

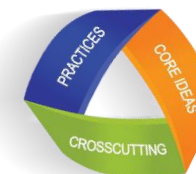


Dubai International Private School

DIS, in partnership with parents and community, strives to prepare every student to be digitally literate, a lifelong learner, and a productive citizen.



Dubai International School-Al Quoz
Science Department (Grades 9-12)
Curriculum Annual Plan
Grade: 9 Subject: Biology 2024-2025



BOOK: Inspire

QI:

NGSS	DCIs	Topic	Learning Objectives	Week No. & Date	No. of Periods
		Scientific skills (Analysis – Interpretation - Deduction – Comparison)	<ul style="list-style-type: none"> Know the scientific definition of every scientific inquiry. <ul style="list-style-type: none"> Describe//Analyze//Interpret//Hypothesize//Posed problem//Annotate 	W1: 26/08/2024 30/08/2024	5
HS-LS1-2	LS1.A Structure & Function	Unit -1: Living systems Lesson-2: organisms -cells to body systems	<ul style="list-style-type: none"> Explore the levels of organization in the body. Examine the organ systems and their primary functions. Compare prokaryotic cells and eukaryotic cells. Explore the animal and plant cells, with its constituents and organelles Differentiate between animal and plant cells. 	W2: 2/9 / 2024- 6/9 / 2024	5
HS-LS1-3	LS1.A Structure & Function	Unit : 1 Lesson 3 : Mechanisms of homeostasis	<ul style="list-style-type: none"> Recognize the importance of homeostasis as a control system in the body. Explore the negative feedback loop and its mechanism and examples Explore the positive feedback loop and its mechanism and examples 	W3: 09/9/2024- 13/9/2024	10
HS-LS1-3	LS1.A Structure	Unit : 1 Lesson 3	<ul style="list-style-type: none"> Develop an understanding of how different systems interact among each other (Maintaining glucose concentration) 		

	& Function	Mechanisms of homeostasis	<ul style="list-style-type: none"> Develop an understanding of how different systems interact among each other to maintain carbon dioxide concentration. Explore the negative feedback loop in case of <u>diabetes</u>. 	W4: 16/9/2024- 21/9/2024	
HS- LS1-5 HS- LS2-5	LS2.B Cycles of matter and energy transfer in ecosystem	Unit 3- Matter and energy in living systems. Lesson -1 : Photosynthesis	<ul style="list-style-type: none"> Examine the organelle responsible of photosynthesis to take place. State the word and symbolic chemical reaction of photosynthesis. Explain both the light and non-light dependent stages in photosynthesis process 	W5: 23/9/2024- 27/9/2024 (29/9/2023 Prophet's Birthday)	10
HS- LS1-5 HS- LS2-5	LS2.B Cycles of matter and energy transfer in ecosystem	Unit 3 Photosynthesis	<ul style="list-style-type: none"> Examine the organelle responsible for cellular respiration to take place. State the word and symbolic chemical reaction of cellular respiration. 	W6: 30/9/2024 04/09/2024	
HS- LS1-7 HS- LS2-3	LS1.C organization for matter and energy flow in organisms	Unit 3 Lesson 2 : Cellular Respiration	<ul style="list-style-type: none"> . Explain and Explore Glycolysis, Krebs cycle and electron transport chain 	W7: 07/9/2024 11/09/2024	10
			PROJECT WEEK	W8: 14/09/204 18/09/2024	
			FALL MAP TEST SCIENCE	W9:	5

				21/10/2024 – 25/10.2024	
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QII:

PE Code	DCIs	Topic	Learning Objectives	Week Date	No. of Periods
HS-LS2-3 HS-LS2-5	LS2.B Cycles of matter and energy transfer in ecosystem	Unit 4: Ecosystem- Stability and change Lesson1 : Population Dynamics	<ul style="list-style-type: none"> Explain how matter and energy move through different organisms. Identify and describe the Carbon cycle. Identify and describe the Nitrogen cycle. Identify and describe the water cycle. Identify and describe the Oxygen cycle. 	W10: 28/10 /2024 1/11 /2024	5
HS-LS2-3 HS-LS2-5	LS1.B Growth and Development of organisms	Unit 4 Ecosystem - Stability and change Lesson 2 : Ecosystem dynamics	<ul style="list-style-type: none"> Describe Algal blooms and their effects on the health of terrestrial and aquatic ecosystems. Describe the history and reasons that lead to climate change. Identify and describe the Phosphorus cycle. Explain and analyze how humans impact the Earth's cycles, specifically Air pollution. 	W11: 5/11 2024 8/11/2024	5
HS-LS1-4	LS1.B Growth and Development of organisms	Unit 5 Cells: Stability and change Lesson 1 : Cell Cycle)	<ul style="list-style-type: none"> Describe the structure of a chromosome. Describe the stages of the cell cycle. Compare rates of division in different cell types. Identify factors that limit cell size. 	W12: 11/11/2024 15/12/2024	10
HS-LS1-4	LS1.B Growth and	Unit 5	<ul style="list-style-type: none"> Identify internal and external factors that regulate cell division. 	W13: 18/11/ 2024	

	Development of organisms	Cells: Stability and change Lesson 1 : Cell Cycle)	<ul style="list-style-type: none"> Explain cancer in terms of the cell cycle. 	22/11/2024	
HS-LS1-4	LS1.A Structure and Function	Unit 5 Cells: Stability and change Lesson 2: Mitosis and Differentiation	<ul style="list-style-type: none"> Understand Chromosomes and DNA. Explore Mitosis phases (P-MAT). Differentiate between cytokinesis in animals and plants. 	W14: 25/11-2024 29/11/2024	5
HS-LS1-4	LS1.A Structure and Function	Unit 5 Cells: Stability and change Lesson 2: Mitosis and Differentiation	<ul style="list-style-type: none"> Connect Cell differentiation to plants and animals. Relate stem cells to differentiation and treatment of different medical conditions. 	W15: 4/12/2024 6/12/2024	5
			PROJECT WEEK	W16: 09/12/ 2024 13/12/2024	5
			WINTER BREAK	DEC 16th JAN 5th 2025	
			FINALIZING LESSONS AND REVISION WEEK	W17: 06/01/2025 10/01/2025	
			WEEK 18 and 19 : SEMESTER ONE FINAL/MAKEUP/BREAK BETWEEN SEMESTER		