



**Overall Curriculum Aim:**

*To develop all students as creative mathematicians who can apply, reason, question, challenge and be successful*

**Scheme for Learning**

**Curriculum Area – Maths**

**Overview – Year 11 L Higher Maths 2021-22**

**Personnel Responsibility – Mr D Albon (Curriculum Director)**

**Quality Assured by – Mr C Mills (VP)**

**Exam Board/Qualification at KS4 – Edexcel 1MA1**

Assessment Cycle	Topic/Unit Title – Big Question	Rationale/Skill Development	Link to Assessment Objectives/Progression Scales Skills The following areas will be assessed
1	How many different types of graph can you recognise?	The majority of topics can be linked to a different type of graph, even if the skill isn't explicitly learning about that graph in that lesson. Students need to be able to recognize and interpret a wide range of graphs including: linear, quadratic, cubic, reciprocal, trigonometric, speed/distance/time/acceleration/rates of change, simultaneous equations, parallel and perpendicular, direct and inverse proportion, exponential. They also need to be able to calculate, estimate and interpret gradients and areas under graphs, as well as solutions and roots from graphs.	<p><b>Consolidating various Number/Ratio and Algebra skills:</b></p> <ul style="list-style-type: none"> <li>• Estimate powers and roots.</li> <li>• Graphs of compound units and converting compound units.</li> <li>• Linear, quadratic, reciprocal, exponential, non-standard graphs.</li> <li>• Equations of Circles.</li> <li>• Simultaneous Equations.</li> <li>• Solving Quadratics.</li> </ul>
2	Where are the gaps in your knowledge?	Students will continue to learn the highest topics from the GCSE specification aiming at grades 8-9, whilst filling any gaps caused by lost learning time in previous years. Topics include, but are not limited to, functions, proof, circle theorems, histograms and vectors.	<p><b>Consolidating a wide range of skills</b></p> <ul style="list-style-type: none"> <li>• Composite and inverse functions.</li> <li>• Algebraic proofs.</li> <li>• Circle theorems (including their proofs).</li> <li>• Vectors problem solving.</li> <li>• Histograms.</li> </ul>
3	How can you maximise your marks?	In the lead up to the final exams, as well as lessons based on the QLA, students will focus heavily on exam technique, in order to maximise the number of marks they score per question.	<ul style="list-style-type: none"> <li>• Completing past papers to identify and address knowledge gaps.</li> <li>• Improving exam technique to maximise marks.</li> </ul>