Introduction to Physical Chemistry

Physical Chemistry Tutorials
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Don't Panic

For those of you that haven't figure it out by now: studying at University is going to be very different from what you have experience before. It may be a cliché, but in order to succeed you will have to be self-motivated. Lecture notes won't always cover everything, be prepared to do some reading. You'll find this is doubly so with the short terms here at Oxford. I'm guessing your vacation may bear more resemblance to "working on catching up" than "working on my tan".

Having scared you witless, I can offer you two concessions: (1) Don't worry if you don't understand everything first time, I certainly didn't. If you did, I'd be out of a job. (2) I am here to make your life easier! If there are things you're having difficulty with, make a note and bring it up in the tutorials.

Physical Chemistry tutorials will generally come in two parts; we will spend a little time going over the important concepts covered in the course, then the majority of our time will be spent going over problems I will set a week or so before the tutorial.

I don't ask you to make any revision notes before the tutorials, but condensing what you've learnt onto a side or two of A4 may help you consolidate what you know and realise what parts of the course you need to work on.

I may seem like hard work, but solving problems is the best way to learn Physical Chemistry. It's easy to think you've understood something in the lecturers, but it's when you're stumped in front of a question that you really realise what you can do, and what you need to work on.

With this in mind, I ask that you attempt every question. Even if you don't think you can get very far, it's learning to think about the different ways to answer the problem that will help you most in the long term. If you're really stuck, you can always get in touch and I can point you in the right direction.

I suggest you buy a copy of Atkins, Physical Chemistry. It provides a good introduction to almost all of the topics covered in your course. It has proven an indispensable tome to many undergraduate chemists. Many other textbooks will depend on your taste and interests (I remember it took me at least 3 different secondhand textbooks before I found a mathematical methods book I found even remotely comprehensible).

- Please hand in your work to my pidgeon hole in Wadham before dinner, two days before the day of the tutorial.
- Only attempt those questions marked as "supplementary" once you have worked on all the others.

Note for 2005/2006:

This is my first year hear in Oxford and although (luckily for you) I know a fair bit of Physical Chemistry, I am still learning how your lecture course is taught. If there's any portion of the course you feel particularly weak with, or anything you would like to cover, come and see me and I'll see what we can do.