

Lab Midterm Review Topics
History of the Earth - Honors - GLY 302
Spring 2011

Lab 1 - Sedimentary Environments

interpretation of depositional environment from sedimentary features
construction of lithofacies maps and interpretation of paleogeography

Lab 2 - Stratigraphy and Correlation

construction of a stratigraphic column
correlation of stratigraphic columns
unconformities
lithology, sequence of beds, electrical methods
recognition of transgression & regression from changing sediment type

Lab 3 - Relative Geologic Time / Sequence of Geologic Events

determination of the sequence of geologic events from geologic cross-section
Steno's Principles, unconformities, cross-cutting relations, baked contacts

Lab 4 - Absolute Geologic Time / Dating

age of the oceans from rate of delivery of salts by streams
radiometric dating
half-lives, decay curves
Real Example: Rb-Sr dating

Lab 5 - Introduction to Fossils

age determination using fossils
fossil symmetry
solitary/colonial
fossil identification using a key
modes of preservation (hard parts, molds/casts, carbonization, permineralization)