

CHEMISTRY 342 - Fall, 2009
PHYSICAL CHEMISTRY I

Lecturer: Prof. Preston T. Snee, 4176 SES, 3-2566, sneep@uic.edu

Office hours: Tuesday and Wednesday, 12-1

<http://ramsey1.chem.uic.edu/sneep/www/chem342/>

Graders: The grader for this course is: Yang Cui, vmbncy@gmail.com

Office hour: 3:30 - 4:30, 274 SES

Textbook: Ira Levine, *Physical Chemistry*, 6th Edition, McGraw-Hill.

Prerequisites: Grade of C or better in MATH 181, PHYS 142, MATH 210 (or concurrent registration).

Lectures: There will normally be four lectures per week: Monday, Wednesday, and Friday 2:00-2:50 in Room C003 in Learning Center C and Friday 3:00-3:50 also in the same location. The second Friday lecture will focus on problem solving, and students are encouraged to suggest problems for discussion. New material may also be presented in the second Friday lecture. The subject matter of each lecture and the corresponding pages in the textbook are listed in the calendar.

Students with disabilities who require accommodations for access and participation in this course must be registered with the Office of Disability Services, which may be reached at (312) 413-2103 (voice) or (312) 413-0123 (TTY).

Homework: A problem set will be assigned once every week, and will be due one week later. Solutions will be posted on-line. Late papers will not be accepted.

Exams: There will be three hour exams during the semester. The first hour exam will deal with the properties of gases and the First Law. It will be held on **Friday, Sept. 23**. The second hour exam will cover the Second and Third Laws and phase states. It is scheduled for **Friday, Oct. 30**. A third hour exam is scheduled **Nov. 20** on phase transitions. The final will cover all discussed materials. It will be held during finals week.

Grades: The grade for the course will be calculated as follows:

Final 300 points

Hour exams 300 points

Problem sets 100 points

Quizzes 50 points

If a student misses an hour exam but can provide a justifiable reason for his or her absence, the grade for the missed exam will not be included in the course average.

Makeup exams will not be given. Incompletes will be given only for serious and documented reasons, such as illness and family emergencies.

Academic Honesty: In all work (examinations, quizzes, and homework problems) you must adhere to the guidelines regarding academic honesty as described in the *UIC Student Handbook*. Academic dishonesty will not be tolerated! A student who will be caught and proven to have committed an act of academic dishonesty on any homework set, quiz or examination will automatically fail the course. The dishonest student will be reported to the Head of the Chemistry Department and to the Dean of the School of Liberal Arts and Science.

Attendance: Attendance and participation in all lectures is mandatory. All of the material covered during class lecture periods and in discussion sessions is examinable. The use of cellular phones and palm pilots or other such devices is not permitted during lectures, discussions and examinations. Please do not bring food or drinks.

Survival Guide: Chemistry 342 is a rigorous course covering the fundamentals and applications of Thermodynamics. This course involves logical reasoning and quantitative problem solving to a greater degree than most of the other courses you have taken. The only way to succeed in this course is through hard work. You must keep up with the work everyday, because succeeding topics build on and require an understanding of what was covered before. Here is what I expect from you:

1. Get to class on time and take careful notes.
2. Every two weeks reread all your notes from start to finish. If you do this, studying for tests and the Final Exam becomes a very simple exercise.
3. Go through the textbook to find the relevant reading material. As you read work through the mathematics and the examples provided by the author. Your goal is to understand not to memorize!
4. Work on the homework assignment. Start working on the homework assignment as soon as you receive it. It is impossible to do the entire assignment the night before it is due. The grader is not allowed to provide solutions to the homework problems before the due date of the assignment.
5. Along with reading your notes every two weeks, redo the homework problems that you missed. Don't just look at the solutions, rewrite the problem from scratch and see if you can do it without notes. You'll be surprised how often, even when you have looked over the answer just moments before, that you still can't answer the problem. Examine the solution repeatedly till you can answer the question "blindfolded".