

Collaboration on Homework

Physics 216

Spring 2004

Most scientific work these days is done in collaborations and much can be learned by collaborating with others. However, there is no substitute for learning by thinking about physics and solving problems yourself. The primary purpose of the assignments in this course is to help you learn the material. Although your solutions will be graded and you will receive a grade for the course, these grades are actually secondary.

We want to steer a middle way between doing assignments entirely alone or mainly in collaboration with others. Here is how you should work:

- You should first attempt to solve the problems yourself. If you manage to do them in a reasonable amount of time with a reasonable amount of effort, so much the better. This will certainly give you the most personal satisfaction and you will maximize your learning/effort ratio. If there are very subtle points in a problem, I will break it into a number of steps or I will include hints to help you get started.
- If you are stuck on one or more problems, you may discuss them with other students or with me. However, this should be limited to understanding the essential point(s) so that you can go ahead to solve most of the problem yourself.
- You may use some help from references, but you should not simply go on a systematic search for the solution in the literature. For many problems a literature search would actually be a waste of time anyway.
- In any event, the solutions you turn in should be in your own words and your own style. You should not simply copy a solution from a friend or a book.
- If you do use help from a friend or book or from me, include an acknowledgment. After all, in real scientific papers we use acknowledgments and references to give credit to others for their help.

I hope that this policy will encourage you to learn the material by solving each problem in the most effective way.

None of this is intended to discourage you from discussing the material in the lectures and text or from consulting other references to help you understand difficult concepts or derivations. In fact, looking at this subject from a number of different points of view can be an invaluable learning experience.