Curriculum Overview

Subject: AS Level Maths

Year Group: 12

CHASE HIGH
Aspirations, Character & Excellence

The AS level mathematics courses provide a comprehensive introduction to major mathematical concepts and their practical applications, which are essential for further studies and various career paths. The course includes pure mathematics, statistics and mechanics, allowing students to develop significant analytical and problem-solution skills.

Topics such as algebra, calculus and geometry are detected, which highlights the relevance of mathematics in both academics and everyday life. The evaluation includes written examinations that test the ability of students to implement their knowledge effectively. Ultimately, the AS level mathematics courses promote a passion for mathematics by preparing students for academic and professional success.

TERM 1	**TERM 2**	**TERM 3**
Pure – Unit 1 Algebraic Expressions Pure – Unit 2 Quadratics Pure – Unit 3 Equations and Inequalities Pure – Unit 4 Graphs and Transformations Pure – Unit 5 Straight line Graphs Pure – Unit 6 Circles Statistics – Unit 1 Statistical Sampling Statistics – Unit 2 Data Presentation and interpretation	Statistics – Unit 3 Measures of Spread and Location Statistics – Unit 4 Correlation Statistics – Unit 5 Probability Statistics – Unit 6 Statistical Distribution Statistics – Unit 7 Hypothesis Testing Pure – Unit 7 Algebraic Methods Pure – Unit 8 The Binomial Expansion Pure – Unit 12 Differentiation Pure – Unit 13 Integration Mechanics – Unit 8 Modelling in Mechanics Mechanics – Unit 9 Kinematics (Constant acceleration)	Pure – Unit 9 Trigonometric Ratios Pure – Unit 10 Trigonometric Identities and Equations Mechanics – Unit 10 Forces and Newton's Law Mechanics – Unit 11 Kinematics 2 (Variable Acceleration) Pure – Unit 11 Vectors Pure – Unit 14 Exponentials and Logarithms
KEY ASSESSMENTS End of Term 1 Assessment focusing on key chapters covered this term. DIRT sessions allow students to reflect on key areas required for further improvements.	KEY ASSESSMENTS End of Term 2 Assessment focusing on key chapters covered this term. DIRT sessions allow students to reflect on key areas required for further improvements.	KEY ASSESSMENTS Final Exams
Extended reading suggestions and external resources: The textbook which we follow for the course is; Pearson Edexcel AS and A level Mathematics Pure Mathematics Year 1/AS Textbook + e-book (A level Maths and Further Maths 2017) by Greg Attwood et al (ISBN- **13-978-1292183398**) Up Learn; www. uplearn.co.uk; This website will give students access to resources, support videos, revision tools and online self-study materials. Course Specification; A level Mathematics		