# Course Description

## Mathematics

**Aims of the Subject**

Whilst studying mathematics students will:

- Use mathematical skills and knowledge to solve problems
- Develop abilities to reason logically, to generalise and to construct proofs
- Simplify real life situations with the use of mathematical models
- Use mathematics as an effective means of communication
- Develop skills needed to use technology such as calculators effectively and to be aware of their limitations
- Take increasing responsibility for their own learning and the evaluation of their own mathematical development

**Course Description:** Both A level and AS Mathematics have a 2:1 ratio of pure to applied content. Pure content focus on algebra whereas the applied content looks at mechanics and statistics.

**Assessment**

The specification followed does not have a coursework element and is fully assessed by a written examination paper taken in June in the following structure:

**AS Assessment**

Paper 1: Pure Mathematics – 2 hour exam (100 marks)

Paper 2: Statistics and Mechanics – 1 hour 15 minute exam (60 marks)

**A-Level Assessment**

Paper 1: Pure Mathematics 1 – 2 hours (100 marks)

Paper 2: Pure Mathematics 2 – 2 hours (100 marks)

Paper 3: Statistics and Mechanics – 2 hours (100 marks)

**Study Requirements:** Students will be expected to spend a minimum of five hours per week outside timetabled lessons studying. They will also be expected to complete tasks punctually and to take responsibility for their own learning. This will mean seeking advice from mathematics teachers outside lesson time where appropriate.

**Course Entry Requirements:** GCSE Grade 6 or above in Mathematics, having completed the full Higher GCSE course and 70% or above in the Head Start Test. We recommend a Grade 7 at GCSE.

Exam Board: PEARSON Specification link:
https://qualifications.pearson.com/content/dam/pdf/A%20Level/Mathematics/2017/specification-and-sample-assesment/a-level-l3-mathematics-specification-issue4.pdf

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