

Honors Physical Chemistry I
Chem 3890
Course information

Last updated: November 1, 2011

Instructor: GREGORY EZRA gse1@cornell.edu Tel: 255-3949.

Office hours: Wednesday, 2:00–4:00 pm; Thursday, 2:00–4:00 pm, G12 Baker Lab.

Lectures: MWF 9:05–9:55 am, 255 Olin Hall.

Course webpage: <http://www.chem.cornell.edu/gse1/chem3890.html>

Homework assignments, course handouts and announcements will be posted here.

Textbooks:

Introduction to Quantum Mechanics, 2nd edition, by D.J. Griffiths

Physical Chemistry: A Molecular Approach, by D.A. McQuarrie & J.D. Simon (University Science Books). <http://www.uscibooks.com/mcq.htm>

The book by Griffiths is a very readable introductory text on Quantum Mechanics. We will also cover material from the Physical Chemistry text by McQuarrie & Simon. (You will need this book for Chem 3900.)

Teaching assistants:

SIDDARTH CHANDRASEKARAN sc974@cornell.edu Office hours: T 3:30–5:30 pm

MALLORY GERACE mrg224@cornell.edu Office hours: Th 3:30–5:30 pm

DANIEL MOBERG drm255@cornell.edu Office Hours: W 3:30–5:30 pm

MIKE SEGAL mas573@cornell.edu

Mathematica: The problem sets will require the use of Mathematica, a flexible and powerful package that can relieve much of the drudgery of mathematical calculations and computations, enabling you to focus on concepts and results.

If you own a personal computer that runs Windows, Mac OS, or Linux, a license for Mathematica 8 for one academic year can be purchased from CU Software Licensing (<http://cusoftware.cornell.edu/cusoftware/purchase/mathematica.cfm>) or direct from Wolfram Research (<http://www.wolfram.com/products/student/mathforstudents/licenses.html>, Standard or Annual Editions).

Problem Sets: The key to learning physical chemistry is working and thinking about problems. Many students find that they learn and retain more if they discuss challenging problems with one another. You are therefore encouraged to discuss the problem sets with other members of the class; however, every student is responsible for his/her own writeup. Violations will be prosecuted under the Cornell Academic Integrity Code.

For reference, here are the ground rules:

You must personally type every keystroke in your submitted Mathematica workbooks. The only exception to this rule is if you incorporate all or part of one of the notebooks distributed on the class website into your work (as you are free to do). You may not copy and/or edit another student's work and submit it as your own, either in full or in part. You may not jointly edit or compose solutions with another student. The electronic, printed or written exchange of solutions (including but not limited to Mathematica workbooks and code) is expressly prohibited. *Both the sender and the receiver will be prosecuted under the Cornell Academic Integrity Code.*

Problem sets will be due in lecture. Late problem sets will not be accepted. Solutions to the problem sets will be posted on the web soon after the problem set is due.

Recitations: Recitations are intended to hone your problem solving skills. No new physical chemistry will be introduced in recitation, but recitations will help you master the lecture material and solve the assigned problems. Your attendance is important.

Section 1 Mallory M 1:25–2:15 pm Baker 335

Section 2 Siddarth T 9:05–9:55 am Baker 335

Section 3 Dan W 1:25–2:15 pm Baker 335

Exams: There will be two equally weighted evening prelims. No make-up prelims will be given. If an exam is missed because of illness or a pre-approved absence, an estimated grade will be assigned on the basis of the other examinations.

Prelim 1 Thursday, October 6. Baker 200 7:30–9:00 pm

Prelim 2 Tuesday, November 15. Baker 200 7:30–9:00 pm

If you think that a mistake has been made in the grading of one of your exams, please turn the exam in to one of the TAs within one week of its return to you with a *written statement* describing the mistake.

Final exam: Thursday, December 8, 2:00–4:30 pm. Rockefeller Hall 201 Schwartz Aud

Grading: The final course grade will be determined with the following weights:

Preliminary exams 50 %

Final exam 30 %

Homework 20 %

Anticipated median grade B+