

Year 13 Maths Curriculum Map 2022						
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<p>Content: What will students know</p>	<ul style="list-style-type: none"> • Topic 1 – Proof • Topic 2 – Algebra and functions • Topic 1 – Statistical sampling 	<ul style="list-style-type: none"> • Topic 3 – Coordinate geometry in the (x, y) plane • Topic 4 – Sequences and series • Topic 2 – Data presentation and interpretation • Topic 6 – Quantities and units in mechanics 	<ul style="list-style-type: none"> • Topic 5 – Trigonometry • Topic 6 – Exponentials and logarithms • Topic 3 – Probability • Topic 7 – Kinematics 	<ul style="list-style-type: none"> • Topic 7 – Differentiation • Topic 8 – Integration • Topic 4 – Statistical distributions • Topic 8 – Forces and Newton's laws 	<ul style="list-style-type: none"> Topic 9 – Numerical methods • Topic 10 – Vectors • Topic 5 – Statistical hypothesis testing • Topic 9 – Moments 	<p>Exam technique and past-papers</p>
<p>Skills: What will students be able to do</p>	<p>Evaluate, including by making reasoned estimates, the accuracy or limitations of solutions, including those obtained using numerical methods.</p> <p>Understand the concept of a mathematical problem-solving cycle, including specifying the problem, collecting information, processing and representing information and interpreting results, which may identify the need to repeat the cycle.</p> <p>Understand, interpret and extract information from diagrams and construct mathematical diagrams to solve problems, including in mechanics.</p> <p>Translate a situation in context into a mathematical model, making simplifying assumptions.</p> <p>Use a mathematical model with suitable inputs to engage with and explore situations (for a given model or a model constructed or selected by the student).</p> <p>Interpret the outputs of a mathematical model in the context of the original situation (for a given model or a model constructed or selected by the student).</p> <p>Understand that a mathematical model can be refined by considering its outputs and simplifying assumptions; evaluate whether the model is appropriate.</p> <p>Understand and use modelling assumptions.</p>					

Mathematics A Level Curriculum

Other: Literacy/Numeracy/ Ethos	Use of technology is increased in both variety and depth.					
Assessment:	End of Topic Tests and Half-Term assessments	End of Topic Tests and Half-Term assessments	End of Topic Tests and Half-Term assessments	Mock Exam	External Exam	