Instructor: Dr. Dean B. Atkinson (Dr. A.)
SRTC - 476, phone (503) 725-8117, email AtkinsonD@pdx.edu,
http://chem.pdx.edu/~atkinsdb/teach/223 and D2L (except email)

Office Hours: Monday, Tuesday, Wednesday 9:30 a.m. - 10:30 a.m. (or by appointment)


Grading: Weekly Online Homework worth 100 points – see below
Two Midterms (see schedule below) worth 100 points each
Final Exam (Wednesday, June 13, 2012, 12:30 - 2:20 p.m.) worth 150 points
Course Participation (clickers) worth 50 points

Grades are based on the total of the above categories. The following scores will guarantee the letter grade shown, however I may choose to revise the breakpoints downward at my discretion and I will differentiate (+’s and –‘s) within the letter grades at my discretion:

[(A) 90%, (B) 80%, (C) 65%, (D) 55%]

Required Access to Online Homework System: Mastering Chemistry, Pearson, www.masteringchemistry.com. If you did not receive an access code with your book, you can purchase one at the website under the Support Tab followed by the FAQs for Students Tab. To register for this course, enter my course code, MCATKINSON31831.
Note: Completion of CH 286 (Workshop) is acceptable in lieu of Mastering Chemistry.

Required Purchase and Use of Clickers: We’ll be using Turning Technologies’ clickers or Responseware (clicker-less) systems. You’ll get points for coming to class.

Schedule (subject to change - except exams)

M April 2 Introduction / Ch. 15 Acids and Bases, pH
W April 4 Ch. 15 Weak Acids and Bases
F April 6 Ch. 15 Acid/Base Solutions

M April 9 Ch. 16 Buffers
W April 11 Ch. 16 Titration Curves
F April 13 Ch. 16 Acid/Base Equilibrium Problems

M April 16 Ch. 16 Solubility
W April 18 Ch. 16 Solubility Equilibria
F April 20 Ch. 16 Complex Ion Equilibria
Wednesday June 13, 2012 12:30 a.m. – 2:20 p.m. FINAL EXAM (note change from regular class time – if you come at 2 p.m., you won’t have much time to take the test)

THE TEXT is Chemistry: A Molecular Approach by Nivaldo J. Tro. It looks like a good treatment (this is the first time I’ve used it) and should be a useful reference for your future chemistry career. (Not a good idea to sell your science books back – you may need them again!) We will be skipping around a bit, so I will try to give you a feeling for the sections of the text that we will be covering in the next lecture during each class meeting. From experience, we find that a good study technique is to quickly read over the sections of the text which will be covered before the lecture and then go back and read it again more carefully at some point afterward.

THE HOMEWORK is administered online – you’re pretty used to the drill already, if you took the other two sections here, if not, come and talk with me about strategies. The big advantages of online homework are the instant feedback you get and the ability for you to do more problems than we could ever stand to grade. The grading scheme I use is mostly participation based (you get credit for making an effort on the problems) but be forewarned that not doing the homework will probably result in poor performance on the exams.
**THE CLICKERS** (or Responseware clicker-less version) are classroom response system tools. I’ve been dying to use these since I started teaching and this is the first time I’ve been pretty convinced that the technology is good enough and the price is low enough to make it worthwhile. The idea is that you won’t just sit there like a sponge trying to absorb information, but that you’ll take an active role, even in class (hopefully you always do outside of class). It also gives me some indication if the lecture has gone completely off the rails and people have no idea what I’m talking about. As with any innovation, I think it could be great if it’s done well, and I’m excited to try to do so. I plan to use it in my CH 320 Quantitative Analysis lecture in the Fall, so if you are thinking about taking that, you should hold on to the clicker or buy at least a year license on the Responseware.

**THE TWO MIDTERMS** are in-class, 55 minute exams. You will be allowed to bring a one-page set of “crib notes” containing any information that you find useful.

**THE FINAL** will be one hour and 50 minutes, in-class during Finals Week. You may use two pages of notes. No one that skipped the Final Exam has ever passed this class, as far as I know.

**ALL EXAMS** will be primarily short answer, problem solving based written tests. You’ll be allowed your crib sheets, a calculator, a pencil, and your brain. Using someone else’s brain will be harshly penalized. We will spot check student IDs during the test, so try to remember to bring yours on those days. Obviously, if the name on the test doesn’t match the name on the ID, there will be serious consequences for both people.