

CHM 501
Advanced Inorganic Chemistry 1
Spring 2019

Instructor:	Dr. Bill Euler	
Office:	Beaupre 474B	
Office Hours:	Tuesday, 9 – 10:30 a.m.; Wednesday, 10:00 – 11:00 a.m.	
Web site:	https://www.chm.uri.edu/weuler/chm501/index.html	
Grading:	Three hour exams (Feb. 21, Mar. 28, Apr. 25)	300 pts
	Final Exam (May 2)	150 pts
	Occasional Homework	<u>100</u> pts
	TOTAL	550 pts

Tentative Lecture Topics:

Jan. 24	Atomic structure, Electron Configurations
Jan. 29	Term symbols, Screening
Jan. 31	Valence Bond Theory, Lewis Structures, VSEPR, Hybridization
Feb. 5	Weak Interactions
Feb. 7	Symmetry & Group Theory
Feb. 12	Symmetry & Group Theory
Feb. 14	Molecular Orbital Theory
Feb. 19	Molecular Orbital Theory
Feb. 21	Exam 1
Feb. 26	Solid State Structure, Bravais Lattices, Space Groups
Feb. 28	Ionic Bonding
Mar. 5	Ionic Bonding
Mar. 7	Overview of Transition Metal Chemistry
Mar. 19	Ligand Field Theory
Mar. 21	Ligand Field Theory
Mar. 26	Spectroscopy of Transition Metal Complexes
Mar. 28	Exam 2
Apr. 2	Magnetism
Apr. 4	Reactions of Transition Metal Complexes
Apr. 9	Reactions of Transition Metal Complexes
Apr. 11	Organometallic Chemistry
Apr. 16	Organometallic Chemistry
Apr. 18	Catalysis
Apr. 23	Nanomaterials
Apr. 25	Exam 3
Apr. 30	Review
May 2	Final Exam, 11:30 a.m. – 2:30 p.m.