Mathematics

Exam board : Pearson/Edexcel

Specification no : 9FM0

Link to the Specification: a-level-l3-further-mathematics-specification.pdf

Content:

Topic	Assessment	A Level %
Core Pure Mathematics 1	1 hour 30 mins	25%
Core Pure Mathematics 2	1 hour 30 mins	25%
Further Pure Mathematics 1	1 hour 30 mins	25%
Further Mechanics 1	1 hour 30 mins	25%

Course Delivery:

A level Mathematics is taught mainly by exposition by the teacher and solving problems in class, although students will be expected to contribute to class discussions of new topics. A significant part of the course will be in keeping up with the homework tasks, normally set after each lesson, consisting of exercises from the textbook. Much of the course involves problem-solving, and students will need to demonstrate perseverance to succeed.

This course is designed to run alongside the A level Maths course (9MA0) and must be taken jointly with the course.

Course Content:

This course extends and deepens the concepts taught at A Level Mathematics. Students are taught compulsory units in pure mathematics that involve complex numbers, matrices and further calculus methods. Students will also study further applied mathematical topics in mechanics consisting of units in elastic collisions and work, energy & power.

Entry requirements:

Further Maths students are normally expected to achieve an 8 or 9 in GCSE Mathematics. It is not a requirement that students study GCSE (or Level 2) Further Mathematics.

Resources:

All students will be assigned a login to the Pearson Edexcel Active Learn website that gives them online access to the course textbooks and revision workbooks.

There is also a wealth of material available on the school's Moodle website such as course notes, past papers and additional revision materials.

Skills & personal qualities required / developed by course:

This course is very much designed for students with a keen interest in mathematics and a strong desire to study mathematics or a closely related subject at university level.

By studying A-level Further Maths, you'll gain an immense amount of analytical and problem-solving skills alongside a deep and rich understanding of mathematics. You will gain an appreciation of the beauty of mathematics and its application to real world problems.

Recommended reading / websites:

www.physicsandmathstutor.com

https://www.pearsonactivelearn.com/app/home

https://nrich.maths.org/

For more general introductions to mathematical thinking, try Jeremy Wyndham - Why do buses come in threes? Jeremy Wyndham - How long is a piece of string? And Simon Singh - Fermat's Last Theorem.