• CHM2047: One-Semester General Chemistry (Kleiman)

The course is designed for entering (not transfer) students who wish to move more quickly into advanced course work. Topics include electronic structure and bonding, gases, liquids, solids, kinetics, equilibria, acids and bases, thermodynamics, oxidation-reduction, metals and non-metals.

- Front Matter
- 1: Introduction
- 2: Describing Quantum systems
- 3: Atoms, Orbitals and Electronic Configurations
- 4: Periodic Trends in Elements and Compounds
- 5: Molecular Structure and Geometry
- 6: Understanding Molecules with QM
- 7: Models for Polyatomic Molecules
- 8: 8 Coordination Chemistry
- 9: Gases
- 10: Thermochemistry
- 11: Spontaneous Processes and Thermodynamic Equilibrium
- 12: Chemical Equilibrium- Thermodynamics and General Considerations
- 13: Solutions
- 14: Chemical Equilibrium in Solutions
- 15: Chemical Kinetics
- Back Matter