

SYLLABUS

CHEMISTRY 107
SECTION 03

GENERAL CHEMISTRY I
10:00 am - 10:50 am, MTWTh

FALL 1998
CNSB 100

Lecturer: Dr. Stephen Fox, CNSB 205, tel: 342-1838, e-mail: chfox@alpha.nlu.edu
Office Hours: 8:00 am - 10:00 am, MTWThF, or by appointment
Text: *Chemistry, The Study of Matter and Its Changes*, Second Edition, Brady and Holum

<u>Chapter</u>	<u>Topics</u>	<u>Tests (date)</u>
1,2,3,	Introduction, Units Atoms, Molecules, Ions Stoichiometry	#1, 100 pts (9/24/98)
4,5,6,	Acids-Bases, Thermochemistry Redox Reactions, Atomic Structure	#2, 100 pts (10/15/98)
7,8,9	Chemical Bonding Molecular Structure Periodicity	#3, 100 pts (11/12/98)
10,11,12	Gas Laws, Intermolecular Forces Solutions, Colligative Props. Comprehensive	#4, 200 pts (12/14/98) (8:00 am - 9:50 am)

Other Dates: Please see Fall 98 Schedule; e.g. 11/6/98 -- "Drop Date"

Grading:

85.0 - 100%	425-500 pts	A
75.0 - 84.9%	375-424 pts	B
60.0 - 74.9%	300-374 pts	C
50.0 - 59.9%	250-299 pts	D
0.00 - 49.9%	0-249 pts	F

The four tests will comprise various types of questions, including some multiple choice, descriptions, and calculations. A calculator, therefore, is required, and it should feature logarithms, exponents, reciprocals, etc.. Sharing of calculators will not be permitted during a test. The three 100 point tests, and the Final, all count toward the final grade; the lowest score will not be dropped. The Final (test #4, 200 points) will be comprehensive, although biased toward material from Chapters 10,11, and 12. Grades will be assigned from a composite score from 500 possible points. Make-up tests will only be given at the end of the semester, and only for excused absences; an excused absence requires authentic documentation.

Objectives

- To introduce the idea of matter, its phases, its structures
- To introduce and distinguish the constituents of matter: atoms, molecules, ions
- To introduce measurement by units, and to interconvert units
- To utilize the Scientific Method
- To introduce the notion of a "chemical reaction"
- To introduce the notion of energy exchange accompanying a chemical reaction
- To introduce the Periodic Table
- To introduce electronegativity
- To introduce Lewis structures
- To rationalize properties of solids, gases, liquids, and solutions, based on attractive forces