Higher Level Maths

Course Description
This is a taster course for those students who are interested in pursuing IB Higher Level Maths. This course aims to give an introduction to 4 components of the Higher Mathematics curriculum for both A&A (analysis and approaches) and A&I (applications and interpretations) courses. Students will develop advanced mathematical concepts which prepare them for the IB HL Maths exam.

The four topics that will be covered in this course are Graph theory, Formal proofs, Matrices and Applications on transformations.

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<td>Learning Outcomes
By the end of the course, students will have developed concepts in Matrix Algebra, Graph Theory, Number Theory, and Formal Proof. They will have acquired high level problem-solving skills to handle problems in those advanced topic areas.</td>
<td>Compatible Courses</td>
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<td>The 6 C’s
Capacity to Learn
Students can organise their time to meet deadlines (e.g. to work on a project that applies challenging mathematical concepts to solve a real life problem)
Students can focus and show perseverance when working through challenging mathematical concepts;
Students will know where to go if they need help to solve a problem
Communication
Student can understand how the form helps to convey meaning (e.g. to understand the mathematical language and terminology used to describe a mathematical theorem)
Student can create a text that achieves its purpose (e.g. to adopt and use precise and exact mathematical language and terminology when describing for example a solution to a problem or a mathematical proof.)</td>
<td>Future Study
This course is for aspiring students who enjoy the challenge of mathematics. It does not aim to improve the mathematical understanding of the core curriculum. Students who are studying the Further Pure iGCSE in year 10 and 11 and/ or are in set 1 for maths would be better suited to this course.

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Student comment

Teacher	Semester	Block (A=Years 9-11 B=Years 10-11)
M. Fowler	2	B