Chemistry 271, Spring 2009, 9 a.m. section **Jason Kahn**
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Advice for Success:

1. **Active Learning.** Chemistry cannot be learned passively. You need to think through questions on your own. Thus, doing the assigned homework is essential for success, whether or not problem sets are graded. Looking at problems and then looking at answers without doing the work on your own is useless. You learn from identifying dead ends that are not in the key.

2. **Cumulative Material.** The material in this course builds on what has come before. If you fall behind, the next section will be more difficult to understand, and the situation will deteriorate from there. You need to make sure that you understand each lecture before the next lecture.

3. **Keep Up With Lectures.** The best way to make sure that you understood a lecture is to go over it in detail as soon as possible after the lecture. The best way to do this is to recopy your lecture notes, flagging questions and/or looking up anything that is not clear in the process. If you don't have time to do this, then at least make sure to leave yourself enough room to annotate your notes after class. If a PowerPoint of the lecture is available, you may find it useful to recopy lecture notes onto a printout of the PowerPoint, though I have not tried this myself.

4. **If You Have Questions, Ask For Help!** This is the purpose of discussion sections and office hours. However, you will get much more out of your instructors if you have followed step #3.

5. **Do Not Rely On PowerPoint.** I will make any PowerPoints that I use in class available after class, but I do not guarantee that every lecture will have a PowerPoint. I do guarantee that the PowerPoint will not include everything that you need to know from the lecture. If I were to provide a completely comprehensive PowerPoint, it would be called a textbook. If you could learn this material effectively solely from a textbook, you would not need this course at all.

PowerPoint is very much a double-edged sword. It is convenient, it allows you to focus on content instead of catching every last bit of nomenclature, it provides you with an outline. However, it is all too tempting to sit back and watch the PowerPoint go by, without engaging with the lecture. Use PowerPoint as an adjunct for writing and thinking, not a replacement.

Guaranteed Instructions for Failure:

1. Skip lecture, because your friends will take notes, and the instructor will assume the responsibility of putting everything important on the web. Skip discussion section, because most of it just goes over the lecture material, which you already have covered.

2. Do not bother with ungraded problem sets, because they don't count toward your grade.

3. The night before each exam, look at the PowerPoints you downloaded. Realize that you don't understand some of the material, assume that anything you don't understand is an unimportant details. Discover that your friends' handwriting in the notes you borrowed is illegible.

4. Compare the assigned problems with the answer key, and decide that it all looks reasonable.

5. On the exams, attempt, for the first time, to answer questions that are similar to the problem sets but may take a step or two further or require information from other chapters.

6. After the end of the semester, assume that even though you got a D for this course you deserve to be qualified for the next step. Forget everything, sell your book, and burn your notes, because the next instructor will provide you with everything you need for the next course.