**LECTURE SCHEDULE**

*Aug 27-31: Overview of course; what is science? The Earth as a planet*
  Stanley (pg. 244-247)

*Sep 5-7: Earth materials, rocks and minerals*
  Stanley (pg. 13-17; 25-34)

*Sep 10-14: Rocks & minerals continued; plate tectonics.*
  Stanley (pg. 3-12; 35-46; 128-141; 175-186)

*Sep 17-21: Geological time and dating of the rock record; chemical systems, the climate system through time. Quiz 1 (Sep 19; 5%).*
  Stanley (pg. 187-194; 196-207; 215-223; 232-238)

*Sep 24-28: Sedimentary environments and life; paleoecology.*
  Stanley (pg. 76-80; 84-96; 99-123)

*Oct 1-5: Biological evolution and the fossil record.*
  Stanley (pg. 151-173; 47-55)

*Oct 8-12: Precambrian earth and life; the fossil record of early life. Mid-term exam (Oct 12; 15%).*
  Stanley (pg. 247-280)

*Oct 15-19: Early Paleozoic; Cambrian explosion of life on earth; invertebrate animals*
  Stanley (pg. 65-70; 287-311)

*Oct 22-26: The Middle and Late Paleozoic; vertebrate origins and characteristics, fishes, life moves onto land.*
  Stanley (pg. 315-338; 341-358)

*Oct 29- Nov 2: The early Mesozoic; marine vertebrates, dinosaur origins ecology and evolution. Quiz 2 (Nov 2; 5%).*
  Stanley (pg. 373-393)

*Nov 5-9: The late Mesozoic; life in the Cretaceous, birds are dinosaurs, early mammals.*
  Stanley (pg. 403-418; 423-427)

*Nov 12-14: No class on Nov 16, Mass extinctions in the fossil record.*
  Stanley (pg. 308-309; 334-335; 358-361; 394-395; 418-421)

*Nov 19, 26-30: The Cenozoic; mammals and their relatives. Thanksgiving Break: November 20-26*
  Stanley (pg. 429-451)

*Dec 3-7: The late Cenozoic; human evolution, modern extinctions and climate, human impact on the biosphere. Essay due (Dec 7, 20%).*
  Stanley (pg. 453-470; 484-493; 495-511; 514- 519)

**Final (TBA; 20%)**

**LAB SCHEDULE**

*Sep 6: Minerals, Igneous & Metamorphic Rocks*

*Sep 13: Plate Tectonics*

*Sep 20: Sedimentary Rocks & Depositional Environments*

*Sep 27: Sequences of Events & Radiometric Dating*

*Oct 4: Stratigraphy*

*Oct 11: Geologic Map Interpretation & Cross Sections*
Oct 18: Correlation & Lithofacies Analysis
Oct 25: Fossilization & Invertebrates I **Midterm Lab Exam**
Nov 1: Invertebrates II
Nov 8: Invertebrates III
Nov 15: Vertebrates
Nov 29: Biostratigraphy and Fossils in Paleoenvironments
Dec 6: **Final Lab Exam**