

(BS=3.5,ET=0.0,MA=0.0)

Scope: 2013-1**Offerings:**
2014-1 2015-1

This course features an in-depth study of main group and transition elements and their compounds, with emphasis on chemical bonding and both atomic and molecular structures. The fundamentals of quantum chemistry to include the valence bond and molecular orbital theories as applied to inorganic chemistry are studied. An introduction to symmetry/group theory, coordination chemistry/crystal field theory, chemistry in aqueous and nonaqueous solutions, and organometallic compounds are also included in the course. Chemical principles and spectroscopic techniques will also be emphasized. Journal articles from the chemical literature are used to supplement the text with topics of current interest.

Lessons: 40 @ 55 min (2.500 Att/wk) **Labs:** 7 @ 120 min**Special Requirements:** None**Prerequisite(s):** CH384 -Or -CH481