

Summer Term plan

Year 12 Mathematics A Level

<p>Mrs Laidler/Mr Bullock</p> <p>Mechanics Assessment Students will take a Mechanics assessment on Wednesday 21st April covering all the work from the Mechanics section, this will be followed by a feedback and review session.</p> <p>Parametric Equations Using parametric equations and converting between parametric and cartesian equations</p> <p>Differentiation</p> <ul style="list-style-type: none"> • Consider the shape of functions looking at concavity and points of inflection • Differentiating Trigonometric functions • Differentiating Exponential and Logarithmic functions 	<p>Mrs Loveridge/Mr Ahluwalia</p> <p>Statistics review and assessment Lessons will review the work covered in the Statistics section and then students will take a Statistics assessment on Friday 30th April.</p> <p>Functions</p> <ul style="list-style-type: none"> • Use graphs of the modulus of a linear equation • Use composite functions, inverse functions, and their graphs • Define a function as a mapping, including the range and domain • Use correct language and notation to describe functions accurately • Find and use inverse functions • Understand the effects of combinations of transformations <p>Fractions</p> <ul style="list-style-type: none"> • Simplify rational expressions • Decompose rational functions into Partial fractions
Half Term	
<p>Differentiation</p> <ul style="list-style-type: none"> • Chain rule • Product rule • Quotient rule • Differentiating Inverse functions 	<p>Trigonometry</p> <ul style="list-style-type: none"> • Work with radian measure, including use for arc length and area of sector • Understand and use the standard small angle approximations of sine, cosine and tangent • Understand and use the definitions of secant, cosecant and cotangent and of arcsin, arccos and arctan; their relationships to sine, cosine and tangent; understanding their graphs; their ranges and domains • Use trigonometric formulae for compound angles, double angles and half angles • Find and use equivalent forms for $a\cos\theta + b\sin\theta$ Simplify and solve equations using trigonometric formulae
<p>UCAS Prediction exams 28th June – 7th July Revision lessons of Year 12 Core work will precede the assessments with all teachers The assessment is made up of two papers</p> <ul style="list-style-type: none"> • Core with Mechanics • Core with Statistics <p>Core makes up two thirds of the assessment with Statistics and Mechanics a sixth each.</p>	