Curriculum Overview

Subject: Maths (A-Level)

Year Group: 13

CHASE HIGH
Aspirations, Character & Excellence

Intent of course:

Our Year 13 students have the opportunity to continue to hone their analytical skills in the study of A-level Mathematics. Students will continue to develop a vast array of problem-solving skills. These skills are highly transferable and can be applied to numerous areas of life, both personal and professional, and the skills provide an excellent foundation to learning at the tertiary level. Additionally, Mathematics at the A-Level fosters research skills, empowering students to discover solutions to complex problems and thoroughly investigate various theories.

TERM 1	TERM 2	TERM 3
Year 12 Content *Pure – Chapter 11 Vectors (2D)* **Year 13 Content** Pure – Chapter 1 Algebraic Methods Pure – Chapter 2 Functions and Modelling Pure – Chapter 3 Sequences and Series Pure – Chapter 4 The Binomial Theorem Pure – Chapter 5 Radians Pure – Chapter 6 Trigonometric Functions Statistics – Chapter 1 Regression, Correlation and Hypothesis Testing Statistics – Chapter 2 Probability Mechanics – Chapter 4 Moments Mechanics – Chapter 5 Forces and Friction	Pure – Chapter 7 Trigonometry and Modelling Pure – Chapter 8 Parametric Equations Pure – Chapter 9 Differentiation Pure – Chapter 10 Numerical Methods Pure – Chapter 11 Integration Statistics – Chapter 3 The Normal Distribution Mechanics – Chapter 6 Projectiles Mechanics – Chapter 7 Applications of Forces Mechanics – Chapter 8 Further Kinematics	Pure – Chapter 12 Vectors (3D) **Revision for final examinations**
KEY ASSESSMENTS Half-term assessment 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 Half-term assessment 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 examination
Extended reading suggestions and external resources:		

The textbook which we follow and is good for the course is Pearson Edexcel A level Mathematics Pure Mathematics Year 2 Textbook + e-book (A level Maths and Further Maths 2017) by Greg Attwood et al. (ISBN **978 1 292 18340 4**)

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

Intent of course:

Our Year 12 students have the opportunity to engage in the study of AS-level Mathematics. Students will develop a vast array of analytical and problem-solving skills. These skills are highly transferable and can be applied to numerous areas of life, both personal and professional. Additionally, Mathematics at the AS-Level fosters research skills, empowering students to discover solutions to complex problems and thoroughly investigate various theories.

TERM 1	TERM 2	TERM 3
Pure – Chapter 1 Algebraic Expressions Pure – Chapter 2 Quadratics Pure – Chapter 3 Equations and Inequalities Pure – Chapter 4 Graphs and Transformations Pure – Chapter 5 Straight line Graphs Pure – Chapter 11 Vectors Pure – Chapter 7 Algebraic Methods Pure – Chapter 8 The Binomial Expansion Statistics – Chapter 1 Statistical Sampling Statistics – Chapter 2 Measures of Location and Spread Statistics – Chapter 3 Representations of Data Mechanics – Chapter 8 Modelling in Mechanics Mechanics – Chapter 9 Kinematics (Constant acceleration)	Pure – Chapter 9 Trigonometric Ratios Pure – Chapter 10 Trigonometric Identities and Equations Pure – Chapter 12 Differentiation Pure – Chapter 13 Integration Statistics – Chapter 4 Correlation Statistics – Chapter 5 Probability Statistics – Chapter 6 Statistical Distributions Mechanics – Chapter 10 Forces and Newton's Laws	Pure – Chapter 6 Circles Pure – Chapter 14 Exponentials and Logarithms Statistics – Chapter 7 Hypothesis Testing Mechanics – Chapter 11 Kinematics 2 (Variable Acceleration) ***Year 13 Content*** *Pure – Chapter 1 Algebraic Methods* *Statistics – Chapter 1 Regression, Correlation and Hypothesis Testing* *Mechanics – Chapter 4 Moments*
KEY ASSESSMENTS Half-term assessment 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 Half-term assessment 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 Half-term assessment End of Year Assessment for AS content (Internal) DIRT sessions allow students to reflect on key areas required for further improvements

Extended reading suggestions and external resources:

The textbook which we follow and is good 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