**CHAPTER 12 STUDY OUTLINE**

**DNA**

12.2 The Structure of DNA (pg. 344 – 348)

1. The Components of DNA
   1. Nucleic Acids and Nucleotides
   2. Nitrogenous Bases and Covalent Bonds
2. Solving the Structure of DNA
   1. Chargaff’s Rule
   2. Franklin’s X-Rays
   3. The Work of Watson and Crick
3. The Double-Helix Model
   1. Antiparallel Strands
   2. Hydrogen Bonding
   3. Base Pairing

12.3 DNA Replication (pg. 350-353)

1. Copying the Code
   1. The Replication Process
   2. The Role of Enzymes
   3. Telomeres
2. Replication in Living Cells
   1. Prokaryotic DNA Replication
   2. Eukaryotic DNA Replication