**CHAPTER 11 GENETICS STUDY OUTLINE**

**INTRODUCTION TO GENETICS**

11.1 The Work of Gregor Mendel (pg. 308 – 312)

1. The Experiments of Gregor Mendel
   1. The Role of Fertilization
   2. Genes and Alleles
   3. Dominant and Recessive Alleles
2. Segregation
   1. The F1 Cross
   2. Explaining the F1 Cross
   3. The Formation of Gametes

11.2 Applying Mendel’s Principles (pg. 313 – 318)

1. Probability and Punnett Squares
   1. Using Segregation to Predict Outcomes
   2. Probabilities Predict Averages
   3. Genotype and Phenotypes
   4. Using Punnett Squares
2. Independent Assortment
   1. The Two-Factor Cross: F1
   2. The Two-Factor Cross: F2
3. A Summary of Mendel’s Principles