

Chem 260 Mineral-Water Interface Geochemistry

Week	Topic
1	Review of General Thermodynamics/Water Chemistry
2	Introduction/Mineral Surface Structures
3	Mineral Surface Structures/Surface Functional Groups
4	The Chemistry of Surface Sites/ Surface Charge
5	Surface Electric Chemistry/Double Layer Model
6	Thermodynamics of Surfaces/Surface Free Energy/Laplace Equation
7	Thermodynamics of Surfaces/Kelvin Equation/Gibbs Equation
8	Mid-Term
9	Adsorption/Surface Area/Empirical Models
10	Adsorption/Empirical Models
11	Adsorption/Surface Complexation Models
12	Weathering and Mineral Dissolution/Bulk Methods
13	Mineral Dissolution/Surface Dynamics/Kinetics
14	Mineral Precipitation/Surface Dynamics/Kinetics
15	Project presentation
16	Final