

Mineralogy (Geol-250)

Fall 2003

Wk	Date	Topic	Reading	Activity
1	09/03	Course Intro and Department Tour		<i>Classification</i>
	09/05	Mineral Groups & Physical Properties	3-5; 97-113	
2	09/08	Symmetry and External Form	6-12	
	09/10	Crystal Systems and Classes	12-19	<i>Lattices(3)</i>
	09/12	Miller Indices & Forms	19-38	<i>Crystal Systems (5)</i>
3	09/15	Projection	175-180	<i>Miller Indices (4)</i>
	09/17	Native Elements	397-404	<i>Packing & Interstitial Space (1,2)</i>
	09/19	Origin and Composition of Earth		
4	09/22	Crystal Chemistry and Bonding	39-53	<i>Unit Cells</i>
	09/24	Packing and Lattices	53-73	Native Elements
	09/26	Sulfides	378-386	
5	09/29	Oxides & Hydroxides	356-377	<i>Introduction to Optics</i>
	10/01	Light & Color in Minerals	74-75	Sulfides
	10/03	Optical Properties of Matter	114-121	
6	10/06	Isotropic Minerals	121-130	<i>Isotropic Minerals</i>
	10/08	Mid-Term Exam I		Oxides
	10/10	Uniaxial Minerals	151-156	
7	10/13	Uniaxial Minerals	131-136	<i>Uniaxial Minerals</i>
	10/15	Uniaxial Minerals	136-143	Oxides + Halides
	10/17	Biaxial Minerals	143-151	
8	10/20	Biaxial Minerals	156-159	<i>Biaxial Minerals</i>
	10/22	Biaxial Minerals and Review		Carbonates et al.
	10/24	<i>Break</i>		
9	10/27	X-Ray Diffraction	160-168	<i>X-Ray Diffraction</i>
	10/29	X-Ray Diffraction		Nesosilicates
	10/31	Mid-Term Exam II	169-174	
10	11/03	Silicates - Nesosilicates	183-200	<i>X-Ray Diffraction/Petrography</i>
	11/05	Nesosilicates	306-325	Inosilicates
	11/07	Sorosilicates & Cyclosilicates	291-305	
11	11/10	Inosilicates	261-277	<i>SEM-EDS Analysis</i>
	11/12	Inosilicates	277-290	Sorosilicates & Cyclosilicates
	11/14	Phyllosilicates	234-252	
12	11/17	Phyllosilicates	252-260	<i>Mineral Project</i>
	11/19	Tectosilicates - Silica Polymorphs	201-208	Phyllosilicates
	11/21	Tectosilicates - Feldspars	208-225	
13	11/24	Tectosilicates - Feldspars		<i>Mineral Project</i>
	11/26	Tectosilicates - Feldspathoids	225-234	Tectosilicates
	11/28	Thanksgiving		
14	12/01	Halides		<i>Mineral Project</i>
	12/03	Carbonates	326-340	
	12/05	Nitrates, Borates, Sulfates	340-346	
15	12/08	Chromates, Tungstates, Molybdates	346-355	
	12/10	Phosphates, Arsenates, and Vanadates		
	12/12	<i>Sonju Lake Intrusion Conference</i>		<i>Mineral Project Presentations</i>
16	12/15	Mid-Term Exam III		