

Corn Heredity QUIZ Review
GENERAL BIOLOGY LABORATORY BSC 1005L

Note: The following learning objectives are meant to represent a general overview of the BSC1005L - and by no means are to be used as an all inclusive study guide. Requisites for this course include all assigned readings, handouts, written assignments, movies and lectures as well as any extra projects. Students are responsible for all the assigned materials regardless of whether or not said materials have been specifically covered or addressed during class. As always, students with questions regarding assignments, whether covered in class or not, are welcome to come to my office during office hours, or by appointment, or may e-mail me at: arodrigu@broward.edu their questions to me and I will respond in a timely manner. Upon successful completion of this unit, the students should be able to:

1. Each gene in an organism determines a particular trait of the organism. Diploid organisms carry two alleles for each gene. Define the following terms
a) heterozygous b) dominant c) recessive d) homozygous
2. What is the phenotype and genotype of an organism?
3. If (S) represents the dominant allele for smooth kernels in corn, and (s) represents the recessive allele for wrinkled kernels, what is the phenotype and genotype of a kernel of Ss?
4. What are the possible offspring from the cross PPss x ppSS. Use a Punnett square to find the answer.
5. If purple (P) is dominant to non purple (p). What is the probability that the offspring of a cross between Pp x Pp will be non-purple, purple?
6. A man with blood type B, with one parent of blood type O, marries a woman with blood type AB. What will be the theoretical percentage of their children with blood type B? Use a Punnett square to find the answer.
7. Show the Punnett square for a dihybrid cross in corn.