Notes on Examinations in FCH 361

1) You should bring your calculator, 1-2 pencils (an eraser), and a cheat sheet (a single 8.5" x 11" piece of paper with whatever notes you wish to put there). You will write answers in a blue book which will be provided by the instructor.

2) The exam will consist of probably 3 calculation problems and 3-4 conceptual questions. Those conceptual questions will be worth <u>at least </u>30% of the points on the exam, so be prepared!

3) When you answer a calculation problem, you need to **Show Your Work**! This means you must do the following to get full credit:
a) write down the equation you use in symbolic form, for example:

$$ln\left(\frac{[B]/[B]_0}{[A]/[a]_0}\right) = ([B]_0 - [A]_0)kt$$

b) if you rearrange an equation, write that too (or skip step (a) if you are able)!

$$t = \frac{1}{k}\frac{ln\left(\frac{[B]/[B]_0}{[A]/[A]_0}\right)}{[B]_0-[A]_0}$$ I want to see the numbers too! $$t = \frac{1}{3500}\frac{ln\left(\frac{[0.005]/[0.01]}{[0.003]/[0.008]}\right)}{[0.01]-[0.008]}$$

4) There will be plenty of partial credit. Errors in the initial steps of a multi-step calculation will only result in single deduction for the error, even when the error renders all your other work numerically incorrect. However, penalties for errors will be bigger if you get an intermediate or final answer that I think you should know to be wrong.

5) Your score on the conceptual questions may be based on your best score on 2 out of 3 (or 3 out of 4). If so, it is still to your advantage to have an answer for each question. Your answer should be 1-2 sentences long. Anything longer may start to smells of manure! A longer answer usually adds some errors, for which you will lose points.

6)   **Cheat Sheets**

You do not need to copy down tables of rate constants, etc., that you would ordinarily look up for a *Problem*. I will put on the exam values of R, k_B, h, etc., on the exam for you.

The equations needed to solve the test questions will all be ones you needed to solve Homework *Exercises* or *Problems;* I will not try to trick you by picking an obscure equation you never had a chance to use. So you do not need to copy down every equation in the text. However, answering questions may require you use a familiar equation to solve for a variable that you did not solve for previously.

You may want to add explanations of concepts, answers for certain types of problems, reminders to check for your most common mistakes, graphs, etc.