

Course / Strand	Topic	Core Standard	Description	Key Vocabulary	Instructional Strategies and Resources
Biology	Heredity	HS.SC.B.H.1	Cellular genetics	DNA, nucleotide, adenine, guanine, cytosine, thymine, base pairing, double helix, nucleotide, transcription, translation, The Human Genome project, peptide bonds	
Biology	Heredity	HS.SC.B.H.2	Structure and function of DNA in cells	RNA, RNA polymerase, transcription, translation, codon, anticodon, polypeptide, ribosome,	
Biology Biology	Heredity Heredity	HS.SC.B.H.3 HS.SC.B.H.4	Genetic mechanisms and inheritance Mutations	transformation, radioactive markers, gene mutation, translocation, selective breeding, polyploidy, genetic engineering, selective breeding gene mutation, chromosomal, mutation, point mutation, frameshift mutation, deletion, duplication, inversion translocation	
Biology	Heredity	HS.SC.B.H.5	Modern genetics	incomplete dominance, sex-linked, monohybrid, punnett square, independent assortment	
Biology	Evolution	HS.SC.B.E.1	Mechanisms	evolution, theory, fossils, acquired traits, inherited traits, gene pool, directional selection, stabilizing selection, disruptive selection, hardy-weinberg principle, genetic equilibrium, geographic isolation	
Biology	Evolution	HS.SC.B.E.2	Speciation	mutation, genotype, phenotype, natural selection, selective pressures	
Biology	Diversity and Interdependence of Life	HS.SC.B.DI.1	Biodiversity	kingdom, phylum, class, order, family, genus, species, archaebacteria, eubacteria, protista, fungi, plantae, animalia	
Biology	Diversity and Interdependence of Life	HS.SC.C.DI.2	Ecosystems	food chain, food web, trophic levels, biomass, biomes, biomagnification, biogeochemical cycles	

Biology Biology	Diversity and Interdependence of Life Cells	HS.SC.D.DI.3 HS.SC.C.C.2	Loss of Diversity Cellular processes	population density, immigration, emigration, logistic growth, exponential growth, carrying capacity, invasive species, native species photosynthesis, cellular respiration, chloroplasts, chlorophyll, mitochondria	
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