#### **Examination Board**

Edexcel

#### **Specific Course Requirements**

For 'A' Level Mathematics the requirement is a grade 7 (or better) at GCSE mathematics. For Further Mathematics the requirement is a grade 9 for GCSE Mathematics.

#### **Course Content**

Pure Mathematics includes:

Proof; Algebra and functions; Coordinate geometry in the (x, y) plane; Sequences and series; Trigonometry; Exponentials and logarithms; Differentiation; Integration; Numerical methods; Vectors.

### Statistics includes:

Statistical sampling; Data presentation and interpretation; Probability; Statistical distributions; Statistical hypothesis testing.

#### Mechanics includes:

Quantities and units in mechanics; Kinematics; Forces and Newton Laws; Moments.

# What do I need to know, or be able to do, to study this course?

A secure understanding of all aspects of the Higher Level GCSE is necessary. In particular, confident understanding and handling of trigonometry, indices and algebraic topics such as Quadratic Factorisation, Simultaneous Equations and Algebraic Fraction manipulation are essential, as these skills form the foundation skills to understanding many 'A' Level Mathematics topics. If you don't like Algebra, then 'A' Level Mathematics is not for you!

#### How will I be assessed on this course?

# 'A' Level Mathematics (9MA0)

There will be 3 separate 2 hour papers.

Paper 1 2 hours Pure 33% 100 marks

Paper 2 2 hours Pure 33% 100 marks

Paper 3 2 hours Statistics and Mechanics 33% 100 marks

Paper 3 has two sections. Section A and B will test Statistics and Mechanics respectively.

# 'A' Level Further Mathematics (9FM0)

There will be 4 separate 1 ½ hour papers.

Paper 1 1 ½ hours Core Pure Mathematics 1 25% 75 marks

Paper 2 1 ½ hours Core Pure Mathematics 2 25% 75 marks

Paper 3 1 ½ hours Further maths option 1 – Decision maths 1 25% 75 marks

Paper 4 1 ½ hours Further maths option 2- Further statistics 1 25% 75 marks

# What could I do with a qualification in this subject?

'A' Level Mathematics has always been a popular and enjoyable option at JFS. Its benefits are also numerous, students go into Higher Education to study a variety of Mathematics related topics such as Engineering, Computer Science, Dentistry and Business. 'A' Level Mathematics is also a welcome qualification for entry to Medicine, Law and Economics and Politics.

# The three most commonly asked questions about this course are: What support is offered?

Teachers offer an 'open door' policy. This means that students who have encountered problems can come along and seek help at appropriate times in order to help with their understanding.

# What is the expectation regarding homework?

Students will complete the vast majority of the exercises set as homework. As a result students can expect to spend an average 2 hours per exercise. In total we would expect students to be spending between 8 and 12 hours on the Mathematics work per week.

	Sixth Form YG		
YG			
	'A' Level Maths Year 1	'A' Level Further Maths	
Y12	Pure Mechanics Statistics	Further pure year 1 Decision	
Y13	A' Level Maths Year 2  Pure Mechanics Statistics	Further Maths  Further pure year 2  Further Statistics	