Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
M	**Jan 29**		**What is inorganic chemistry? Asking questions in inorganic chemistry, syllabus**	**Bring computer or device to class**
W	**Jan 31**	Read the syllabus, fill out class survey, do the rest of In Class Activity 1 and submit answers online, buy ebook and lab notebook if you don't have one already, Read Chapter 2 section 2.8 and answer the in text questions	**The periodic table and some basic chemistry concepts**	
R	**Feb 1**	Get lab notebook	**No Lab This Week**	
F	**Feb 2**	Read Chapter 3.1-3.4 and do in text questions, Study element names for Quiz!	**Classifications of compounds, some chemistry basics, nomenclature of ionic compounds**	**Quiz on Element names (see handout, first 5 min of class)**
M	**Feb 5**	Read the remaining sections of Chapter 2 and do the in text questions, work on Chapter 2 Homework questions (all questions due Wednesday by class time), Read Chapter 3.5 and do in text questions. Start working on Chapter 3 Homework questions up to 3.22	**Finish nomenclature: nomenclature of covalent compounds, acids, and hydrates**	
W	**Feb 7**	**Text questions Intro to book due,** Read Chapter 4, Section 4.1, 4.2, up to 4.4.2 and do in text questions	**Introduction to chemical reactions, electrolytes, representing chemical equations, precipitation reactions**	

Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
R	**Feb 8**	Get lab notebook, Read the Lab Syllabus, Lab 1 and do the pre lab assignment	**Laboratory Safety, Check into Lab, Lab 1: An Enigmatic Chemical Conundrum**	
F	**Feb 9**	**Homework questions and text questions, Chapter 3 due, study for quiz!**	**Introduction to chemical reactions, electrolytes, representing chemical equations, precipitation and acid base reactions**	**Quiz on nomenclature and the periodic table (include charges and polyatomic ions)**
M	**Feb 12**	**Homework questions and text questions, Chapter 2 due,** Read rest of Chapter 4 (including added section on complexation reactions) and do in text problems	**Chemical reactions continued (redox and complexation reactions)**	
W	**Feb 14**	Read Chapter 5 (all sections) and Review Chapter 1 (scientific notation and unit conversion!), **Chapter 4 text problems due**, work on Chapter 4 Homework problems	Spectroscopy and light	
R	**Feb 15**	Read Lab 2, do prelab assignment. Write up for Lab 1 is due (1 per group)	**Lab 2: Aluminum into Alum**	
F	**Feb 16**	**Chapter 4 homework problems due** Read Chapter 6 Do review questions on unit conversion and scientific notation in Chapter 1 if you are rusty!	Energy and quantization, Bohr model of the atom and energy levels of electrons	

Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
M	**Feb 19**	Chapter 6 Homework questions (no new reading)	Bohr model continued	
W	**Feb 20**	Chapter 6 Homework, In Class 4 Read Chapter 7, Section 7.1-7.3	Quantum Theory and radial probability diagrams	Bring your computer to class
R	**Feb 21**	Lab 2 equations are due (not turned in yet), Read Lab 3 and do the prelab	Lab 3: Reactions of Cu and Fe	
F	**Feb 22**	Read up through 7.4.1 except 7.4.1.C Homework Chapter 7, spend some time on the website The Orbitron exploring and reading about orbitals	Radial Probability diagrams and Electron Configurations of Atoms, paramagnetic and diagmagnetic atoms	Bring your computer to class Extra office hours 3:30 pm - 5 pm (plus normal 1:40 pm - 3:30 pm office hours)
Su			Q&A Session, Room 374, 3 - 4 pm, additional time afterward for individual questions in my office	
M	**Feb 25**	**Study for Exam!!**	**Exam I in class**	
W	**Feb 27**	Read rest of Chapter 7	Electron configurations of ions, Atomic and Ionic size	

Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
R	**Feb 28**	Lab 2 and Lab 3 due, Read Lab 4 and do prelab	Lab 4: Unknown Ionic Compounds Week 1	
F	**Mar 2**	Complete In Class 5 for Homework, Work on Chapter 7 homework text questions	Introduction to periodic properties, Zeff, charges on ions	**Bring a scientific calculator**
M	**Mar 5**	Re-read the last couple sections of Chapter 4, do in text problems for those sections	Talk about 1st exam,periodic properties con't: Sizes of atoms and ions, ionization energies and electron affinities	
W	**Mar 7**	Exam corrections due, Homework problems on periodic properties, Chapter 7	Periodic properties con't	
F	**Mar 9**	In Class worksheet 6 is due, Read Chapter 8 (all sections!) and do in text questions, do any remaining homework questions in Chapter 7	Go over In Class 6, Introduction to Covalent Bonding	
M	**Mar 12**	Read Chapter 9, Section 9.4 and do in text questions, Homework questions Chapter 8	Meet in regular classroom, but we'll go to the computer lab! Inequivalent Resonance Structures	
W	**Mar 14**	Lab 4 is due, work on homework questions Chapter 9	Lab 5 Part 1, How to Use Spartan	

Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
F	**Mar 16**	Read Section 9.6 and do in text questions	Valence Bond Theory	
M	**Mar 19**	Polarity of Lab 5 Part 2, Make sure you are finishing problems in the text before the exam	Introduction to Valence bond theory, Review for exam, go over polarity questions, In Class questions	
W	**Mar 21**			
F	**Mar 23**	**Study for the exam!**	**Exam II in class!**	
M	**Apr 2**	No Homework!	Intro to solid state structures	**Meet in the computer lab**
W	**Apr 4**	**Lab 5 due in class, Read Chapter 9.6 (Hybridization)**	Valence Bond Theory of molecules with central atoms	
F	**Apr 6**	No new reading	VB Theory Practice	

Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
M	**Apr 9**	Read section in text on MO Theory 9.7.1 and 9.7.2 (, do practice VB theory problems from class list (answers are posted online)	**More VB Practice, Introduction to MO Theory**	
W	**Apr 11**	No new reading, do in text problems	MO Theory	
F	**Apr 13**	Read Chapter 11, Appendix and Chapter 11.1, 11.4,	Ionic and metallic bonding, structures of solids	
M	**Apr 16**	In text problems and finish reading Chapter 11 sections	Properties of solids continued, introduction to band theory	**Quiz on VB Theory and MO Theory**
W	**Apr 18**	Read Section 9.8 (Band Theory), Finish all Chapter 9 problems through 9.47 (except 9.32–I'll try to delete it)	**Band theory and semiconductors, introduction to acid base chemistry**	
F	**Apr 20**	Re-read 15.1-15.8 and do in text problems	**Ka's, Kb's, conjugate acids and bases**	

Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
M	**Apr 23**	**Read: http://www.chemguide.co.uk/inorganic/complexions/acidity.html and Chapter 15.10.3** **http://chemwiki.ucdavis.edu/Analytical_Chemistry/Analytical_Chemistry_2.0/06_Equilibrium_Chemistry/6F%3A_Ladder_Diagrams** **Work on Chapter 11 Homework problems and start the Chapter 15 homework problems** **Lab 8 is due**	**Acid base properties metal ions, ladder diagrams**	
W	**Apr 25**	Study for exam!	Exam 3 in class	
F	**Apr 27**	**Finish reading Chapter 15**	**Predicting the favorability of acid base reactions**	**Extra office hours 12:30 pm - 3 pm**
M	**Apr 30**	**Work on Chapter 15 problems, finish In Class problem that we started at the end of class**	Trends in acidity and basicity, Acid base properties of salts, Redox maybe	

Day	Date	Homework	In Class Activities, Topics, Learning goals	Special Notes
W	**May 2**	**Read Chapter 18, Section 18.3, Do In Text problems**	Introduction to Redox chemistry, electrochemical potentials	
F	**May 4**	**Read Chapter 18, 18.5, do in text problems, start on Homework problems**	Calculating E°rxn, predicting products and reactions, batteries and applications of redox	
M	**May 7**	**Read Chapter 18.6, 18.7, Homework problems**	Batteries	
W	**May 9**	**Read Chapter 21.1-21.2.1.3 Coordination Chemistry, Finish In Class worksheet and Chapter 18 Homework problems!**	Intro to coordination chemistry and types of ligands, identifying charges on ligands and metal ions, Review	
W	**May 16 8:30 am -11:30 am**	**Study for final exam!**	**Cumulative Final Exam (approx 30% new material since the last exam), will be administered in two sessions** with **a break in between**	