CARNEGIE MELLON UNIVERSITY  
Department of Chemistry  
09-107: Honors Chemistry  

Syllabus Fall Semester, 2001

Lectures: Tuesday, Thursday 3:00 – 4:20 pm in Doherty Hall 2105

Workshops: Wednesday 6:30 - 8:20 pm in Doherty Hall 2122

Web site: http://www.chem.cmu.edu/courses/09-107/
All course handouts are available on the web site, along with a list of assignments and upcoming due dates.

Instructors:  
David Yaron  
Mellon Institute 501  
yaron@andrew.cmu.edu  
268-1351

Nadine Fattaleh-Diggs  
Doherty Hall 2201  
f2c@andrew.cmu.edu  
268-1871

Office Hours: To be announced and posted on web site.


Molecular modeling kits should be purchased from Ellen Reichenbach in Doherty Hall 2114 ($14 check or money order made out to Department of Chemistry).

Workload: It is assumed that you will spend at least 10 hours per week on this course: 5 in lecture and recitation, and at least 5 outside the classroom.

Group work: You are encouraged to work in groups on the graded homework assignments. This means you can work together on the problem, but you must write your own solution.

On your homework, you must list the members of your work group.

*Note: Every member of the group must be involved in finding the solution. Group work does not mean copying the answers of other members in your group.*
Grading: The final grade will be based on the following point distribution.

Homework/workshops
There will be 250 pts in graded homework and workshop activities. The lowest two scores will be dropped.

250pts

Exams:
There will be 3 one-hour exams.

400pts
Tentative Dates: September 26
October 31
December 5
and a comprehensive final exam.

All exams will be graded on a 100pt scale. The 400pts used in determining the final grade will be obtained by writing down the scores for each of the hour exams once, and the score for the final exam three times:

exam1 exam2 exam3 final final final

The lowest two scores in the above list will then be dropped. If your final is your highest score, it will count for 75% of your exam grade. If you do not do well on the final it will count for only 25% of your exam grade.

The course will be graded on an absolute scale, such that all students in the course may receive an A if they perform A quality work. The point ranges will be such that 90% will ensure an A, 80% a B, etc. We may also lower these cutoffs, for instance, assigning 87-100% a grade of A.

Makeup exams: NOTE: No make-up exams will be given. Since the grading scheme is designed to allow low scores to be dropped, a missed exam will not be counted in the final average.

Tentative List of Topics

Stoichiometry
Atomic Structure and Theory
Periodic trends
Molecular Bonding Theories
Intermolecular Interactions

Solid State Chemistry
Transition Metal Chemistry
Biochemistry
Gases and Phase Transitions