Chemistry 456, Winter 2008
Thermodynamics

University of Washington Department of Chemistry

Instruction Hours: M, W, F 10:30 - 11:20 a.m. Bagley 260
Tutorial Hours: Thursday 10:30 - 11:20 a.m. Bagley 260
Tuesday 2:30 - 3:20 p.m. Bagley 261

Course Web Site: http://courses.washington.edu/bhrchem/

Instructor: Professor Bruce H. Robinson
Bagley, 212, 206-543-1773, robinson@chem.washington.edu
Office Hours: Fri 1:00 – 2:00 p.m. and by appointment.

Teaching Assistant:

Lewis Johnson: Bagley 208 lewisj@u.washington.edu
Office Hours: Tuesday (To be set later)

Text: 456 Engel or Engle and Reid, "Physical Chemistry"

Recommended: Zumdahl, Chem. 152 textbook. Chapters 5, 9 and 10.

Class Reading Schedule (Approximate)

Week	Reading in the Text
1	Chapter 1 and 2
2	Chapter 3
3	Chapter 4
4	Chapter 5
5	Chapter 6
6	Chapter 7
7	Chapter 8
8	Chapter 9
9	Chapter 10
10	Chapter 11

Holidays: No class Monday 1/21/08 and Monday 2/18/08
Examinations:
First Exam: Friday, Feb 1, 2008 (100 points)
Second Exam: Friday, Feb 29, 2008 (100 points)
Final Exam: Monday, 3/17/08, 8:30-10:20 (200 points)

Homework: Worth 100 points total. Due Tuesday and Friday to be turned into the TA. Place them in Lewis Johnson's mailbox or at another location at his direction by 5:00 p.m. on the appointed day. Any additional arrangements will need to be made directly with the T.A. Assignments will be made from each lecture and posted on the web site. Answer keys will be posted weekly on the web site.

There is nothing more important in the course than doing the homework. Do not just do problems to get something turned in and get a few points; this is your opportunity to discover when you don't know something and to seek help from fellow students, TAs, teachers, texts etc. The goal of a homework problem is not the answer; the goal is to understand the material and how you get the answer. I know of no other way to know whether I understand the material than to test myself with problems.

I also recommend that you rewrite your notes after each lecture into a different notebook to be sure that you indeed understand what was said. Use this as an opportunity to expand on what was left out of lecture but alluded to. Mark parts of the lecture that were unclear or confusing and use the class and tutorial time as an opportunity to clarify what is confusing. If you are confused, please assume that others are similarly perplexed. If I feel it is of general concern we can go over it, otherwise I can suggest that we meet individually.

I am assuming that you had Chemistry 152; and that the text for that course was Zumdahl's "Chemical Principles". Reviewing the material in there would be very valuable for this course. In particular Chapter 5 on ideal gasses, and 9 and 10 on the first and second laws of thermodynamics, will be of fundamental importance in developing the ideas of energy, heat, work, entropy and free energy.