

Day	Date	Homework	In Class Activities	Special Notes
W	Aug 23		Background knowledge probe, 13 Essential concepts, Inorganic ASAP TOC Activity	
F	Aug 25	Read Chapter 1, Chapter 2, Section 2.1, 2.2, Redo your 13 Essential concepts paper	In Class Atomic Orbitals exercise, the Orbitron	**Bring your computers to class**
W	Aug 30	Read Chapter 2, Section 2.3, Finish first literature assignment, Socratic atomic orbital questions (just a few!)	Periodic trends	**Bring your computers to class**
F	Sept 1	Read Chapter 3 (won't do much with 3.4), do worksheet that I gave you on periodic properties, be ready to put some of them on the board	More periodic trends, simple bonding models	
W	Sept 6	Finish periodic trend and bonding problems, review bonding models for some in class practice!	Simple bonding models and applications	
F	Sept 8	Skim Chapter 9, particularly 9.5, I'll be taking a slightly different approach to this material	Understanding coordination complexes and ligands, the advanced version!	
W	Sept 13	Read Chapter 4, Section 4.1, 4.2 Homework: Analyze three more compounds in the current issue of IC the way we did in class (see handout)	Symmetry	

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F	Sept 15	Read 4.3, find symmetry in handout figures	Point groups	
W	Sept 20	Do worksheet on point groups	More point groups and applications of symmetry (the simplified version!)	
F	Sept 22	Read Chapter 5, Section 5.1-5.3	Review of diatomic MO theory (and some symmetry applications)	
W	Sept 27	NO CLASS	ATTEND DEPAUW DIALOGUE	
F	Sept 29	Read J. Chem Ed. Article by Adam Johnson	Intro to polyatomic MO theory	
W	Oct 4	Do MO diagram for square planar CH ₄ for homework!, Re-read sections of paper on lone pairs and hypervalent bonding	How to deal with hypervalent molecules and lone pairs	
F	Oct 6	Work on MO Problem set, turn in by 8 am Monday	MO Practice in class	

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W	Oct 11	Study for midterm	Mid-Term Exam (1 h but can come up to 30 min early if you like)	
F	Oct 13	Read Chapter 9, all sections, but you can skim somewhat	Introduction to Coordination Chemistry	
W	Oct 25	Read Section 10.1, 10.2, 11.1, 6.6	Trends in ligands, HSAB, crystal field theory review	
F	Oct 27	Read Chapter 10, Section 10.3, 10.4 (you can ignore the matrix algebra parts)	Crystal field theory continued and colors of transition metal complexes, introduction to ligand field theory (MO theory)	
W	Nov 1	No new reading	Ligand field theory continued, π donors and acceptors	
F	Nov 3	Supplemental Chapter on Bioinorganic (will email it to you when the textbook rep sends it to me-still nothing we've been back and forth about this several times! If I don't hear back today, I'll find an alternative reading)	Introduction to bioinorganic chemistry, biological ligands	

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W	Nov 8	Watch Tom O'Halloran TEDx Talk Problem Set 3 is due Read bioinorganic paper by Anne Jones for Friday Link to paper Link to supplemental information	Major ideas and fields of study in bioinorganic chemistry	
F	Nov 10	Answer discussion questions for paper discussion	Bioinorganic paper discussion	
M or T	Nov 13 or 14	Read Amy's paper for literature discussion and do discussion questions as indicated	Amy Prieto literature discussion (with Amy Prieto!)	
W	Nov 15	Read Chapter 13 through the end of 13.3.3	Introduction to Organometallic Chemistry and the 18 Electron Rule (with in class worksheet)	
F	Nov 17	Read Chapter 13.4-13.5.2 See Sample 5 Slides About	Modes of bonding in organometallic complexes	
W	Nov 29	Read Chapter 14.1-14.3	Organometallic Reactions and Catalytic Cycles	

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F	Dec 1		Paper Discussion - Methane to methanol	
W	Dec 6	Prepare your 5 Slides About	5 Slides About Presentations	
F	Dec 8	Prepare your 5 Slides About	5 Slides About Presentations	
R	Dec 14 8:30 AM	Study for Final Exam	Final (will include a literature component—paper provided on Dec 8)	