## YISHUN SECONDARY SCHOOL

Subject & Code: Science (Biology) 5088 Level & Stream: Sec 4E (Express) / Year 2024

The Curriculum and Approaches to Learning		Key Programmes / Competitions
To cultivate the joy of learning Science by developing students' knowledge, skills and attitudes in scientific-thinking through a well-designed curriculum that focuses on scientific inquiry and authentic learning. To prepare students for a life-long passion in learning Science and enable them to innovate and contribute to a technologically-driven society.		Selected school competitions and enrichment programmes.
Term / Week	Learning Experiences (Chapter, Activity)	Learning Outcomes & Assessment
1/ 2-4	Chapter 10: Organisms and their Environment [W3] Practical 1: Year <b>2013</b> (test for starch in variegated leaf)	W1: back to school program W7: 12-13 Feb (CNY)
1/ 5-7	Chapter 11: Molecular Genetics	WA1 [50 minutes] (W9): C5 (Nutrition in Humans), C6 (Transport in Humans), C7
1/8-10	[W8] Practical 2: Year <b>2010</b> (test for starch & RS & protein, energy content/burn biscuits, drawing & magnification) + Year <b>2023</b> (comment on procedure with suggestion for improvement)	(Respiration in Humans)
	[W9] Practical 3: Year <b>2022</b> (plant reproduction & syringe skills)	
	[W10] Practical 4: Year <b>2021</b> (test for starch in chickpea, enzyme concentration on rate of product formation, osmosis – planning)	
2/ 1-4	Chapter 12: Reproduction in Humans	W2: 29 Mar (Good Fri)
2/ 6-8	Chapter 13: Inheritance	W4: 10 Apr (Hari Raya Puasa) W5: Student Learning Fest
2/9	[W9] Practical 5: Year <b>2015</b> (enzyme/pH change in milk)	W7: 1 May (Labour Day) W10: 22 May (Vesak Day) / MTL Intensive
	June Holiday:	
	Practical 6: Year <b>2017</b> (osmosis in potato cells, drawing & magnification) + <b>2011</b> (planning question)	WA2 [1.5 hour] (W7): C8 (Infectious Diseases), C9 (Nutrition and Transport in
	Practical 7: Year <b>2016</b> (test for starch & <u>reducing</u> <u>sugars</u> & <u>gases</u> , drawing & effect of temp on enzyme activity in potato)	Plants), C10 (Organisms and their Environment), C11 (Molecular Genetics), C12 (Reproduction in Humans)
	June Holiday HW: Year 2019 Yearly paper	( Spreading)

3/ 1-2	[W1] Practical 8: Year <b>2019</b> (test for starch &	W2: 1 July (Youth Day)
	reducing sugars, enzymes/transport in plants) + Year	W5: 23-25 July HBL (GCE Oral
	2018 planning question	Exam)
		W7: 8-9 Aug (National Day)
	[W2]-Practical 9: Year <b>2018</b> (Transpiration measuring	W8- 10: 14 Aug (Sci Practical
	loss of water, wind affecting rate of transpiration)	Exam), Prelim Exams (15-28
		Aug), Teachers' Day (29-30
		Aug)
3/ 3-8	Revision and Prelim	
	- Yearly papers from 2020 to 2023	
4/1-10	Prelim Script Checking / Revision for O-levels	W8: 31 Oct (Deepavali)