

## Eight Suggestions for 21-111 Students Spring 2007

In no particular order:

1. Take notes in class. If it's written on the board, it's worth writing in your notes. Lectures generally proceed at such a pace that you will not grasp every detail upon first hearing it. If you have good notes you will be able to go back through the lecture and understand all of the concepts and details you may have missed or not understood the first time through.
2. Review your notes. Even if you think you understood everything from lecture, you will frequently find points you have missed or make connections between concepts on a second reading. Also, some professors can be so convincing in lecture that they make difficult concepts seem easy. Reading over your notes after lecture is a good way to make sure you really understood what was being presented. Some students use a technique of copying over their notes after class, writing each step only when they can explain why it's true.
3. Keep up with the reading and coursework. Difficult concepts can take a lot of time to really understand, and you will need to think about them (and sleep on them) a few times before you really get it.
4. Work with other people on your homework. Besides being more fun, checking your work with others will help you avoid those little mistakes that cost you time and points. Trying to explain a concept to someone else is an excellent test of how well you understand it yourself.
5. Know your definitions. You will be asked to be clever on the homework and tests, but the tools you will use will always be the definitions (and theorems proved from the definitions). If you don't know these you will get nowhere.
6. Write up your solutions on your own. Though working together is encouraged, at some point you are responsible for understanding every piece of the problems, and have to be able to write the complete solutions in your own words.
7. Stay organized. When studying for a cumulative exam, your best resources are your old notes and homeworks. Keep these in order and you will have a good record of what the course is about.
8. Do problems. It's very easy to listen to someone else explain something, or read about it, and think you understand, but on exams you will be asked to solve problems using these concepts, and doing exactly this is the best way to tell if you are prepared for a test. Re-solve old homework problems from scratch, and do similar ones on your own.