

### Getting Ahead in Physics

1. Don't be intimidated about the class
2. Think positively. Consider problem solving a challenge!
3. Go to lecture regularly and take notes
4. Read the material before you go to class. This will give you a general sense of what will be taught and you can take better notes in lecture.
5. Time management is key to this class. There will be many topics in a short amount of time, which will become overwhelming if you do not have a consistent study schedule.
6. Do not pull all nighters
7. Study while feeling refreshed and full of energy. Studying is not as effective when you are lethargic and tired
8. Test yourself periodically as you read the textbook
9. Science and math are like languages: you cannot cram them and they must be practiced daily. Learn the concepts versus just memorizing formulas.
10. Problem solving is not a spectator sport. You must practice yourself to better understand what is going on.
11. When approaching a problem start by reading it slowly the first time and then pick out key words as you read the question a second time.

- 12.** Drawing diagrams will help you visualize a problem
- 13.** Break down large problems into smaller, more manageable pieces
- 14.** Do not mix apples and oranges. While working on a problem be sure to keep your units straight
- 15.** Perseverance pays: it helps to think about a problem even when you are not at your desk trying to solve it.
- 16.** Talk your problem over with a friend and/or classmate. It may help your understanding to verbalize a problem to someone else.
- 17.** Try working the problem from both ends: start at the beginning and go as far as you can. Then go to the end and work backwards. Many times you'll be able to pull it together in the middle. If not, visit office hours, the Q Center in the library (Storrs), or the physics learning resource center in the Gant West building room 302A.