

## TIPS FOR SUCCEEDING IN AN INTRODUCTORY PHYSICS COURSE:

There are a number of best-practices that are strongly correlated with achieving a high grade in introductory physics courses. These include:

1. **Get the book.** Read it. Use it. There are LOTS of very good hints and ideas in the Preface. Most students do not read the Preface, but in it the authors have given you their best advice on how to use the text successfully.
2. Actually **read the text** (with a highlighter if you prefer). This should be done before the class lecture, and if possible, afterward as well. Make sure you read the “Master the Concepts” section at the end of each chapter – it is critical to summarizing what you’ve learned.
3. **Put in the time.** The textbook recommends (and we agree) that you should be spending at least 2 hours outside of the class for every hour of lecture. This is at least 6 hours per week.
4. **Practice, practice, practice.** Do the quiz section assignments (before class), do the extra credit problems, and do the suggested problems. You can watch Michael Jordan play basketball for 3 hours a day, every day, and you will never get better at basketball – not unless you yourself put in the practice.
5. **Strive for understanding.** Many students feel if they just “get the answer” from a TA or help center person, they have accomplished the task. This is incorrect. You have accomplished your task when you truly understand the problem, how to set it up, how to solve it, and what it is asking. Just completing the problem to get some random answer is not enough.
6. **If needed, attend your instructor’s office hours.** This will be most effective if you bring your book and your homework problems and ask him/her to help you identify your “sticking points.” Open-ended statements like, “I don’t get any of it,” will not be helpful in this setting.
7. **Do a self-evaluation (and be honest).** If you really want to know how you will do on the exam, give yourself an honest evaluation. Pick a few problems randomly from the text that you haven’t done before. A friend or family member can help with this. If you can solve it without any other help, you are ready. If you have no idea how to do it, you are not ready.
8. **Memorizing previously worked problems is NOT studying.** Many students feel exam preparation should consist of just “looking over” old problems and old exams. That is incorrect. An exam will generally consist of new, unseen problems. While completely understanding the assigned problems is a good idea, your best strategy is to try to work as many new problems as possible (this is accomplished by practicing, see tip 4).