C. OUTLINE OF MAJOR CONTENT AREAS
1. Acid/Base Chemistry and Buffers
2. Elements, Atomic Theory and The Periodic Table
3. Gas Properties and Laws
4. Ionic and Covalent Compounds
5. Measurements, Significant Figures and Metric System
6. Most content has accompanying Lab Component
7. Polarity and VSEPR Theory
8. Stoichiometry
9. Thermodynamics, Reaction Rates and Equilibrium
10. Writing, Balancing, and Identifying Chemical Reactions
D. LEARNING OUTCOMES (General)
   1. The learner will demonstrate basic knowledge of organic chemistry with emphasis on functional
groups, structures, and reactions.
   2. The learner will exhibit knowledge of inorganic chemical reactions, chemical
quantities/concentrations and acids/bases.
   3. The learner will demonstrate knowledge of scientific measurement, matter and change, the periodic
   table, compounds and their bonds, and gases.

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies
   Goal 03 - Natural Science
   1. Demonstrate understanding of scientific theories.
   2. Formulate and test hypotheses by performing laboratory, simulation, or field experiments in at least
two of the natural science disciplines. One of these experimental components should develop, in
greater depth, students' laboratory experience in the collection of data, its statistical and graphical
analysis, and an appreciation of its sources of error and uncertainty.
   3. Communicate their experimental findings, analyses, and interpretations both orally and in writing.

F. LEARNER OUTCOMES ASSESSMENT
   As noted on course syllabus

G. SPECIAL INFORMATION
   None noted