

Ernest Bevin College

COURSE TITLE: AS Pure Mathematics & Statistics & Mechanics Examination Board: Edexcel

Course content / description

The Pearson Edexcel Level 3 Advanced Subsidiary GCE in Mathematics consists of two externally-examined papers. Students must complete all assessment in May/June in any single year.

Objectives

To build on and develop the techniques students have learned at GCSE so that they acquire the fluency required for advanced work.

Assessment Examination

Paper 1: Pure Mathematics (*Paper code: 8MA0/01) Written examination: 2 hours forms 62.5% of the qualification 100 marks

Content overview:

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

Paper 2: Statistics and Mechanics (*Paper code: 8MA0/02) Written examination: 1 hour 15 minutes forms 37.5% of the qualification 60 marks

Content overview:

Section A: Statistics - Statistical sampling, Data presentation and interpretation, Probability, Statistical distributions, Statistical hypothesis testing

Section B: Mechanics - Quantities and units in mechanics, Kinematics, Forces and Newton's laws

Entry Requirements / Group organisation / Setting

Assumed Knowledge

Candidates are expected to know the content of Higher Tier GCSE.

Exercises from the textbook are suggestions only. These will usually be started in class and students expected to finish them at home. Lessons should start with reference to the last exercise.

Books / other materials / visits / field courses etc.

Calculators

Calculator is allowed in the examination for this module.

How you can help

- 1) Check planner regularly and ensure that all homework is completed on time.
- 2) Contact Maths teacher if there are problems before they get out of hand
- 3) Encourage/monitor revision of past work and especially for mock and final exams
- 4) Ensure your son is always equipped for lessons and exams with appropriate materials (a scientific calculator, geometry set, revision notes etc.)

Why Study / Where it leads

Studying mathematics provides you with a broad range of skills in later life. You can study internet security, financial mathematics, engineering, medicine and a wide range of inexhaustive career options including teaching. The skillsets and knowledge acquired from studying Mathematics are in great demand across all sectors and industry.

