SUBJECT	Year 1 – A Level Mathematics	Year	12	SUMMARY CURRICULUM PLAN

Subject content (What will be covered) [CEIAG opportunities]	As a result, what students should know /understood	What students should be able to do	How students will be assessed	By when (Half term 1 > 6)
Students are required to study both pure mathematics and applied mathematics in both statistics and mechanics.				
Pure Mathematics	Proof; Algebra and functions; Coordinate geometry in the (x, y) plane; Trigonometry; Exponentials and logarithms; Differentiation; Integration; Vectors	• understand mathematics and mathematical processes in a way that promotes confidence, fosters enjoyment and provides a strong foundation for progress to further study • extend their range of mathematical skills and techniques • understand coherence and progression in mathematics and how different areas of mathematics are connected • apply mathematics in other fields of study and be aware of the relevance of mathematics to the world of work and to situations in society in general • use their mathematical knowledge to make logical and reasoned decisions in solving problems both within pure mathematics and in a variety of contexts, and communicate the mathematical rationale for these decisions clearly • construct mathematical proofs • use their mathematical skills and techniques to solve challenging problems that require them to decide on the solution strategy • represent situations mathematically and understand the relationship between problems in context and mathematical models that may be applied to solve them • draw diagrams and sketch graphs to help explore mathematical situations and interpret solutions • interpret solutions and communicate their interpretation effectively in the context of the problem • read and comprehend mathematical arguments, including justifications of methods and formulae, and communicate their understanding • use technology, such as calculators and computers, effectively and recognise when it may be inappropriate to use them	Homeworks Topics Tests (1hr) Mock Exam (2hrs)	HT5
Applied Mathematics - Statistics	Statistical sampling; Data presentation and interpretation; Probability; Statistical distributions; Statistical hypothesis testing		Homeworks Topics Tests (1hr) Mock Exam (35 mins)	HT5
Applied Mathematics - Mechanics	Quantities and units in mechanics; Kinematics; Forces and Newton's laws		Homeworks Topics Tests (1hr) Mock Exam (35 mins)	HT5