

CHEM 2B
Honors General Chemistry
Syllabus Winter 2009

Lecture: Wednesday and Friday from 3:00 – 4:15 pm

Location: PHELP 3519

Instructor: Professor Rick Dahlquist

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Office hours: Monday and Thursday from 11 – 12 pm in Chem 1126C or by appointment.

Course webpage: <http://www.chem.ucsb.edu/coursepages/08winter/2B-Dahlquist/index.shtml>

Course Objective: Chem. 2B is the second quarter of the three-quarter Honors Freshman Chemistry course. This class focuses on various topics in Physical Chemistry including The Laws of Thermodynamics, Electrochemistry and Chemical Kinetics, This is some of the most difficult material in first year chemistry.

Course requisition: Chem 1A or Chem 2A

Textbook: Chemical Principles, the Quest for Insight, Atkins & Jones. WH Freeman, 4th edition

Examination:

- **Midterm 1:** Wednesday Feb 4, 2009
- **Midterm 2:** Friday March 6, 2009
- **Final exam:** Saturday March 21, 2009 from noon-3 pm
- Note this is the last day of finals!!!

Note: *No large screen and programmable calculator is allowed during the exam. You can use only a basic scientific calculator. Check with me if you are not sure your calculator is allowed or not. You can buy one at Staples for ~ \$10.*

Homework: There will be nine problem sets given in class. The key to learning this material is to work as many problems illustrating the concepts as possible.

Grading: Your course grade will be based on problem sets, two midterms, and a final exam.

Problem sets	20%
Midterm 1	20%
Midterm 2	20%
Final Exam	40%

Approximate Lecture Schedule

Weeks 1-2 (Jan 5 – Jan 16):	First Law of Thermodynamics (Chapter 6)
Weeks 3-4-5 (Jan 19 – Feb 6):	Second and Third Law of Thermodynamics (Chapter 7)
Week 6-7 (Feb 9 – Feb 13):	Electrochemistry (Chapter 12)
Weeks 8-9 (Feb 16 – Feb 27):	Chemical Kinetics (Chapter 13)
Week 10 (Mar 2 – Mar 13):	review

Online Resources: <http://www.chem1.com/chemed/genchem.shtml#B1>