



GCSE Statistics

Key contacts: Mrs L Davies
Exam Board: Edexcel

Overview of the course:

Why choose Statistics?

GCSE Statistics will expand a student's mathematical knowledge and skills in understanding, analysing and presenting data. It will help with many other subjects and make the student better informed and a more competent decision maker.

This course initially builds on many of the skills studied in Key Stage 3 and GCSE Mathematics, but takes these mathematical ideas much further and seeks to develop an understanding of their use. Many new skills and statistical methods are introduced and applied to real world situations, including the communication of statistical findings.

What will you study?

All of the statistical topics that have been learnt in GCSE Mathematics are also covered in GCSE Statistics such as Averages (mean, median and mode), Statistical Diagrams (Bar Charts, Pie, Chart, Histograms etc) and Probability (Theoretical Probability, Tree Diagrams, Venn Diagrams etc) which can strengthen a student's understanding in this area. It then looks deeper into many of these topics, at how they are used more practically in real life situations and different variations of these topics that would not otherwise be covered in GCSE Mathematics. Examples include: considering the Geometric Mean as well as the more commonly used Arithmetic Mean or rather than just identifying a correlation from a scatter graph, being able to calculate Spearman's Rank Correlation Coefficient to give you an exact value for it.

Units include:

- Collection of data
- Processing and representing data
- Summarising data
- Scatter diagrams and correlation
- Time series
- Probability
- Index numbers
- Probability distributions

Assessment

Edexcel GCSE Statistics is for all learners. Students will be entered for either the Foundation or Higher paper, which will support all students to progress and be challenged. The GCSE is 100% examination, there are two terminal examinations at the end of Year 11. Calculators can be used in both papers and they contain short, medium and extended response questions. There will be regular internal assessments to help judge your progress throughout the course.

Paper 1 - 1 hour 30 minutes written examination, 80 marks. 50% of the qualification.

Paper 2 - 1 hour 30 minutes written examination, 80 marks. 50% of the qualification.

Possible career paths:

GCSE Statistics will be of benefit in many occupations where the use and interpretation of statistical methods are required. For example:

- Statistician
- Accountant
- Medical Researcher
- Scientist
- Research Psychology
- Marketing
- Biostatistician
- Weather Forecasting