

Genetics 4th Nine Weeks: Scope and Sequence

Content Standards	Dates Taught	% of Students scoring over 70%	Dates Re-taught (Optional)	Formative and Summative Assessments/ (Any Additional Comments Optional)
ACOS (1) Chapter 14 Explain how Hardy-Weinberg principles provide a base line for recognizing evolutionary changes in gene frequency due to genetic drift, gene flow, non-random mating, mutation, and natural selection.				
ACOS (5) Describe inheritance patterns based on gene interactions <ul style="list-style-type: none"> • Predicting patterns of heredity using pedigree analysis • Identifying incomplete dominance, codominance, and multiple allelism 				
ACOS (4) Describe the process of meiosis and the cell cycle, and the hereditary significance of each.				
ACOS (6) Describe the occurrences and effects of sex linkage, crossover, multiple alleles and polygenes factors such as radiation, chemicals, and chance.				
ACOS (8) Explain the structure of eukaryotic chromosomes, transposons, introns, and exons.				
ACOS (2) Describe factors such as radiation, chemicals, and chance the cause mutations in populations.				
ACOS (9) Differentiate among major areas in modern biotechnology, including plant, animal, microbial, forensic and marine Examples: cloning, insulin production, DNA profiling, bioremediation <ul style="list-style-type: none"> • Describing techniques used with recombinant DNA 				
ACOS (10) Explain the development and purpose of the Human Genome Project				
ACOS (11) Describe the replication of DNA and RNA viruses				

