

**YISHUN SECONDARY SCHOOL**  
**ADDITIONAL MATHEMATICS**  
**SECONDARY 4 Express 2026**

<b>Mathematics Curriculum</b>		<b>Key Programmes</b>
In line with the requirements of the Additional Mathematics Syllabus, teaching of Math at YSS focuses on developing thinking, reasoning and problem-solving skills using Math Modelling, investigations and making connections among mathematical concepts.		
<b>Term 1</b>	<b>Chapter</b>	<b>Assessment</b>
Week 0 - 1 (1 Jan, Thu-New Year day)	Back to School Programme (2 Jan to 6 Jan)	
Week 1 - 2	<b>Chapter 10: Trigonometric Equations &amp; Identities</b>  10.2 Trigonometric identities 10.3 Addition Formulae	
Week 3	10.4 Double Angle Formulae	
Week 4	10.5 Proving of identities 10.6 R-Formulae	
Week 5	8 Linear Law	
Week 6	<b>Chapter 11- Gradients, Derivatives &amp; Differentiation Techniques</b>  11.1 Derivatives and gradient functions 11.2 Five rules of differentiation	
Week 7 (16 Feb, Mon – School Celebration, 17 Feb, Tue – 18 Feb, Wed CNY)	11.3 Higher derivatives 11.4 Increasing and decreasing functions	
Week 8 (27 Feb, Fri – HBL Sec 3 Oral)	<b>Chapter 12: Applications of Differentiation</b>  12.1 Equations of tangent and normal	
Week 9 (6 Mar, Fri – HBL Sec 3 Oral)	12.2 Rates of change	
Week 10	12.3 Stationary points 12.4 Maximisation and minimisation problems	WA1
<b>March Holiday Assignment (YSS 2024 Prelim papers)</b>		
<b>Term 2</b>	<b>Chapter</b>	<b>Assessment</b>
Week 1 (23 Mar, Mon – Hari Raya Puasa School Hol)	<b>Chapter 14-Integration</b>  14.1 Integration as reverse of differentiation 14.2 Two rules of integration 14.3 Integration of power functions	

Week 2 (3 Apr, Fri – Good Friday)	<b>Chapter 13: Differentiation of Trigonometric, Exponential &amp; Logarithmic Functions and their Applications</b> 13.1 Derivatives of trigonometric functions	
Week 3	13.2 Derivatives of exponential functions 13.3 Derivatives of logarithmic functions	
Week 4 (HBL – Fri Sec 4 Oral)	13.4 Further applications of differentiation 14.4 Integration of trigonometric functions	
Week 5 (HBL – Fri Sec 4 Oral)	14.5 Integration of exponential functions 14.6 Integration of functions of the form $\frac{1}{x}$ and $\frac{1}{ax+b}$ 14.7 Further examples of integration	
Week 6 (1 May Fri - Labour Day)	14.7 Further examples of integration	WA2
Week 7	<b>Student Learning Festival</b>	
Week 8	<b>Chapter 15: Applications of Integration</b> 15.1 Definite Integrals	
Week 9	15.2 Further examples of definite integrals	
Week 10 (27 May, Wed – Hari Raya Haji)	<b>Intensive Mother Tongue session</b>	

**June Holiday Assignment (2024 O level Paper)**

Term 3	Chapter	Assessment
Week 1	15.3 Area under a curve	
Week 2 (6 Jul Mon – Youth Day)	16.1 Key concepts in kinematics 16.2 Application of differentiation in kinematics	Timed Practice (During Consultation)
Week 3 (National Oral Exam: Tue – Thu) HBL 14 - 16 Jul	<b>HBL due to National Oral Examination</b> 16.3 Application of integration in kinematics	
Week 4	<b>Chapter 17 - Proofs in Plane Geometry</b> 17.1 Basic proofs in plane geometry 17.2 Proofs using congruent and similar triangles	
Week 5	17.3 Proofs using quadrilateral properties 17.4 Tangent-Chord Theorem (Alternate Segment Theorem)	
Week 6 (7 Aug, Fri – National Day)	YSS Prelim 2025 Paper 2	

School Celebration)		
Week 7 (10 Aug, Mon – National Day School Holiday)	2025 O level papers	
Week 8	<b>Preliminary Examination</b>	
Week 9 and 10 (3 Sep Thu - Teachers' Day celeb) (4 Sep Fri - Teachers' Day Celebration)	<b>Preliminary Examination</b>	
<b>September Holiday Assignment (Specimen paper P1)</b>		
<b>Term 4</b>	<b>Chapter</b>	
Week 1	<b>Sec 4E5N Script Check and Review of Exam scripts</b>	
Week 2	<b>Intensive Revision (Specimen paper P2)</b>	
Week 3	<b>Study leave</b>	