

A LEVEL CURRICULUM OVERVIEW FOR THE MATHEMATICS DEPARTMENT

HEAD OF DEPARTMENT: MR TUDOR

EXAM BOARD: EDEXCEL (9MA0)

KEY STAGE COORDINATOR: MISS PARTON



| | AUTUMN 1 | AUTUMN 2 | SPRING 1 | SPRING 2 | SUMMER 1 | SUMMER 2 |
|------------------------------|---|--|---|--|---|--|
| | Attentive & Discerning | Faith-filled & hopeful | Intentional & prophetic | Compassionate & Loving | Learned & Wise | Curious & Active |
| Year 12 Teacher 1 | Quadratics (3 hrs) Equations and Inequalities (6 hr) Algebraic division, factor theorem and proof (8hrs) Modelling in mechanics (1 hr) Kinematic graphs – displacement, velocity and acceleration (2 hrs) | Kinematics (10 hrs) Trigonometric identities and equations (10 hrs) Trigonometric ratios and graphs (3 hrs) | Trigonometric ratios and graphs (3 hrs) Differentiation (11 hrs) | Integration (11 hrs) Vectors (3 hrs) | Vectors (6 hrs) Forces (10 hrs) | Variable acceleration (8 hrs) Y12 content completed Insight into A Level content |
| Year 12 Teacher 2 | Algebraic Expressions (2 hrs) Graphs (6hrs) Straight line graphs (5 hrs) | Circles (4 hrs) Data collection (1 hr) Measures of location and spread (5 hrs) Representation of data (4 hrs) | Exponentials (8 hrs) Correlation (4 hrs) | Probability (6 hrs) Binomial expansion (4 hrs) | Binomial expansion (3 hrs) Statistical distributions (5 hrs) | Hypothesis testing (7 hrs) Y12 content completed Insight into A Level content |
| Year 13 Teacher 1 | Radians (6 hrs) Trigonometric functions (5 hrs) Trigonometry and modelling (9 hrs) | Forces and friction (6 hrs) Differentiation (11 hrs) Moments (4 hrs) | Applications of forces (6 hrs) Integration (12 hrs) | Numerical methods (6 hrs) Projectiles (4 hrs) Parametric equations (5 hrs) Further kinematics (6 hrs) | Revision | A Level Examinations |
| Year 13 Teacher 2 | Proof (3 hrs) Algebraic and partial fractions (2 hrs) Binomial theorem (5 hrs) Functions and modelling (4 hrs) | Functions and modelling (4 hrs) Conditional probability (5 hrs) Sequences and series (3 hrs) | Series and sequences (5 hrs) The normal distribution (7 hrs) | The normal distribution (4 hrs) 3D Vectors (4 hrs) | Regression and correlation (5 hrs) Revision | A Level Examinations |