

CHEMISTRY 342 - Spring, 2012
PHYSICAL CHEMISTRY I

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

Office hours: Tuesday and Wednesday, 12-1

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

Graders: The graders for this course are: TA1 and TA2, whom will be named later.
Office Hrs: .

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 be four lectures per week: Monday, Wednesday, and Friday 2:00-2:50 in Room 209 of Burnham Hall 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; this depends on the direction of the wind and the current temperature in Nova Scotia, Canada. 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 given that the solutions have been posted. In the history of this course, students that do not turn in homework assignments on time generally have to repeat Chem342. Don't be such a screw-up.

Exams: There will be three hour exams. The first hour exam will deal with the properties of gases and the First Law of thermodynamics. It will be held on **Friday, Feb. 10**. The second hour exam will cover the Second and Third Laws. It is scheduled for **Friday, Mar. 16**. A third hour exam is scheduled **Apr. 13** on phase transitions and whatever else we talked about. The final will cover all discussed materials. It will be held during finals week, or sometimes thereabout (don't worry so much).

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 unless I feel like it, which I probably will. Incompletes will be given only for serious and documented reasons, such as illness and family emergencies and catastrophic explosions.

Chemistry as a Minor: This course is one of the options available for students who wish to get a minor in chemistry. If you are planning on a minor, other requirements must also be met. For example, you must get half of the required hours at UIC (i.e., 9 hours if you are taking 342, 10 hours if you are taking 314). In addition, your GPA in your courses in chemistry must be a 2.0 overall and a 2.0 in your UIC classes. As other issues may apply, you are advised to contact the Department Director of Undergraduate Studies Donald Wink (dwink@uic.edu) in Chemistry or Greg Keller (gkelle1@uic.edu) in Biology to review your coursework to ensure that you are, in fact, on track for a minor.

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 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 uses of iPhones, iPads, or anything are not permitted during lectures, discussions and examinations. Please do not bring food or drinks unless you bring one for me.

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. Don't screw with my tomato plant (his name is Ralph). I love that damn thing.
2. Get to class on time and take careful notes.
3. 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.
4. 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!
5. 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.
6. 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".