital textbook (p. 90).
12. Read [11 U2 reading](#).
13. Complete U2 ws1 – U2 ws5 and U2 review.

Note: You may be unsure of how to do some of these – that's okay. It's important, though, that you at least attempt to answer all of the questions to the best of your ability. We'll be able to discuss and work through any issues at the beginning of the school year. I don't grade homework as that is your opportunity to practice material without worrying about having it affect your grade; however, it is important that you take the time to work through the homework material. Once again, don't hesitate to email me with any questions and I will try to make a timely reply.