

Timeline for Inorganic Chemistry KZ4004, January 19 – February 18, 2015

F (1-12) Lectures, R (1-7) Exercises, L (1-6) Lab sessions

F and R : Ulrich Häussermann

L : Kristina Spektor and Daniel Eklöf

Textbook: “Inorganic Chemistry” 6th edition (by Mark Weller, Tina Overton, Jonathan Rourke, Fraser Armstrong) ISBN: 978-0-19-964182-6 or “Shriver & Atkins’ Inorganic Chemistry” 5th edition (by Atkins, Overton, Rourke, Weller, Armstrong, Hagerman)

Sal **KXXX** för föreläsningar och **MXXX** för laborationer

Day	am 9:15-12	pm 13-17
Jan-19	F1	
20	F2	R1 Symmetry
21	F3	R2 Application of group theory: MOs
22	F4	R3 Application of group theory: spectra
23		

26	F5	R4 Acid-base chemistry
27	F6	R5 Redox chemistry
28	Introduction to lab	L1 Metal ions in aqueous solution, hydroxides, oxides
29	F7	L2 Ag-NH ₃ complexes
30		

Feb-02	F8	L3 HSAB principles
3	F9	R6 Exercises main group chemistry
4	L4 Bromine and IBr ₂ ⁻	L4 Bromine and IBr ₂ ⁻
5	F10	L5 Co(III) complexes
6	L5	L5

09	F11	L6 Synthesis of thermochromic materials
10	L6	L6
11	(reservlab)	(reservlab)
12	F12	R7 Exercises transition metal chemistry
13		

16	Q&A Session	
17		
18	Exam (10-15)	
21		
22		

F1: Atomic and molecular structure (pp 8 – 42)

F2: Bonding in molecules (pp 42 – 61)

F3: Molecular symmetry (pp 179 – 197)

Intro to lab: Physical techniques in inorganic chemistry (pp 223 – 250)

F4: Acids and bases (pp 111 – 144)

F5: Acids and bases contd. Oxidation and reduction (pp 147 – 175)

F6: Oxidation and reduction, contd.

F7: Periodic trends (pp 257 – 272) and principles of main group chemistry

F8: Group 1,2, and 13 elements (excerpts from chapters 11 to 13)

F9: Group 14 and 15 elements (excerpts from chapters 14 and 15) and group 16-18 elements (excerpts from chapters 17 and 18)

F10: Introduction to coordination compounds (pp 179 – 197) and d-block elements (pp 449 – 471)

F11: d metal complexes: electronic and molecular structure, properties (pp 473 – 504)

F12: d metal chemistry: reactions, organometallic chemistry ...

Page numbers and chapters refer to the textbook (5th edition)