



# Year 12 Statistics Learning Journey

## Curriculum Journey – Y12 Statistics

When?	Chapter	Key Learning Objectives Key Questions	Unit Assessment
HALF TERM 1	<b>Ch 1. Data collection</b>	<ul style="list-style-type: none"> <li>• Understand ‘population’, ‘sample’ and census, and comment on the advantages and disadvantages of each</li> <li>• Understand the advantages and disadvantages of simple random sampling, systematic sampling, stratified sampling, quota sampling and opportunity sampling</li> <li>• Define qualitative, discrete and continuous data and understand grouped data</li> <li>• Understand the large data set and how to collect data from it, identify types of data and calculate simple statistics</li> </ul>	<b>EOC Test 1</b> covering <ul style="list-style-type: none"> <li>• Population</li> <li>• Sample</li> <li>• Census</li> <li>• Random sampling</li> <li>• Systematic sampling</li> <li>• Stratified sampling</li> <li>• Quota sampling</li> <li>• Opportunity sampling</li> <li>• Qualitative, discrete, continuous, grouped data</li> </ul>
HALF TERM 2	<b>Ch 2 Measures of location and spread</b>	<ul style="list-style-type: none"> <li>• Calculate measures of central tendency such as the mean, median and mode</li> <li>• Calculate measures of location such as percentiles and deciles</li> <li>• Calculate measures of spread such as range, interquartile range and interpercentile range</li> <li>• Calculate variance and standard variation</li> </ul>	<b>EOC Test 2</b> covering <ul style="list-style-type: none"> <li>• Mean, median, mode</li> <li>• Percentiles, deciles</li> <li>• Interquartile and interpercentile range</li> <li>• Variance</li> <li>• Standard deviation</li> </ul>
HALF TERM 3	<b>Ch 3 Representations of data</b>	<ul style="list-style-type: none"> <li>• Identify outliers in data sets</li> <li>• Draw and interpret box plots</li> <li>• Draw and interpret cumulative frequency diagrams</li> <li>• Draw and interpret histograms</li> <li>• Compare two data sets</li> </ul>	<b>EOC Test 3</b> covering <ul style="list-style-type: none"> <li>• Outliers</li> <li>• Box plots</li> <li>• Cumulative frequency</li> <li>• histograms</li> </ul>

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HALF TERM 4	<b>Ch 4 Correlation</b>	<ul style="list-style-type: none"> <li>• Draw and interpret scatter diagrams for bivariate data</li> <li>• Interpret correlation and understand that it does not imply causation</li> <li>• Interpret the coefficients of a regression line equation for bivariate data</li> <li>• Understand when you can use a regression line to make predictions</li> </ul>	<b>EOC Test 4</b> covering <ul style="list-style-type: none"> <li>• Scatter diagrams</li> <li>• Correlation</li> <li>• Regression line</li> </ul>
HALF TERM 5	<b>Ch 5 Probability</b>	<ul style="list-style-type: none"> <li>• Calculate probabilities for single events</li> <li>• Draw and interpret Venn diagrams</li> <li>• Understand mutually exclusive and independent events, and determine whether two events are independent</li> <li>• Use standard tree diagrams</li> </ul>	<b>EOC Test 5</b> covering <ul style="list-style-type: none"> <li>• Probability</li> <li>• Venn diagrams</li> <li>• Mutually exclusive events</li> <li>• Independent events</li> <li>• Std tree diagrams</li> </ul>
HALF TERM 6	<b>Ch 6 Statistical distributions</b>	<ul style="list-style-type: none"> <li>• Understand and use simple discrete probability distributions including the discrete uniform distribution</li> <li>• Understand the binomial distribution as a model and comment on appropriateness</li> <li>• Calculate individual probabilities for the binomial distribution</li> <li>• Calculate cumulative probabilities for the binomial distribution</li> </ul>	<b>EOC Test 6</b> covering <ul style="list-style-type: none"> <li>• Probability distributions</li> <li>• Discrete uniform distributions</li> <li>• binomial distribution</li> <li>• Calculate individual probabilities for the binomial distribution</li> <li>• Calculate cumulative probabilities for the binomial distribution</li> </ul>