**CHAPTER 16 STUDY OUTLINE**

**Darwin’s Theory of Evolution**

16.1 Darwin’s Voyage of Discovery (pg. 450 – 453)

1. Darwin’s Epic Journey
2. Observations Aboard the Beagle
   1. Species Vary Globally
   2. Species Vary Locally
   3. Species Vary Over Time
   4. Putting the Pieces of the Puzzle Together

16.3 Darwin Presents His Case (pg. 460 – 464)

1. Evolution by Natural Selection
   1. The Struggle for Existence
   2. Variation and Adaptation
   3. Survival of the Fittest
   4. Natural Selection
   5. Common Descent

16.4 Evidence of Evolution (pg. 465 – 473)

1. Biogeography
   1. Closely Related but Different
   2. Distantly Related but Similar
2. The Age of Earth and Fossils
   1. The Age of Earth
   2. Recent Fossil Finds
3. Comparing Anatomy and Embryology
   1. Homologous Structures
      1. Analogous Structures
      2. Vestigial Structures
   2. Embryology
4. Genetics and Molecular Biology
   1. Life’s Common Genetic Code
   2. Homologous Molecules
5. Testing Natural Selection
   1. A Testable Hypothesis
   2. Natural Selection
   3. Evaluating Evolutionary Theory