Advanced Inorganic Chemistry I (CHE 442)

Potential Instructors*	Dr. Shabnam Hematian; s_hemati@uncg.edu Dr. Jerry Walsh; jlwalsh@uncg.edu
Prerequisites	CHE 342; CHE 406 or CHE 461 are recommended
Corequisites	None
Sample Course Materials	**Textbook:** *Inorganic Chemistry* by Catherine E. Housecroft and Alan G. Sharpe *Inorganic Chemistry* by Mark Weller, Tina Overton, Jonathan Rourke, and Fraser Armstrong
For Whom Planned	CHEM and BCHE majors
Topical Outline§	▪ Basic Concepts: Atoms ▪ Basic Concepts: Molecules ▪ Introduction to Molecular Symmetry ▪ Bonding in Polyatomic Molecules ▪ Acids and Bases ▪ Reduction and Oxidation ▪ *d*-Block Metal Chemistry: General Consideration ▪ *d*-Block Metal Chemistry: Coordination Complexes ▪ Crystal Field Theory and Ligand Field Theory ▪ *d*-Block Metal Complexes: Reaction mechanisms ▪ Organometallic Chemistry *vs.* Bioinorganic Chemistry
Notes	

* To request a comprehensive syllabus, you may contact the instructor for your section directly.

§ Subject to change