Earth Science (ENV 1050) Topics – 1

Large Scale Features
Big Bang Theory
Chemical Condensation Sequence
Expanding Universe
Galaxy
Light-year
Redshift
Titus-Bode Relationship

Early Evolution of Earth
Convection
Distribution of Elements
Homogeneous Cold Accretion
Iron Catastrophe
Observations of the Solar System
Primitive Atmosphere
Temperature Increase

Atoms
Atomic Mass
Atomic Number
Covalent Bonds
Electron Orbits
Ionic Bonds
Ions: Cations and Anions
Isotopes: Stable and Unstable
Metallic Bonds
Neutrons
Nucleus
Octet Rule
Periodic Table
Protons
Valence Shell Electrons

Minerals
Bohr Theory
Classes of Minerals
Crystal Structure
Density
Mineral Cleavage
Pauling's Rules
Physical Techniques
SiO_4 Tetrahedron
The Rock Cycle
Unit cell

Geological Time
Absolute Dating
Alpha, Beta, and Gamma Decay
Angular Unconformities
Conformable Contacts
Cross-Cutting Relationships
Disconformity
Faults: Normal, Reverse, and Strike-Slip
Gradational Contacts
Half Life
Intrusions: Dikes, Sills, and Batholiths
Nonconformity
Paleontology
Principle of Original Continuity
Principle of Original Horizontality
Principle of Superposition
Principle of Uniformitarianism
Relative Dating
Unconformable Contacts

Topographic Maps
Bar Scale
Contour Lines
Degrees, Minutes, and Seconds of Arc
Latitude
Longitude
Map scale
Map, True, and Magnetic North
Quadrangle
Ratio Scale
Relief
Township, Range, and Section
UTM Coordinate System
Vertical Exaggeration

Nature of Science
Bloom's Taxonomy
Hypothesis
Law
Standard Model (the four fundamental forces)
Theory