SUBJECT: Mathematics A Level

HEAD OF DEPARTMENT: Mrs N Foster	EXAM BOARD AND SYLLABUS NUMBER:

SYNOPSIS OF CONTENT:

Pure Mathematics is an extension of GCSE and covers topics such as algebra, trigonometry and function sketching. It introduces calculus which is applied to rates of change and the calculation of areas below curves. Mechanics deals with physical situations involving force, velocity and acceleration; for example, motion due to gravity. It is related to A Level Physics. Statistics at A Level involves topics such as the Binomial distribution and linear regression. These are useful in other subjects such as Biology, Economics and Geography. The new course will not have separate modules and will contain both Mechanics and Statistics for ALL students.

WHY STUDY THIS SUBJECT?

- good career opportunities
- 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
People who have studied mathematics are in the fortunate position of having
an excellent choice of career for
example in Teaching, Insurance, Medicine, Science, Economics.

SELF STUDY ADVICE / USEFUL WEBSITES:

Pearson (Edexcel) website
https://qualifications.pearson.com/en/qualifications/edexcel-a-levels/mathematics-2017.html
A number of past exam papers can be found at:
www.mathsgenie.co.uk

HOW IS IT ASSESSED?

Three examinations at the end of the course; two on Pure Mathematics and one for Applied Mathematics, each of 2 hours duration. The course is linear and all students must cover all topics in Pure Mathematics, Mechanics and Statistics.

ADDITIONAL INFORMATION / CAREER OPPORTUNITIES

You will need a scientific calculator with the ability to calculate statistics, we use the Casio Classwiz; however it is very beneficial to have a graphical calculator – we use the Casio CG50 – these can be purchased through the school at a discounted price.

SPECIFIC MATRICULATION REQUIREMENTS
Grade 7 or higher at GCSE Mathematics.
Students predicted grade 7 and below are required to attend the GCSE-A Level Bridging Programme in July completing both this and the summer work to a satisfactory level.