

## Chilton Public Schools Curriculum Document

**Curricular Area: Biology (General & College Prep)**

**Grade: 10**

**Course Title (if different than Curricular Area):**

EE	IT	EV	EC	WI Academic Standard	WKCE Strand	Learner Concepts	NT	I	D	R	M	R
X	A12.1 12.2, 12.3, 12.4 B12.1, 12.3, 12.5, 12.6 C12.1 12.4 D.12.1 12.2 12.3 12.4			B.12.1, B.12.2, B12.5	19 – Science Inquiry	Dynamics of science			X	X		
X	Same			B.12.1, B.12.2, B.12.3, B.12.4, B12.5	19 – Science Inquiry 24- Personal & Social	Science as a human endeavor			X	X		
X	Same			C12.2, C12.3	19 Science Inquiry	Measurement and SI units				X	X	X
X	Same			B.12.2, B12.4 C12.5, C12.1 G12.1 G12.2, G12.3, G12.4, G12.5	23 – Science & Tech. 19 – Science Inquiry	Effects of (STS) science, technology and society			X	X		
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	Same			B12.4, C12.1, H12.3, H.12.4	19 – Science Inquiry	Applied science vs. pure science			X	X		
	Same			A12.1, A12.2, C.12.1, C.12.2, C.12.3, C.12.4, C.12.5, C.12.6, G12.1, G12.2, G12.3, G12.4, G12.5, H12.2, H12.3, H12.4	19 – Science Inquiry	Scientific methods and techniques			X	X		
	Same	X		F.12.7, F.12.8, F12.9, F12.10,	21 – Life Science Populations & ecosystems Organisms & Environment	Interrelationships within a community			X	X		
		X		F12.7, F12.8, F12.9, F12.10, F12.11	Same as above	Energy Relationships: food webs, chains			X	X	X	
		X		F12.7, F12.8, F12.9, F12.10, F12.11, E 12.2,	Same as above	Ecological & Behavioral Ecology Relationships			X	X	X	
	Same	X		F12.7, F12.8, F12.9, F12.10, F12.11	21- Life Science Organisms & Environments Populations & Ecosystems	Understanding principles of ecological succession and change			X	X		
X	Same	X		F12.7, F12.8, F12.9, F12.10, F12.11 H.12.1, F12.12	21- Life Science Organisms & Environments Populations & Ecosystems	Understand basic principles of population ecology			X	X		
X	Same			F.12.1, F.12.2, B12.2, B12.3, B12.4,	21- Life Science Characteristics of organisms The Cell	Understand biological history of microbiology and cell theory			X	X	X	
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	Same			F12.1, F12.2	SAME AS ABOVE	Distinguish between cell types			X	X	X	
	Same			B12.3	21 – Life Science Characteristic of organisms Diversity and adaptations	Understand organizational levels of an organism			X	X		
	Same			F12.1, F12.2	20 – Physical Science Chemical Reactions	Understand the cellular processes			X	X		
X	Same			G12.3, G12.4	23- Science & Tech.	Demonstrate proper microscopy technique			X	X	X	
	Same			F12.1, F12.2	21- Life Science The cell	Summarize basic cell taxonomy			X	X	X	
	Same			D12.1, D12.2, D12.3, D12.4, D12.5, D12.6, D12.10, D12.11	20- Physical Science Chemical Reactions Energy	Understand basic biochemical process			X	X		
	Same			D12.4, D.12.5, D.12.6, D12.10	20- Physical Science Chemical Reactions Energy	Be able to distinguish between energy relationships			X	X		

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X	Same			A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, F.12.3, F. 12.4, F.12.5, F.12.6, H.12.1, H.12.2, H.12.3, H.12.4, H.12.5, H.12.6	21- Life Science Reproduction and Heredity	Understand biological history of genetics			X	X		
	Same			A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, F.12.3, F. 12.4, F.12.5, F.12.6, H.12.1, H.12.2, H.12.3, H.12.4, H.12.5, H.12.6	21- Life Science Reproduction and Heredity	Summarize Gregor Mendel's work / critics			X	X		
	Same			A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, F.12.3, F. 12.4, F.12.5, F.12.6, H.12.1, H.12.2, H.12.3, H.12.4, H.12.5, H.12.6	21- Life Science Reproduction and Heredity	Explain chromosome theory		X	X			
	Same			A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, F.12.3, F. 12.4, F.12.5, F.12.6, H.12.1, H.12.2, H.12.3, H.12.4, H.12.5, H.12.6	21- Life Science Reproduction and Heredity	Solve Mendelian genetics problems			X	X	X	

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	Same			A.12.1, A.12.2, A.12.3, A.12.4, A.12.5, F.12.3, F. 12.4, F.12.5, F.12.6, H.12.1, H.12.2, H.12.3, H.12.4, H.12.5, H.12.6	21- Life Science Reproduction and Heredity	Solve non-Mendelian genetics problems			X	X	X	
	Same			B.12.1, B.12.2, F12.3, F12.4, F12.5, F12.6	21- Life Science Reproduction and Heredity	Provide evidence that supports DNA as genetic material			X	X	X	
	Same			B.12.1, B.12.2, F12.3, F12.4, F12.5, F12.6 H12.1, H12.2, H12.3, H12.4, H12.5, H12.5, H12.6	21- Life Science Reproduction and Heredity 23 – Science & Tech	Summarize the Human Genome project		X	X			
	Same			F12.3, F12.4, F12.5, F12.6	21- Life Science Reproduction and Heredity	Describe the “Double – Helix”			X	X		
	Same			H12.1, H12.2, H12.3, H12.4, H12.5, H12.5, H12.6	21- Life Science Reproduction and Heredity 24 – Personal & social	Articulate the realities, promises, and fears of genetic engineering		X	X			
X	Same			F.12.5, F.12.7	21 – Life science Characteristics of organisms	Distinguish between cells and viruses			X	X		
X	Same			H12.1, H12.2, H12.3, H12.4, H12.5, H12.5, H12.6	21- Life Science Life cycles Diversity and adaptations	Understand how pathogens cause disease			X	X	X	
	Same			A.12.3, A.12.4, A.12.7	21- Life science Diversity and adaptations	Summarize taxonomic levels of organization			X	X	X	
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	Same			A.12.3, A.12.4, A.12.7	21- Life science Diversity and adaptations	Summarize taxonomic levels of organization			X	X	X	
	Same			A.12.3, A.12.4, A.12.7	21- Life Science Characteristics of organisms	Distinguish between 5 & 6 Kingdom Systems			X	X	X	
	Same			F12.1, F12.2, F12.3, F12.4, F.12.5, F.12.6 F.12.9 F.12.10, F.12.11	21- Life Science Characteristics of organisms Diversity and adaptations	Understand difference between plant and animal cells			X	X	X	
	Same			F12.1, F12.2, F12.3, F12.4, F.12.5, F.12.6 F.12.9 F.12.10, F.12.11	21- Life Science Characteristics of organisms Diversity and adaptations Life cycles	Compare and Contrast reproduction represented in each major group			X	X	X	
	Same			F12.1, F12.2, F12.3, F12.4, F.12.5, F.12.6 F.12.9 F.12.10, F.12.11	21- Life Science Characteristics of organisms Diversity and adaptations	Summarize the possible evolution of major classification groups		X	X			
	Same			F12.1, F12.2, F12.3, F12.4, F.12.5, F.12.6 F.12.9 F.12.10, F.12.11	21- Life Science Characteristics of organisms Diversity and adaptations	Explain functional differences of organisms			X	X	X	
	Same			F12.1, F12.2, F12.3, F12.4, F.12.5, F.12.6 F.12.9 F.12.10, F.12.11	21- Life Science Characteristics of organisms Diversity and adaptations	Compare and contrast plants and algae			X	X		
	Same			F12.1, F12.2, F12.3, F12.4, F.12.5, F.12.6 F.12.9 F.12.10, F.12.11	21- Life Science Characteristics of organisms Diversity and adaptations	Compare and contrast animals and protozoa			X	X		
	Same			F12.1, F12.2, F12.3, F12.4, F.12.5, F.12.6	21- Life Science Diversity and adaptations	Compare and contrast plants, fungi & animals			X	X		
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