



Guthrie Public Schools

Course: Biology I

Grade Level: 10th Grade

Biology I Curriculum Map

Week	Pass Standard/ Course Objectives	Content/ Process Pass Skills	Assessment	Activities/ Resources	Specialized Vocabulary
1	Orientation/ Why do Biology?	P1.3		pp. 20-25, Lab: Metric, Lab Safety, Lab Equipment Identification	
2	Safety/ Scientific Method/ Characteristics of Life/ Microscope/ Field of View	P1.1-.3, P3.1-.5, P4.1-.8, P6.1-.4	Laboratories, Quizzes, Chapter Test	pp. 11-21, Problem Solving Lab 1.2 p. 20, Design Your Own Lab, SpongeBob Experiments, ppts/notes	stimulus
3	Cell Structure/ Cell Chemistry	C1.1-.2, P1.1, P1.3, P2.1, P5.1, P5.3, P6.3-4	Laboratories, Quizzes, Chapter Test	pp. 1171-187, Cells Alive, Lab Cell Structure, Lab: Cell Model, Lab: Cell Membrane, Cell Comparisons, Cell Membrane, Animal/ Plant Cell Colorplate, ppts/ notes, vocabulary	levels of organization (cell, tissue, organs, organ systems, organisms), multicellular, phospholipids, transport (active, passive), biomolecules, enzyme, permeable
4					
5					
6	Photosynthesis and Cellular Respiration	C5.1, P2.1, P4.1, P4.5, P5.3	Laboratories, Quizzes, Chapter Test	pp. 225-227, pp. 231-233, Lab: Chlorophyll fluorescence, Lab: Cell Respiration, ppts/ notes	cellular respiration, ATP
7	Cell Cycle	C1.2, C2.1, P1.1, P2.1, P5.3	Laboratories, Quizzes, Chapter Test, Benchmark 1	pp. 201-210, ppt/ notes, Lab Osmosis, Lab: Animal Mitosis, Mitosis Foldable	DNA (replication, sequence, molecule), RNA
8					

9	Intro to Genetics	C2.2, P1.1, P3.3, P5.2, P6.4	Laboratories, Quizzes, Chapter Test	pp. 253-273, ppt/ notes, Punnett Squares, Vocabulary, Predicting Combinations	allele, analogous, genes (encoding, expression, mutation), genotype, heterozygous, homologous, homozygous, mutation, nucleotide
10					
11	Molecular Basis of Heredity	C2.1, P1.1, P1.2, P3.5, P6.3	Laboratories, Quizzes, Chapter Test, Benchmark 2	pp. 283-301, ppt/ notes, paper DNA, DNA extraction, DNA Keychain, Mutations, Vocabulary	phenotype, recessive trait
12					
13					
14	Patterns of Heredity and Human Genetics	C2.2, P4.1-.5, P5.1	Laboratories, Quizzes, Chapter Test	pp. 308-329, ppt/ notes, Vocabulary, Pedigree Charts, Minilab 2.1, Problem Solving 12.1, Minilab 12.2	mutation, pedigree, sex-linked trait
15					
16					
17	Principles of Ecology	C3.1-.2, C4.1-.2, C5.2, P1.1-.3, P3.1-.4, P4.2, P4.3, P4.8, P5.1, P5.2, P6.1, P6.4	Laboratories, Quizzes, Chapter Test	pp. 34-57, ppt/ notes, cladograms, research of biomes, vocabulary, minilab 2.1, problem solving lab 2.1, energy pyramid, problem solving 2.2	behavior (innate, learned), biogeochemical cycle
18					
19	Communities and Biomes	C4.1-.3, P1.1-.3, P2.1-.2, P3.1-.5, P4.1-.8, P5.1-.3, P6.1-.4	Laboratories, Quizzes, Chapter Test	pp. 65-87, ppt/ notes, labs, worksheets, biome project(s), vocabulary	tropism
20					
21	Population Biology	C4.3, C5.2, P1.1-.3, P3.3, P4.1, P4.3, P4.8	Laboratories, Quizzes, Chapter Test	pp. 91-107, ppt/ notes, labs, project(s), worksheets	carrying capacity, symbiosis (mutualism, commensalism), limiting factors, population density
22					
23	Biological Diversity and	C4.3, C6.1, C6.2, P1.1-.2, P2.1, P3.3,	Laboratories, Quizzes, Chapter	pp. 111-129, ppt/ notes, labs,	

24	Conservation	P4.1, P4.3-4, P4.8	Test, Benchmark 3	worksheets, vocabulary	
25	The Theory of Evolution	C3.1, C3.2, P6.2, P1.1, P2.1, P5.1	Laboratories, Quizzes, Chapter Test	pp. 393-417, ppt/ notes, activity, lab, worksheets, vocabulary	evolution
26					
27	Organizing Life's Diversity	C3.1-.2, P2.1- .2, P4.1, P5.1, P5.2	Laboratories, Quizzes, Chapter Test, Benchmark 4	pp. 443-463, ppt/ notes, activities, worksheets	
28					
29					
30	One Week Reserved for Testing/ Two Weeks for Schedule changes				
31					
32					