

CHEMISTRY 368
Quantum Chemistry and Molecular Spectroscopy
Spring 2004

"Apparently there is colour, apparently sweetness, apparently bitterness; actually there are only atoms and the void"

Democritus, 420 B. C.

Instructor: Dr. Peacock-López, see me at class, in the laboratory or sign up for an appointment (Room TCL 212).

Material: *Physical Chemistry*, D. A. McQuarrie, and J. D. Simon, University, Mill Valley, CA, 1997. Chapters 1-14.

A laboratory manual will be issued.

Copies of *Experiments in Physical Chemistry*, D. P. Shoemaker, C. W. Garland, J.I. Steinfeld, J. W. Nibler, McGraw-Hill, 4th Ed., 1981, may be borrowed from me..

Grades: Midterm exam (Take Home).

<u>Monday March 15</u>	20%
Laboratory Reports	30%
Problem Sets	20%
Final Exam (Take Home)	30%

Computers: Several large computational problems will be performed in conjunction with laboratory experiments. Students are encouraged to take advantage of the personal computers at Williams for word processing, data analysis and presentation, and problem solving.

Honor Code: The Williams College Honor Code applies in Chemistry 368 in the usual manner to the hour test and final exam. Students are free to discuss with each other the problem sets and laboratory reports, but **the written material must be your own**. The data given in your laboratory report must be the data that you and your partner collected in the laboratory. References to all literature explicitly used in problem sets and laboratory reports must be properly noted.

Class

Attendance: New material will be introduced at every class and it is very strongly recommended that you attend and take careful notes. Classes will begin promptly, often with important announcements. Be prompt. Should you have to be absent, get class notes from someone else. There is usually a marked correlation between the number of classes you attend and your grade in the course.

Laboratory
Attendance:

If necessary to be absent from a regular laboratory period, obtain an explanation from the office of the Dean in writing. Please try to make up within the same week. Please note that **laboratory reports are due two weeks after completion of the experiment.**