

NHS Scope and Sequence: Mathematics Advanced Year 11

Implementation for Year 11 from 2021

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	
Term 1	<i>Topic</i>	MA-F1 Working with Functions							Intro to Calculus Part 1			
	<i>Unit title</i>	Algebraic techniques F1.1	Introduction to functions F1.2	Linear, quadratic and cubic functions F1.3			Further functions and relations F1.4		Gradients of tangents C1.1	Difference quotients C1.2		
	<i>Outcomes</i>	MA11-1, MA11-8, MA11-9	MA11-1, MA11-2, MA11-8, MA11-9						MA11-1, MA11-5, MA11-8, MA11-9			

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 2	<i>Topic</i>	MA-T1 Trig and measure of angles			MA - T2 Trig functions			Intro to Calculus Part 2			
	<i>Unit title</i>	Trigonometry T1.1	Radians T1.2		Trigonometric functions and identities T2			The derivative function and its graph C1.3		Calculating with derivatives C1.4	
			Task 1					Assignment/investigation Task 2			
	<i>Outcomes</i>	MA11-1, MA11-3, MA11-8, MA11-9			MA11-1, MA11-4, MA11-8, MA11-9			MA11-1, MA11-5, MA11-8, MA11-9			

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 3	<i>Topic</i>	MA-S1 - Statistical Analysis					MA-E1 – Exponentials and Logs				
	<i>Unit title</i>	Probability and Venn diagrams S1.1		Discrete probability distributions S1.2			Introducing logarithms E1.1	Logarithmic laws and applications E1.2	The exponential function and natural logarithms E1.3	Graphs and app of exponential and logarithmic functions E1.4	
							Yearly Examinations				
	<i>Outcomes</i>	MA11-7, MA11-8, MA11-9					MA11-6, MA11-8, MA11-9				

For assessable outcomes refer to assessment schedule

NHS Scope and Sequence: Mathematics Advanced Year 12

Implementation for Year 12 from Term 4, 2020

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	
Term 4	<i>Topic</i>	MA-S2 Statistical Analysis					MA-F2 Functions			MA – T3 Trig Functions		
	<i>Unit title</i>	Data (grouped and ungrouped) and summary statistics S2.1	Bivariate data analysis S2.2				Graphing techniques F2			Trigonometric functions and graphs T3		
		Assignment/investigation										
	<i>Outcomes</i>	MA12-8, MA12-9, MA12-10					MA12-1, MA12-9, MA12-10			MA12-1, MA12-5, MA12-9, MA12-10		

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 1	<i>Topic</i>	MA – C2 Differential Calculus				Statistical Analysis				App of Calculus MA-C3	
	<i>Unit title</i>	Differentiation of trigonometry, exponential and logarithmic functions C2.1	Rules of differentiation C2.2		Continuous random variables S3.1		The normal distribution S3.2		The first and second derivatives C3.1		
	<i>Outcomes</i>	MA12-3, MA12-6, MA12-9, MA12-10				MA12-8, MA12-9, MA12-10				MA12-3, MA12-6, MA12-9, MA12-10	

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 2	<i>Topic</i>	MA-C3 Applications of differentiation			MA-C4 Calculus						
	<i>Unit title</i>	Applications of the derivative C3.2			The anti-derivative C4.1				Areas and the definite integral C4.2		
	<i>Outcomes</i>	MA12-3, MA12-6, MA12-9, MA12-10			MA12-3, MA12-7, MA12-9, MA12-10						

		Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Term 3	<i>Topic</i>	Financial Mathematics									
	<i>Unit title</i>	Modelling investments and loans M1.1	Arithmetic sequences and series M1.2		Geometric sequences and series M1.3			Financial applications of sequences and series M1.4			
	<i>Outcomes</i>	MA12-2, MA12-4, MA12-9, MA12-10									

For assessable outcomes refer to assessment schedule