

PCHS Curriculum Information

Course Title: A Level Further Maths	Exam Board: AQA	Specification Code: 7367
--	------------------------	---------------------------------

How will students be assessed?

A level Further Mathematics is a linear course which is assessed with three examinations. Each exam is marked out of 100 and lasts for 2 hours. The papers are all calculator papers and are equally weighted, each being worth 33% of the final mark. Each paper has a mix of question styles varying from short single mark questions to longer unstructured questions. Paper one and paper two examine Pure Mathematical methods only, whilst paper three examines topics from two of Statistics, Mechanics or Discrete, depending on the needs of the cohort.

Throughout the course students will be informally assessed using regular topic tests and more formally with termly papers utilising exam questions.

The A level syllabus extends and deepens Mathematical understanding and requires students to demonstrate their skills and knowledge through the application of problem-solving techniques and with the use of clear, precise and appropriate mathematical language.

KEY CONTENT delivered by two teachers – one focussed on Pure content and the other on applied

Half Term 1

Pure content:

Complex numbers and geometry

Roots of polynomials

Matrices, transformations, determinants

Applied content:

Graphs and Networks

Network Flow

Half Term 2

Pure content:

Vectors and 3d space

Sequences and series

Proof

Applied content:

Critical Path Analysis

Linear Programming

Game Theory

Binary Operations

Half Term 3

Pure content:

Further algebra and functions

Conics

Polar coordinates

Further calculus

Applied content:

Work, energy and power

Impulse and momentum

Half Term 4

Pure content:

Hyperbolic functions

Applied content:

Circular motion

Dimensional Analysis

Half Term 5

Pure content:

Revision and opportunity to sit AS exam

Applied content:

Revision & opportunity to sit AS exam

Half Term 6

Pure content:

Begin Year 13 content:

Sketching modular and reciprocal graphs

Determinants of 3 x 3 matrices

Vector product

Applied content:

Further Graphs and Networks

Further Critical Path Analysis