

**YISHUN SECONDARY SCHOOL
ADDITIONAL MATHEMATICS
SECONDARY 5 NORMAL ACADEMIC 2023**

Mathematics Curriculum		Key Programmes
In line with the requirements of the A Mathematics Syllabus, the teaching of A Math at YSS focuses on developing thinking, reasoning and problem-solving skills using Math Modelling, making conjectures, investigations and making connections among mathematical concepts.		
Term 1	Chapter	Assessment
Week 1	Back to School Program	
Week 2	6.1 Exponential expressions and equations	
Week 3	6.1 Exponential expressions and equations (contd) 6.2 Introduction to Logarithms	
Week 4 (CNY – 23 rd Mon and 24 th Tue)	6.3 Laws of Logarithms and Change of Base formula	
Week 5	6.4 Logarithmic and Exponential equations	
Week 6	6.5 Exponential and Logarithmic Functions and graphs	
Week 7	6.6 Applications of Exponential and Logarithmic Functions	WA1: Ch 9, 10, 11.1 (remarks: revision to be done during consultation concurrently)
Week 8	8.1 Why study Linear Law? Converting non-linear equation to linear form	
Week 9	Converting linear for to non- linear equation	
Week 10	Applications of Linear Law	
March Holiday Assignment (YSS Mid-Year 2022 paper)		

Term 2	Chapter	Assessment
Week 1	5.1 The Binomial Expansion of $(1 + b)^n$ 5.2 The Binomial Expansion of $(a + b)^n$	
Week 2	5.3 Applications of Binomial Theorem in real-world contexts	

Week 3 (Good Friday)	13.1 Derivatives of trigonometric functions 13.2 Derivatives of exponential functions	
Week 4	13.3. Derivatives of logarithmic functions 13.4 Further applications of differentiation	
Week 5	Revision for WA2	Timed Practice
Week 6 Hari Raya Puasa (Monday)	Student Learning Festival	
Week 7 Labour Day (Monday)	14.4 Integration of trigonometric functions	WA2 (Wk7-8): Curriculum Time Ch 11- 12, 14.1 – 14.3
Week 8	14.5 Integration of exponential functions 14.6 Integration of functions of the form $\frac{1}{x}$ and $\frac{1}{ax+b}$	
Week 9 (Vesak Day – Mon)	14.7 Further examples of integration	
Week 10	Mother Tongue Intensive session	
June Holiday Assignment (2020 O level paper)		

Term 3	Chapter	Assessment
Week 1 Hari Raya Haji (29 June, Thurs)	16.1 Key concepts of kinematics 16.2 Applications of differentiation in kinematics	
Week 2 Youth Day (3 July, Mon)	16.3 Applications of integration in kinematics	Quiz 2
Week 3 (Hari Raya Haji – Mon)	17.1 Basic proofs in plane geometry 17.2 Proofs using congruent and similar triangles	
Week 4	17.3 Proofs using quadrilateral properties 17.4 Tangent-Chord Theorem	
Week 5 HBL 25-27 Jul	Topical revision	
Week 6	Topical revision	MOCK 1

Week 7 (8 th Aug Tue – 10 th Aug Thurs)	Revision (past year papers)	
Week 8	Revision (past year papers) Preliminary Examination (17 to 30 Aug)	
Week 9	Preliminary Examination	
Week 10 (Teachers' Day Celebration-Thurs, Teachers' Day-Fri)	Preliminary Examination	
September Holiday Assignment (2022 O level papers)		
Term 4	Chapter	Assessment
Week 1	Script Check & Review	
Week 2	Intensive Revision	
Week 3-4	Intensive Revision	
Week 5	Study Leave	
Weeks 6 – 10	GCE O Level Written Examination	