

**YISHUN SECONDARY SCHOOL
ADDITIONAL MATHEMATICS
SECONDARY 4 G3 2025**

Mathematics Curriculum		Key Programmes
In line with the requirements of the 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.		
Term 1	Chapter	Assessment
Week 0 (1 Jan Wed-New Year day)	Back to School Programme	
Week 1	Chapter 10: Trigonometric Equations & Identities 10.2 Trigonometric identities 10.3 Addition Formulae	
Week 2	10.4 Double Angle Formulae	
Week 3	10.5 Proving of identities 10.6 R-Formulae	
Week 4 (28 Jan – CNY celebration, 29-30 Jan Wed Thu - CNY)	8 Linear Law	
Week 5	Chapter 11- Gradients, Derivatives & Differentiation Techniques 11.1 Derivatives and gradient functions	
Week 6	11.2 Five rules of differentiation 11.3 Higher derivatives	
Week 7	11.4 Increasing and decreasing functions	
Week 8	Chapter 12: Applications of Differentiation 12.1 Equations of tangent and normal	
Week 9	12.2 Rates of change	
Week 10	12.3 Stationary points 12.4 Maximisation and minimisation problems	WA1
March Holiday Assignment (YSS 2023 Prelim papers)		
Term 2	Chapter	Assessment
Week 1	Chapter 14-Integration 14.1 Integration as reverse of differentiation 14.2 Two rules of integration 14.3 Integration of power functions	

Week 2 (31 Mar Mon– Hari Raya Puasa)	Chapter 13: Differentiation of Trigonometric, Exponential & Logarithmic Functions and their Applications 13.1 Derivatives of trigonometric functions	
Week 3	13.2 Derivatives of exponential functions 13.3 Derivatives of logarithmic functions	
Week 4 (18 Apr Fri – Good Fri)	13.4 Further applications of differentiation 14.4 Integration of trigonometric functions	
Week 5	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 Thu - Labour Day) (HBL - Fri)	14.7 Further examples of integration	
Week 7 (HBL - Fri)	Chapter 15: Applications of Integration 15.1 Definite Integrals	WA2
Week 8 (12 May Mon – Vesak Day)	Student Learning Festival	
Week 9	15.2 Further examples of definite integrals	
Week 10	Intensive Mother Tongue session	
June Holiday Assignment (2023 O level Paper)		
Term 3	Chapter	Assessment
Week 1	15.3 Area under a curve	
Week 2 (7 Jul Mon – Youth Day)	16.1 Key concepts in kinematics 16.2 Application of differentiation in kinematics	
Week 3 (National Oral Exam: Tue – Thu) HBL 15 - 17 Jul	16.3 Application of integration in kinematics	
Week 4	Chapter 17 - Proofs in Plane Geometry 17.1 Basic proofs in plane geometry 17.2 Proofs using congruent and similar triangles	Time Practice (Consultation Slot)
Week 5	17.3 Proofs using quadrilateral properties 17.4 Tangent-Chord Theorem (Alternate Segment Theorem)	
Week 6 (8 Aug Fri – National Day celebrations)	YSS 2024 papers	

Week 7 (11 Aug Mon – School Holiday)	2024 O level papers	
Week 8	Preliminary Examination	<u>Prelim</u> All Sec 1 to 4 topics
Week 9 and 10 (4 Sep Thu - Teachers' Day celeb) (5 Sep Fri -Teachers' Day Celebration)	Preliminary Examination	
September Holiday Assignment (2022 O level papers)		
Term 4	Chapter	
Week 1	Sec 4E5N Script Check and Review of Exam scripts	
Week 2	Intensive Revision (Specimen paper P2)	
Week 3	Intensive Revision	
Week 4	Study leave	