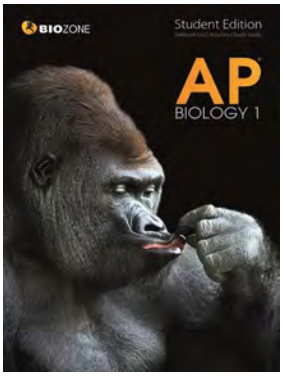

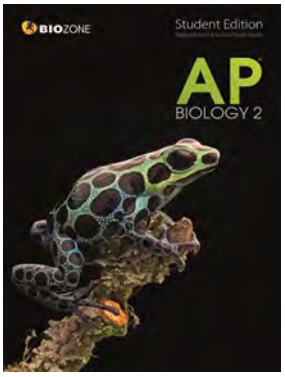

BIOZONE's AP BIOLOGY Series
alignment to the new **CED (2019)**

This document aligns the structure of the College Board's new CED (2019) for AP Biology to BIOZONE's current 2017 editions for AP Biology:

- **AP Biology 1**
- **AP Biology 2**

KEY:
- Indicates material not covered in current editions
- Black Text: Find in BIOZONE title: **AP Biology 1**
- Red text: Find in BIOZONE title: **AP Biology 2**

UNIT	TOPIC	ENDURING UNDERSTANDING	LEARNING OBJECTIVE	ESSENTIAL KNOWLEDGE	Activity #	Activity Title	SKILL
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					29	Amino Acids	2.A
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					37	Condensation and Hydrolysis of Sugars	1.A, 2.A
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					31	Protein Shape is Related to Function	1.A
					32	Comparing Fibrous and Globular Proteins	1.A
				SYI-1.B.2.c	36	Carbohydrate Chemistry	1.A
					39	Polysccharides	1.A
					40	Cellulose and Starch	1.A
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					35	Phospholipids	1.A
	1.5	SYI-1	SYI-1.C	SYI-1.C.1.a	28	Nucleic Acids	
				SYI-1.C.1.b	28	Nucleic Acids	
				SYI-1.C 1.c	29	Amino Acids	
				SYI-1.B.2.d	30	Protein Structure	
					31	Protein Shape is Related to Function	
					32	Comparing Fibrous and Globular Proteins	
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					40	Cellulose and Starch	
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					54	Plant Cells	
					55	Identifying Structures in a Plant Cell	
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					73	Membranes and the Export of Proteins	
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					54	Plant Cells	
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					58	Cell Structures and Organelles	
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					60	Gas Exchange and Stomata	
					62	Uptake at the Root	
					109	The Stomach and Small Intestine	
				ENE-1.B.1	42	Limitations to Cell Size	2.D.a
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					81	Food vacuoles and Simple Guts	
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				ENE-2.C.5	59	The Structure of Membranes	
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					54	Plant Cells	
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				ENE-2.E.2	62	Diffusion	
				ENE-2.E.3	70	Active Transport	
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					65	Investigating Diffusion	3.E.b
					66	Osmosis	
					67	Water Movement in Plant Cells	
					71	Ion Pumps	
				ENE-2.F.2a	73	Membranes and the Export of Proteins	
				ENE-2.F.2b	74	Endocytosis	
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					61	Cell Processes	
					6	ATP Production in Cells	
					12	Chloroplasts	
					29	Regional Specialization and Functional Efficiency	
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				EVO-1.A.3	52	Animal Cells	
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				ENE-1.G.2	23	Enzyme Kinetics	
					28	Achieving Metabolic Efficiency	
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				ENE-1.G.4	25	Enzyme Inhibitors	
	3.4	ENE-1	ENE-1.H	ENE-1.H.1	3	The Role of ATP in Cells	
					4	ATP and Energy	
				ENE-1.H.2.a-c	1	Entropy and Order	
				ENE-1.H.3	5	Energy Transformations in Cells	
	3.5	ENE-1	ENE-1.I	ENE-1.I.1a.i-iii.	13	Origin of Eukaryotic Photosynthesis	6.B
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					16	Light Dependent Reactions	
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				ENE-1.J.3-4	8	Chemiosmosis and the Proton Motive Force	6.B
				ENE-1.J.5	17	Light Independent Reactions	
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					10	Anaerobic Pathways for ATP Production	
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					86	Signal Transduction Using Second Messengers	1.A
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	7.9	EVO-3	EVO-3.B	EVO-3.B.1.a, c	252	What is a Phylogenetic Tree?	
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					255	Why are Birds Dinosaurs?	
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	7.10	EVO-3	EVO-3.D	EVO-3.D.1-2	258	What is a Species?	
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			EVO-3.E	EVO-3.E.1	264	The Rate of Evolutionary Change	2.B.a
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	7.13	SYI-3	SYI-3.E	SYI-3.E.1.a-b	276	The Origin of Life on Earth	
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