 January 2006

Chemistry 131, Principles of Chemistry I
Daily Schedule, Spring 2006

Readings are from the text, *Chemistry, 8th Edition* by Raymond Chang. Answers to the even-numbered problems are given near the back of the book beginning on page AP-1. Complete solutions to the even-numbered problems are given in the *Student Solutions Manual* by B. J. Cruickshank and R. Chang. In the list of assigned problems below, numbers are in italics if no answer is provided; most of these are *Review Questions* (which are usually answered in the reading).

Worksheets are available on the web (http://spiepho.sbc.edu/worksheets/). Please print these out and bring them to class on the day they are assigned.

NOTE: Unless otherwise indicated, *Challenge Problems* may be worked *as a group of students from our class* (but with *no* help or assistance of any type from non-class members). *Challenge Problems* should be handed in at the beginning of the class period in which they are due. Each member of a group should turn in their own paper; the names of all members of the group must be listed on each paper that involves group work.

Daily Assignments

Th 1/19
Read: Guided Tour, Media, A Note to the Student; Chapter 1, The Study of Change, 1.1 – 1.8 (The scientific method, hypothesis, law, theory, substances, mixture, elements, compounds, physical and chemical properties, measurement, SI units and prefixes, scientific notation, significant figures).
Worksheet: *Chapter 1, Scientific Notation, Significant Figures, and the Factor-Label Method of Solving Problems.*

F 1/20
Read: Chapter 1, The Study of Change: 1.9 (Dimensional analysis in solving problems).
Problems: The Scientific Method: 1.4; Classification and Properties of Matter: 1.12, 1.14, 1.16, 1.52; Measurement: *1.17*, *1.18*, 1.22, 1.26; Handling Numbers: *1.28*, 1.30, 1.32, 1.34, 1.36; Dimensional Analysis: 1.38, 1.40, 1.42(c), 1.46, 1.50, 1.54.

M 1/23
Read: Chapter 2, Atoms, Molecules, and Ions: 2.1 – 2.5 (Origins of atomic theory, atomic structure, radioactivity, Rutherford experiment, atomic number, mass number, isotopes, molecules, ions).
Problems: Structure of the Atom: *2.1*, 2.8; Atomic Number, Mass Number, and Isotopes: *2.10*, *2.11*, *2.12*, 2.14, 2.16, 2.18, 2.72; The Periodic Table: *2.20*, *2.21*, *2.22*, 2.24, 2.26, 2.74, 2.78, 2.80.

W 1/25
Read: Chapter 2, Atoms, Molecules, and Ions: 2.6 – 2.7 (Chemical formulas, naming ionic compounds, naming molecular compounds, naming acids and bases, hydrates).
Problems: Molecules and Ions: *2.28*, *2.30*, 2.32, 2.34, 2.36, 2.60, 2.62; Chemical Formulas: *2.39*, *2.40*, *2.42*, 2.44, 2.46, 2.64, 2.66.