

Peicai Secondary School
 Subject Overview for Semester 1 2023
 Additional Mathematics | Secondary 4 | Express

Term 1 (3 January – 10 March)			
Week	Chapter/Topic/Skill/Area	Assignment/ Homework	Weighted Assessment
Week 1 [2 Jan – 6 Jan]	Start Smart Level Programme		
Week 2 [9 Jan – 13 Jan]	Start Smart Level Programme		
Week 3 20/1 – CNY Celebration	Chapter 12: Differentiation <ul style="list-style-type: none"> • 12.1 The Derivative and its Basic Rules • 12.2 The Chain Rule 	<ul style="list-style-type: none"> • Ex 12.1 • Ex 12.2 	
Week 4 23/1 – 24/1 CNY	Chapter 12: Differentiation <ul style="list-style-type: none"> • 12.3 The Product Rule • 12.4 The Quotient Rule 	<ul style="list-style-type: none"> • Ex 12.3 • Ex 12.4 • TYS 	
Week 5 1/2 - HBL	Chapter 13: Tangents, Normals and Rates of Change <ul style="list-style-type: none"> • 13.1 Equations of Tangents and Normals • 13.2 Increasing and Decreasing Functions 	<ul style="list-style-type: none"> • Ex 13.1 • Ex 13.2 	
Week 6	Chapter 13: Tangents, Normals and Rates of Change <ul style="list-style-type: none"> • 13.3 Rates of Change • 13.4 Connected Rates of Change 	<ul style="list-style-type: none"> • Ex 13.3 • Ex 13.4 • TYS 	
Week 7	Chapter 14: Maxima and Minima <ul style="list-style-type: none"> • 14.1 Nature of Stationary Points • 14.2 Maxima and Minima Problems 	<ul style="list-style-type: none"> • Ex 14.1 • Ex 14.2 • TYS 	
Week 8	<ul style="list-style-type: none"> • Revision for WA1 	<ul style="list-style-type: none"> • TYS • Past Year PCSS WA Papers • Other school Exam Papers 	
Week 9	<ul style="list-style-type: none"> • Error Analysis for WA1 	<ul style="list-style-type: none"> • TYS • Past Year PCSS WA Papers 	WA1 2 hours 80 marks
Week 10	Chapter 15: Differentiation of Trigonometric, Exponential and Logarithmic Functions <ul style="list-style-type: none"> • 15.1 Derivatives of Trigonometric Functions 	<ul style="list-style-type: none"> • Ex 15.1 • Ex 15.2 	

	<ul style="list-style-type: none"> 15.2 Derivatives of Exponential Functions 		
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Term 2 (20 March – 26 May)			
Week	Chapter/Topic/Skill/Area	Assignment/ Homework	Weighted Assessment
Week 1 22/3 – HBL	Chapter 15: Differentiation of Trigonometric, Exponential and Logarithmic Functions <ul style="list-style-type: none"> 15.3 Derivatives of Logarithmic Functions 	<ul style="list-style-type: none"> Ex 15.3 	
Week 2	Chapter 16: Integration <ul style="list-style-type: none"> 16.1 Indefinite Integrals 16.2 Integration of Trigonometric Functions 16.3 Integration of Exponential Functions, $\frac{1}{x}$ and $\frac{1}{ax+b}$* 	<ul style="list-style-type: none"> Ex 16.1 Ex 16.2 Ex 16.3 TYS 	
Week 3 5/4 – HBL 7/4 – Good Friday	Chapter 17: Applications of Integration <ul style="list-style-type: none"> 17.1 Definite Integrals 17.2 Area between a curve and an axis 	<ul style="list-style-type: none"> Ex 17.1 Ex 17.2 	
Week 4	Chapter 17: Applications of Integration <ul style="list-style-type: none"> 17.3 Area between a curve and a line 	<ul style="list-style-type: none"> Ex 17.3 	
Week 5	Chapter 18: Kinematics <ul style="list-style-type: none"> 18.1 Applications of Differentiation in Kinematics 	<ul style="list-style-type: none"> Ex 18.1 TYS 	
Week 6 24/4 – Hari Raya Puasa in Lieu	Chapter 18: Kinematics <ul style="list-style-type: none"> 18.2 Applications of Integration in Kinematics 	<ul style="list-style-type: none"> Ex 18.2 TYS 	
Week 7	<ul style="list-style-type: none"> Revision for WA2 	<ul style="list-style-type: none"> TYS Other School Exam Papers 	
Week 8	<ul style="list-style-type: none"> Error Analysis for WA2 	<ul style="list-style-type: none"> TYS 	WA2 2 hours 80 marks
Week 9 17/5 - HBL	Chapter 19: Plane Geometry <ul style="list-style-type: none"> 19.1 Triangular Theorems 	<ul style="list-style-type: none"> Ex 19.1 	
Week 10	Chapter 19: Plane Geometry <ul style="list-style-type: none"> 19.2 Quadrilateral Theorems 19.3 Circle Theorems 	<ul style="list-style-type: none"> Ex 19.2 Ex 19.3 TYS 	

The subject overview is tentative and is subject to changes.