



SUBJECT: Mathematics IB Standard Applications and Interpretation

HEAD OF DEPARTMENT:

Mrs N Foster

EXAM BOARD AND SYLLABUS NUMBER:

IBO / QAN: 60340216

SYNOPSIS OF CONTENT: Number and Algebra Sequences – arithmetic and geometric Logarithms Functions including linear, quadratic, exponential and trigonometric; modelling Geometry and Trigonometry Coordinate geometry Trigonometry, 3 dimensions; Arcs and sectors Graph Theory Probability and Statistics Venn Diagrams Discrete random variables Binomial Distribution Normal Distribution. Poisson Distribution Correlation - Pearson PMCC, Spearman's rank; Regression Chi squared goodness of fit. Hypothesis testing Calculus Tangents and Normals Turning points; Maximum and minimum values. Optimisation problems.	WHY STUDY THIS SUBJECT? - good career opportunities - enjoy solving mathematical problems that have an application to real-life situations -Mathematics teaches you to think logically, to have resilience when solving problems - gives you excellent numeracy skills and the ability to process and interpret data SELF STUDY ADVICE / USEFUL WEBSITES: www.ibo.org https://studyib.net/
HOW IS IT ASSESSED? 20% Coursework. This is a piece of written work that involves investigating an area of mathematics to be completed in Lower Sixth. Two examinations at the end of the course, both of 1½ hours duration.	ADDITIONAL INFORMATION / CAREER OPPORTUNITIES You will need to have a graphical calculator. We use the Casio CG50 – these can be purchased through the school at a discounted price.

	<p>SPECIFIC MATRICULATION REQUIREMENTS</p> <p>At least a grade 5 at GCSE in Mathematics. This course is also suitable for those who achieve higher grades at GCSE. It will support many University courses, including Medicine. It is unlikely to be sufficiently mathematical to support Engineering or Mathematics at University. Some Economics courses will also require a Mathematical course at a higher level.</p>
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